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APPENDIX H

GEOPHYSICAL SURVEY AT THE FORMER BRAMLETTE MANUFACTURED GAS PLANT

November 27, 2019

Mr. Tom King
SynTerra
148 River Street, Suite 220
Greenville, South Carolina 29601

Geophysical Survey at the Former Bramlette Manufactured Gas Plant
Greenville, South Carolina

Dear Mr. King:

This letter and the attached figures serve as a report for the geophysical investigation performed by GEL Solutions on November 6 through November 8, 2019 at the former Bramlette Manufactured Gas Plant (MGP). The purpose of this investigation was to determine the presence and approximate horizontal location of potential underground storage tanks, underground utilities, septic tanks, building foundations and other buried objects at the site. The site is an approximately 4.5-acre field. The MGP plant has been removed, and there are no remaining surface features associated with the former plant.

Equipment and Methodology

The geophysical evaluation included the deployment of time domain electromagnetic (TDEM), ground penetrating radar (GPR) and radio frequency electromagnetic (EM) technologies to the site. A brief description of these technologies is presented in the following paragraphs.

The GPR and TDEM surveys were conducted by towing the geophysical equipment along a system of transect lines on an approximately 10-foot spaced grid established within the investigation area. In spatially restricted and surface obstructed areas, a modified pattern of transect lines was implemented to maximize data acquisition. Positioning for the investigation was provided using RTK/GPS or differential GPS. EM technologies were used in active and passive mode to detect potential underground utilities. The TDEM data was analyzed using Surfer by Golden Software, and the GPR data was analyzed using CrossPoint by ImpulseRadar. GEL Solutions also measured the location of relevant surface features using RTK/GPS.

The information below is an overview of the geophysical equipment and methodologies used for this investigation. The intent of this overview is to give the reader a better understanding of each method, and background information as to what is actually measured, the resolution of the method, and the limitations imposed by site-specific subsurface conditions.

Time domain electromagnetics

TDEM methods measure the electrical conductivity of subsurface materials. The conductivity is determined by inducing (from a transmitter) a time or frequency-varying magnetic field and measuring (with a receiver) the amplitude and phase shift of an induced secondary magnetic field. The secondary magnetic field is created by subsurface conductive materials behaving as an inductor as the primary magnetic field is passed through them.

The Geonics EM61 system used in this investigation operates within these principles. However, the EM61 TDEM system can discriminate between moderately conductive earth materials and very conductive metallic targets. The EM61 consists of a portable coincident loop time domain transmitter and receiver with a 1.0-meter by 0.5-meter coil system. The EM61 generates 150 pulses per second and measures the response from the ground after transmission or between pulses. The secondary EM responses from metallic targets are of longer duration than those created by conductive earth materials. By recording the later time EM arrivals, only the response from metallic targets is measured, rather than the field generated by the earth material.

Ground Penetrating Radar

An ImpulseRadar Crossover dual-channel digital radar control system configured with a 170-Megahertz (MHz) and 600-MHz antenna array was used in this investigation. GPR is an electromagnetic method that detects interfaces between subsurface materials with differing dielectric constants. The GPR system consists of: an antenna, which houses a transmitter and receiver; a profiling recorder, which processes the received signal and produces a graphic display of the data; and a video display unit, which processes and transmits the GPR signal to a color video display and recording device.

The transmitter radiates repetitive short-duration EM signals into the earth from an antenna moving across the ground surface. Electromagnetic waves are reflected back to the receiver by interfaces between materials with differing dielectric constants. The intensity of the reflected signal is a function of the contrast in the dielectric constant at the interface, the conductivity of the material that the wave is traveling through, and the frequency of the signal. Subsurface features which may cause such reflections are: 1) natural geologic conditions such as changes in sediment composition, bedding and cementation horizons, voids, and water content; or 2) man introduced materials or changes to the subsurface such as soil backfill, buried debris, tanks, pipelines, and utilities. The profiling recorder receives the signal from the antenna and produces a continuous cross section of the subsurface interface reflections, referred to as “reflectors” or “reflection events.”

Depth of investigation of the GPR signal is highly site specific, and is limited by signal attenuation (absorption) of the subsurface materials. Signal attenuation is dependent upon the electrical conductivity of the subsurface materials. Signal attenuation is greatest in materials with relatively high electrical conductivities such as clays and brackish groundwater, and lowest in relatively low conductivity materials such as unsaturated sand or rock. In addition, the presence of reinforcement bar in concrete structures may severely attenuate the GPR signal such that objects below the slab may be undetectable. Depth of investigation is also dependent on antenna frequency and generally increases with decreasing frequency; however, the ability to identify smaller subsurface features is diminished with decreasing frequency.

GEL Solutions uses GPR antennas, which are internally shielded from above-ground interference sources. Accordingly, the GPR signal is not affected by nearby aboveground conductive objects such as metal fences, overhead power lines, and vehicles. Therefore, no spurious reflection events are generated on the GPR data by aboveground features, which could lead to false interpretation of subsurface anomalies.

Radio Frequency Electromagnetics

Radio Frequency Electromagnetic (EM) utility locating equipment consists of a transmitter and a dual-function receiver. The receiver can be operated in a “passive” mode or in an “active” mode. The two modes of operation provide various levels of detection capabilities depending on the specific target or application.

The EM system is operated in the “active” mode by either inducting or conducting a signal into the underground utility to be traced. A transmitter is placed over and in line with a suspected buried utility. The transmitter induces a signal, which propagates along the buried utility. As the receiver is moved back and forth across the suspected path of the utility, the trace signal induces a signal into the receivers coil sensor. A visual and audio response indicates when the receiver is directly over the buried utility. Another means of detecting in the “active” mode utilizes a method to “conduct” a signal within the buried utility. To accomplish this, a cable from the transmitter is clamped onto an exposed section of the buried utility and a signal propagates along the buried line. This technique minimizes any interference caused by parasitic emissions from adjacent cables in congested areas. When the system is utilized in the “passive” mode, the receiver is responding to a 60 Hertz cycle current energized by underground utilities.

Interference can and may occur when buried utilities intersect or are adjacent to each other. This effect referred to as “bleed-off” may provide a false response to the identification of the tracked utility. “Bleed-off” is caused by utilities that may be energized in the “active” or “passive” mode. For this investigation, GEL Solutions used RadioDetection 8000 units.

Results

The EM61 response is shown in Figure 1, and the GPR data interpretations are shown in Figure 2. GEL Solutions analyzed both datasets, and compared the responses with the location of known features (such as monitoring wells and surface trash). The combined interpretation is shown on Figure 3 and in AutoCAD on Figure 4. The layout of the former MGP plant (provided by SynTerra) is also shown in the figures for comparison. GEL Solutions identified the following potential subsurface features that may be associated with the former MGP plant and site activities:

- 1) Remnants of building foundations or engineered caps
- 2) Reworked soils (excavations)
- 3) Buried objects with no or little metal content
- 4) Buried objects containing metal
- 5) Engineered subgrade (such as gravel)

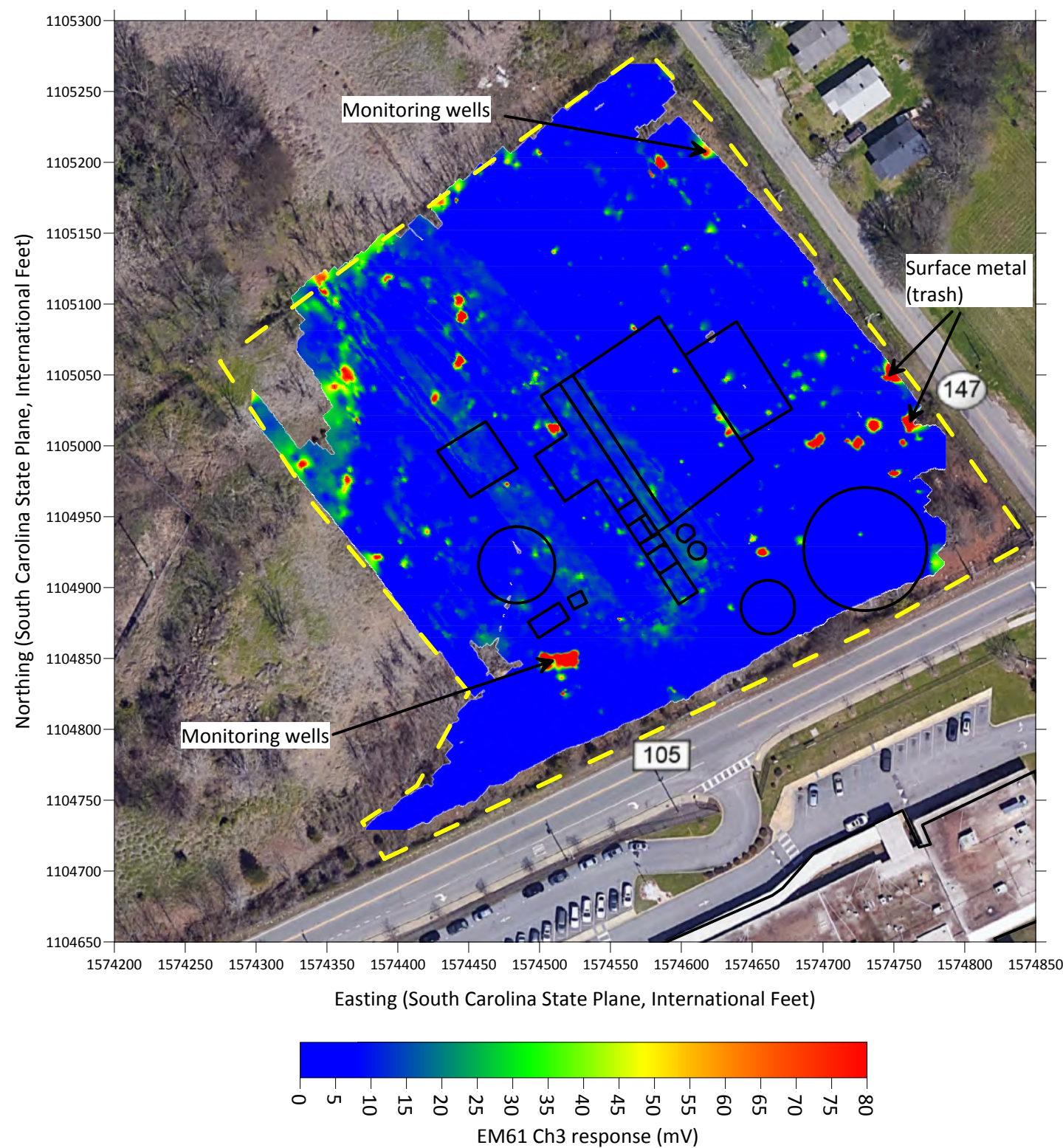
No subsurface utilities were identified within the limits of investigation. GEL Solutions appreciates the opportunity to assist SynTerra with this investigation. If you have any questions regarding this report, or need additional information, please feel free to contact us at 770-980-1002.

Sincerely,



Jorgen Bergstrom, P.Gp.
Principal

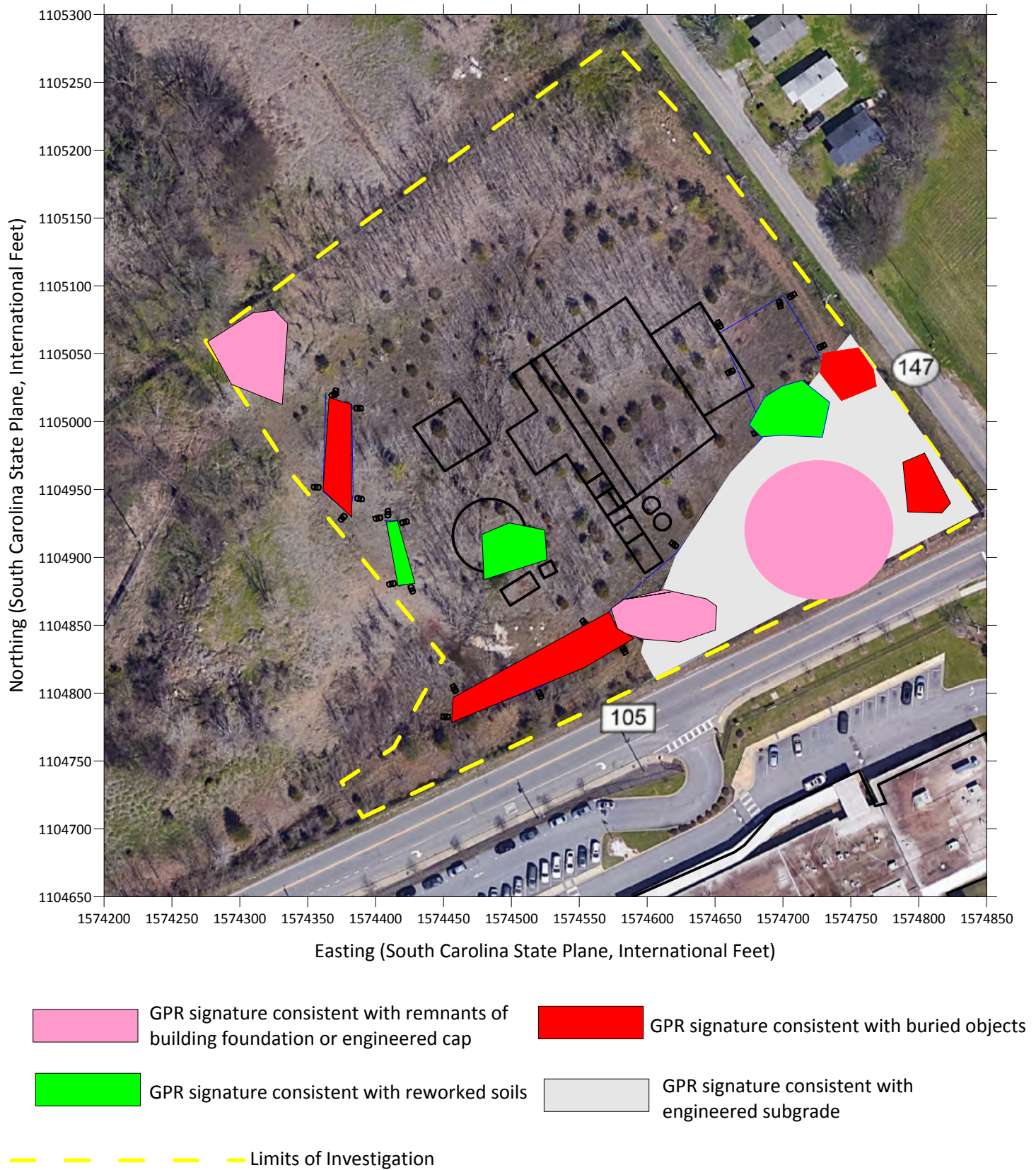
FIGURE 1



EM61 response and historic building layout

Geophysical Survey at the Former Bramlette MGP Plant
Greenville, South Carolina

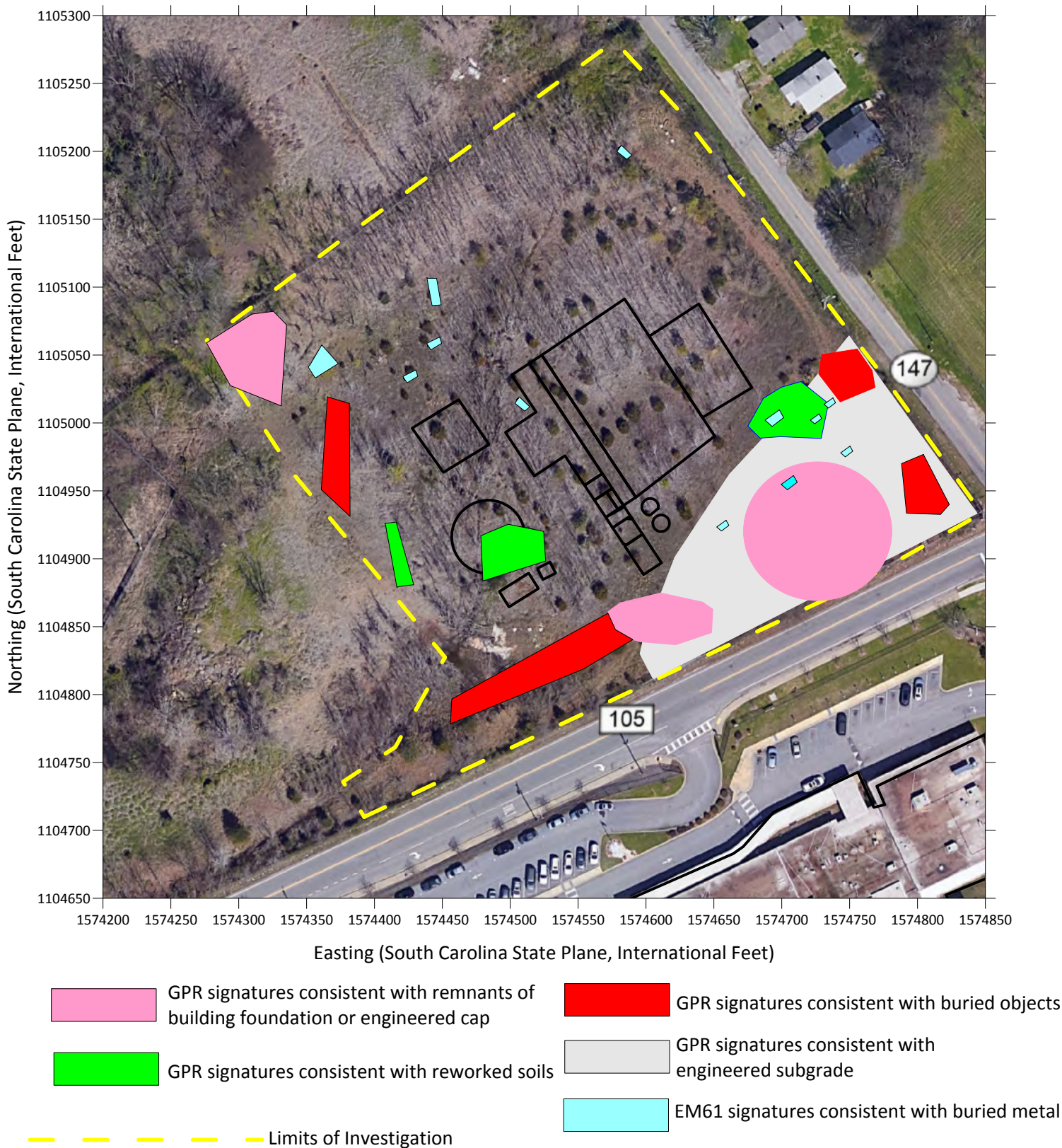
FIGURE 2



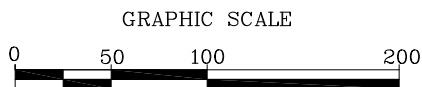
GPR data interpretations and historic building layout

Geophysical Survey at the Former Bramlette MGP Plant
Greenville, South Carolina

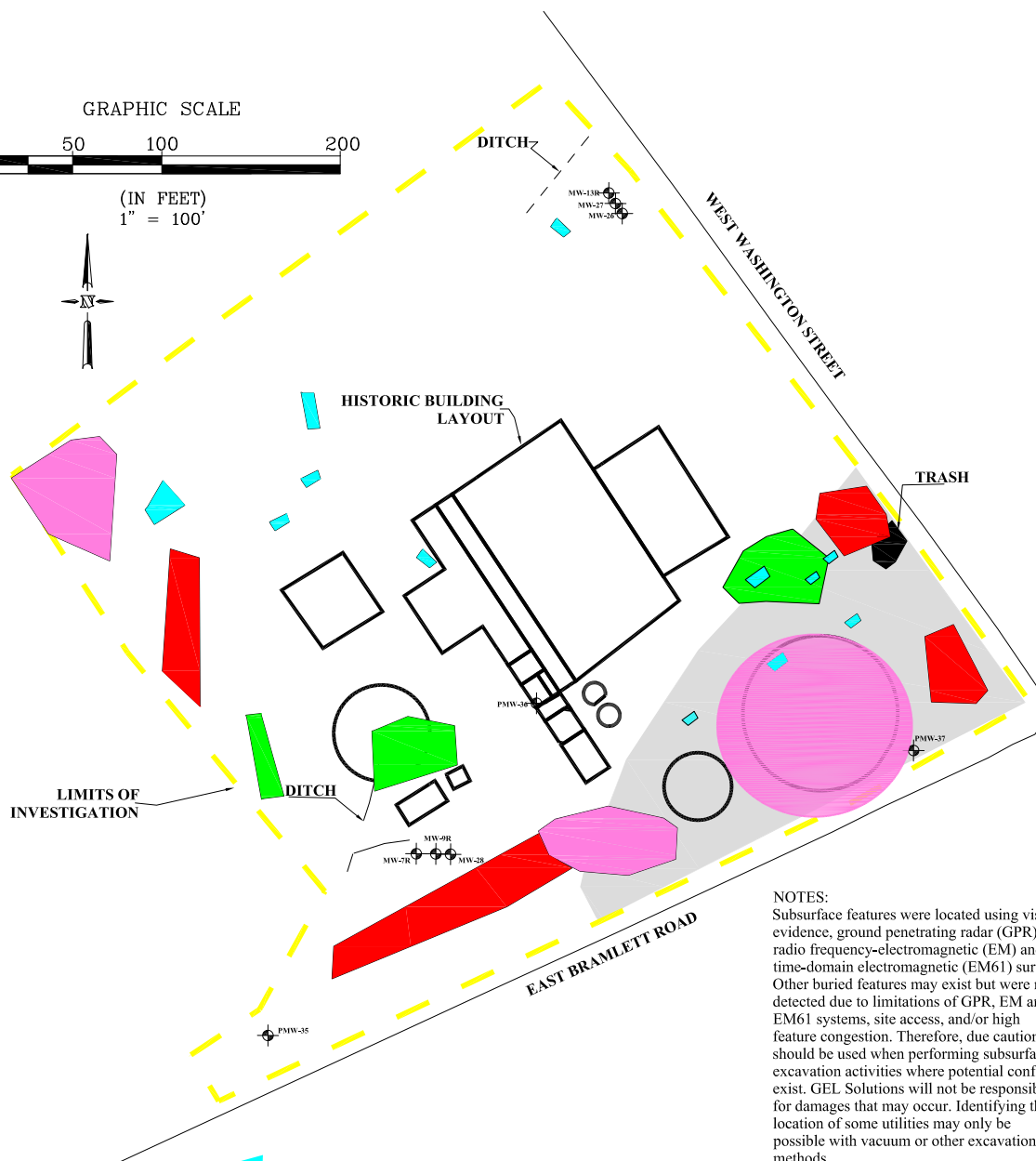
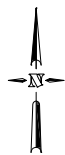
FIGURE 3



Geophysical Survey at the Former Bramlette MGP Plant
Greenville, South Carolina



(IN FEET)
1" = 100'



NOTES:
Subsurface features were located using visual evidence, ground penetrating radar (GPR), radio frequency-electromagnetic (EM) and time-domain electromagnetic (EM61) survey. Other buried features may exist but were not detected due to limitations of GPR, EM and EM61 systems, site access, and/or high feature congestion. Therefore, due caution should be used when performing subsurface excavation activities where potential conflicts exist. GEL Solutions will not be responsible for damages that may occur. Identifying the location of some utilities may only be possible with vacuum or other excavation methods.

- POTENTIAL BURIED METALLIC OBJECTS
- POTENTIAL BURIED OBJECTS
- POTENTIAL REWORKED SOILS (EXCAVATIONS)
- POTENTIAL FOUNDATION REMNANTS OR CAP
- POTENTIAL ENGINEERED SUBGRADE

FIGURE

4

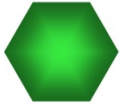
GEOPHYSICAL SURVEY AT THE FORMER BRAMLETTE
MGP PLANT
GREENVILLE, SOUTH CAROLINA

DATA INTERPRETATIONS

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APPENDIX I

FORENSIC ANALYSIS OF NON-AQUEOUS PHASE LIQUIDS (NAPL) COLLECTED FROM THE FORMER BRAMLETTE ROAD MANUFACTURED GAS PLANT (MGP) SITE



Corporate
Environmental
Solutions LLC®

**Forensic Analysis of Non-Aqueous Phase Liquids (NAPL)
Collected from the Former Bramlette Road Manufactured Gas
Plant (MGP) Site**

prepared for

**SynTerra Corporation
Greenville, South Carolina**

prepared by

**Corporate Environmental Solutions LLC
Pittsburgh, Pennsylvania**

CES Project No. 10613

March 30, 2020



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Executive Summary

Corporate Environmental Solutions (CES) was requested to conduct a forensic analysis of data collected on two samples of NAPL identified as MW-06A NAPL and MW-3BR NAPL collected from the former Bramlette Road MGP site. The samples were collected on 3/26/19 and 3/27/19. Analysis was performed by Alpha Analytical of Mansfield, Massachusetts. Parameters analyzed included PIANO Volatile Organics, Alkylated Polynuclear Aromatic Hydrocarbons (PAHs), and Total Petroleum Hydrocarbons (TPH). Sample MW-06A NAPL was also analyzed for viscosity and specific gravity (density).

The results of the forensic analysis revealed sample MW-06A NAPL to be an unweathered MGP tar produced by a coal carbonization process. Sample MW-3BR NAPL is a lightly weathered MGP tar produced by a carbureted water gas (CWG) process. The remainder of this report discusses the MGP processes that produce tar residuals, how forensic investigation of MGP residuals are generally performed, and gives the basis for the conclusions presented in the preceding sentence based on the data at hand.

1 MGP Processes and Characteristics of Tar Residuals

The general term used for NAPL byproducts produced during the manufacture of gas and coke from MGP processes is tar oil. There were three primary processes used to manufacture gas that produced tar oils. These processes were coal carbonization, carbureted water gas, and oil gas. Coal gas plants began operation in 1816 and operated by filling retorts or ovens with bituminous coal, although other types of coal were used if available. The ovens were sealed from ambient air and vents conveyed gases from the coal as it was heated to a temperature between 600°C and 800°C. As the retort gas cooled, larger hydrocarbons condensed into tar while the gases stabilized. The tar oil consisted of aromatic hydrocarbons (benzene and PAHs) mixed with lower proportions of coal distillate and particulates (feedstock).

The CWG process was patented in 1875 by Thaddeus Lowe and the United Gas Improvement Company purchased the patent in 1882. The CWG generator directed air and steam in alternating cycles through a bed of coke or coal to produce water gas or blue gas primarily composed of hydrogen and carbon monoxide. The coke or coal in the generator was combusted in part to produce ash and slag. The water gas travelled to a carburetor where petroleum was sprayed onto hot refractory brick and cracked into light hydrocarbons. This process raised the BTU value of the gas from approximately 300 BTU/ft³ to 530 BTU/ft³. The CWG tar was enriched in aromatic hydrocarbons (benzene and PAHs) mixed with lower proportions of unreacted feedstock (gas oil range saturated hydrocarbons). CWG tar is lighter than coal tar and contains little to no tar acids (e.g., phenols and cresols) and bases (e.g., pyridines, anilines, quinolines, and carbazoles) due to the fact that the gas oil feedstock typically contained relatively little oxygen and nitrogen when compared to bituminous coal. CWG tar also lacks amorphous carbon that is present in coal tar and has a higher water content.



Oil gas production began in 1889 in western United States cities with limited access to coal and easy access to petroleum. The process resembled the carburetion portion of the water gas process with custom processes for cracking crude petroleum and residual fuel oil. The cracking temperature ranged from 690°C to 1100°C, depending on the plant configuration. The oil gas process yielded more tar oil at the lower temperatures and more lampblack at the higher temperatures. High BTU oil gas plants were constructed beginning around 1945 during the transition from MGPs to natural gas. During this time existing CWG equipment was sometimes changed by retrofitting the generators with high temperature refractory brick. As such, oil gas tars will resemble CWG tars to some extent, however, the differences in feedstocks and temperature produce subtle differences in chemical composition that allow for a forensic analysis to distinguish the two types.

The term coal tar has been used extensively to qualitatively describe NAPL from MGP sites. But, as the discussion above shows, true coal tar is only generated during coal gasification or coke production. CWG and oil gas processes produce a petroleum tar generated from the cracking of the carburetion fluids.

2 Forensic Analysis of Tar Oils

As discussed in Section 1, forensic analysis of tar oils is based on differences in the chemical composition resulting from the use of different feedstocks and differences in reaction temperatures. While seemingly straightforward, once these materials are released into the environment, the process of identification becomes much more difficult. Processes such as evaporation, dissolution, oxidation, biodegradation, photolysis, adsorption, etc. can produce significant changes in the appearance of the original tar oil. Comingling with other combustion materials, urban background, soot, road tars, or in the case a staining near marinas, creosote from wood pilings can make identification even more difficult.

Source identification of liquid tar oil can usually be done with volatile and semivolatile fingerprinting if little to no weathering has occurred. In more weathered material, the semivolatile organics, particularly PAHs are the most useful for source identification. That is because they are the most abundant material in tar oils and show a greater resistance to degradation at the higher molecular weight. As such PAH fingerprints and diagnostic ratios have become one of the primary means for distinguishing tar oils from petroleum spills and for differentiating between the different types of tar oils.

3 Different Forms of PAHs

PAHs can be classified into one of three general types: petrogenic, pyrogenic and diagenetic.

Petrogenic PAHs are those derived from petroleum and include crude oil, fuels and lubricants. The key feature of most petrogenic materials is a regular series of normal alkanes along with cyclic alkanes. These are seen as a progression of evenly spaced individual peaks in a GC TPH



chromatogram. In addition, the GC chromatogram normally shows a “hump” in the baseline. This “hump” is referred to as an unresolved complex mixture (UCM) resulting from thousands of compounds in petroleum that cannot be adequately resolved by the chromatograph.

When plotted on a histogram, the PAH pattern for a petrogenic material resembles a bell-shaped curve, with lower amounts of the parent PAH and higher amounts of the alkylated PAHs. The appearance of a petrogenic PAH signature would indicate a source other than an MGP tar or a combination of sources.

Pyrogenic substances are those created from oxygen depleted high temperature processes, including incomplete combustion, pyrolysis, cracking, and destructive distillation. All MGP tar oils are pyrogenic in nature, regardless of which process was used. When plotted on a histogram, the PAH pattern would show a sloped pattern with greater amounts of the parent PAH compounds and decreasing amount of the alkylated PAHs. As the temperature increases, the sloping pattern becomes steeper. Figure 3.1 shows example PAH histograms of petrogenic and pyrogenic materials.

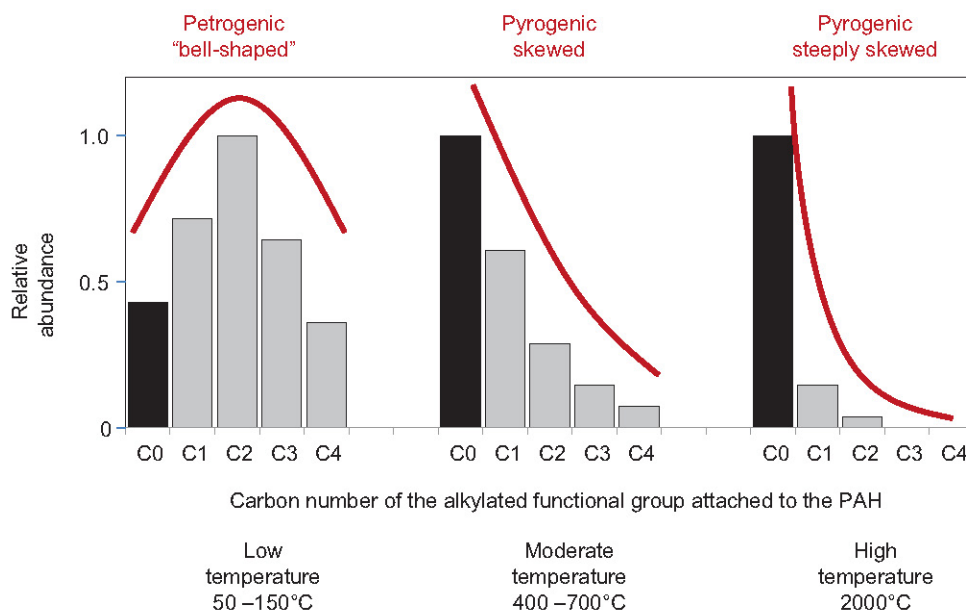


Figure 3.1 – Petrogenic and Pyrogenic PAH Patterns

Diagenetic PAHs are formed from natural sources, such as plants and buried organic materials in their early stages of maturation. Two examples of diagenetic PAHs are retene and perylene.

4 PAHs and Urban Background

The term urban background denotes the variety of nonpoint sources of PAHs in the environment. Common nonpoint sources include atmospheric (soot) particulates and dripped/leaked petroleum washed from the surrounding urban roadways, parking lots, and structures during rainfall events.



Other nonpoint sources include general surface and stormwater runoff. Stormwater runoff is probably the largest chronic contributor of background PAHs to urban sediments. A typical PAH profile for sediments impacted by urban background sources is shown in Figure 4.1. Please note that this is not absolute for all urban background. During a forensic investigation background samples should be collected and analyzed to determine the typical urban background for the site.

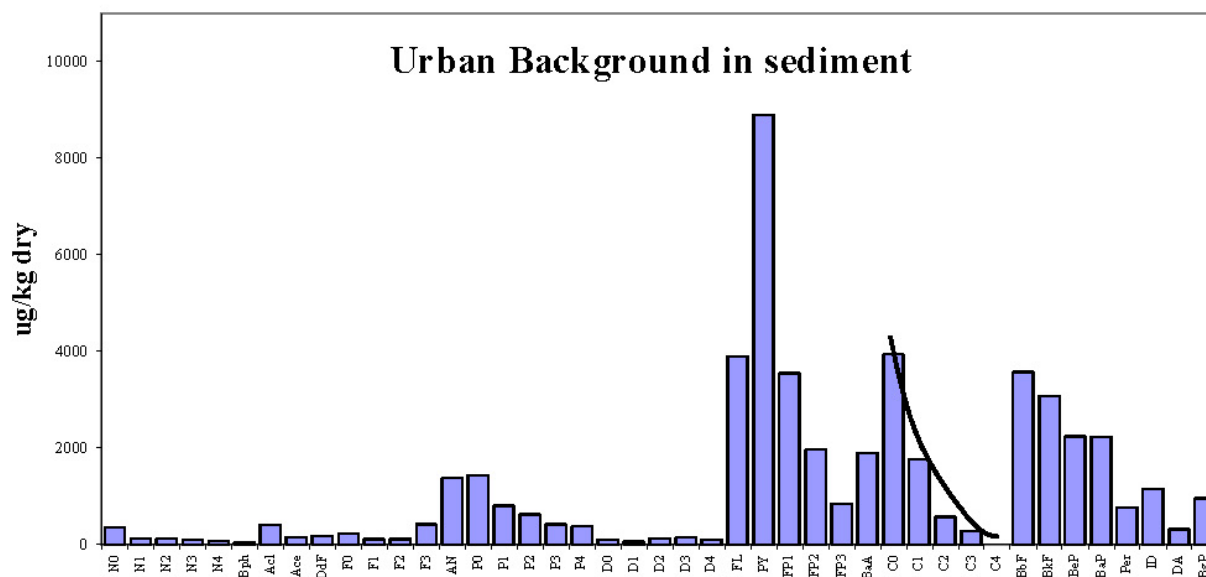


Figure 4.1 – Histogram of Typical Urban Background PAHs in Sediment

The most abundant PAHs are high molecular weight (4- to 6- ring) compounds, particularly the fluoranthene and pyrene isomers. Very few low molecular weight (2- and 3- ring) PAHs are present. The PAHs are consistent with pyrogenic sources; however, the pattern is distinct and very different from MGP tars.

5 Effects of Weathering on PAH Source Signatures

Two key effects on PAH signatures from weathering are common:

- Levels of low molecular weight (2- and 3- ring) PAHs are reduced, thereby increasing the proportion of 4-to 6- ring PAHs; and
- Levels of non-alkylated PAHs are reduced, thereby increasing the proportion of alkylated PAHs.

The PAH weathering rank (PWR) provides a semiquantitative approach for gauging tar oil weathering. The PWR is calculated using the concentrations of naphthalene, phenanthrene, pyrene, chrysene, and benzo(a)pyrene. Using naphthalene as an example, the PWR would be



calculated by taking the naphthalene concentration and dividing by the sum of all five PAH compound concentrations. The process is repeated with the other compounds. The PAH with the highest rank determines the weathering.

PWR 1 – Dominant naphthalene indicates light PAH weathering

PWR 2 – Dominant phenanthrene indicates moderate PAH weathering

PWR 3 – Dominant pyrene indicates heavy PAH weathering

PWR 4 – Dominant chrysene indicates severe PAH weathering

A heavy or severely weathered tar oil could possibly take on the characteristics of urban background. If heavy or severe weathering is suspected, other diagnostic techniques (e.g. interpretation of geochemical biomarkers) are used to help with the identification.

6 PAH Diagnostic Ratios

Forensic investigators have developed numerous (hundreds) of different ratios that are used to help identify PAH sources in the environment. Petrogenic PAH ratios emphasize differences among PAH analytes that are more abundant among fossil fuel products. For example, benzo(e)pyrene concentrations relative to alkylated benzo(a)anthracene/chrysene concentrations are higher than the same ratio using benzo(a)pyrene in sediments near petroleum refineries. In one case, an investigator showed that the urban background chromatogram from a site showed equal amounts of petrogenic and pyrogenic PAHs. This was used in a case study with potential tar oil impacts to show that urban background alone could not account for sediment impacts and that tar oil was a contributing factor.

Pyrogenic PAH ratios emphasize differences among PAH isomers that are more abundant among combustion and carbonization products. The ratios of fluoranthene/fluoranthene + pyrene and benzo(b)fluoranthene + benzo(j) and benzo(k)fluoranthene / benzo(b) fluoranthene + benzo(j) and (k)fluoranthene + benzo(a)pyrene are particularly effective at differentiating PAHs for different pyrogenic sources.

Some PAH ratios are sensitive to pyrolysis while others are thermodynamically stable. Other ratios help separate samples with heavier petrogenic sources. A simple ratio test for distinguishing between coal tar and water gas tar was used by the Electric Power Research Institute (EPRI) in its 2000 report on chemical source attribution at MGP Sites. In this report, CWG tars had a fluoranthene to pyrene ratio of between 0.5 and 0.9 while coal tars had a ratio between 0.87 and 1.46. Another ratio was the dibenzofuran/fluorene ratio. Coal tars had a ratio between 0.39 and 1.11 while CWG tars had a ratio between 0.12 and 0.46. Dibenzofuran is much more prevalent in coal tar because of the higher oxygen content of the coal. Many other ratios are used as well.

In the end, the choice of what ratios to use are based on a knowledge of the site history, potential PAH sources to the environment, a well-defined urban background, and an understanding of potential weathering at the site. There is no one set of ratios that will necessarily work in all instances.



7 Forensic Evaluation of Sample MW-06 NAPL

The sample was analyzed for PIANO volatiles, Alkylated PAHs, TPH, viscosity and specific gravity/density. For forensic analysis purposes, the data from the three chemical analyses were plotted on histograms and the TPH chromatogram was reviewed. Fluoranthene/pyrene and dibenzofuran/fluorene diagnostic ratios for PAHs were calculated as a first pass evaluation. These histograms and chromatogram are shown in Figures 7.1 through 7.4. In the case of the PIANO Volatiles histogram, only detected constituents were plotted. The TPH histogram plots hydrocarbons C9-C40.

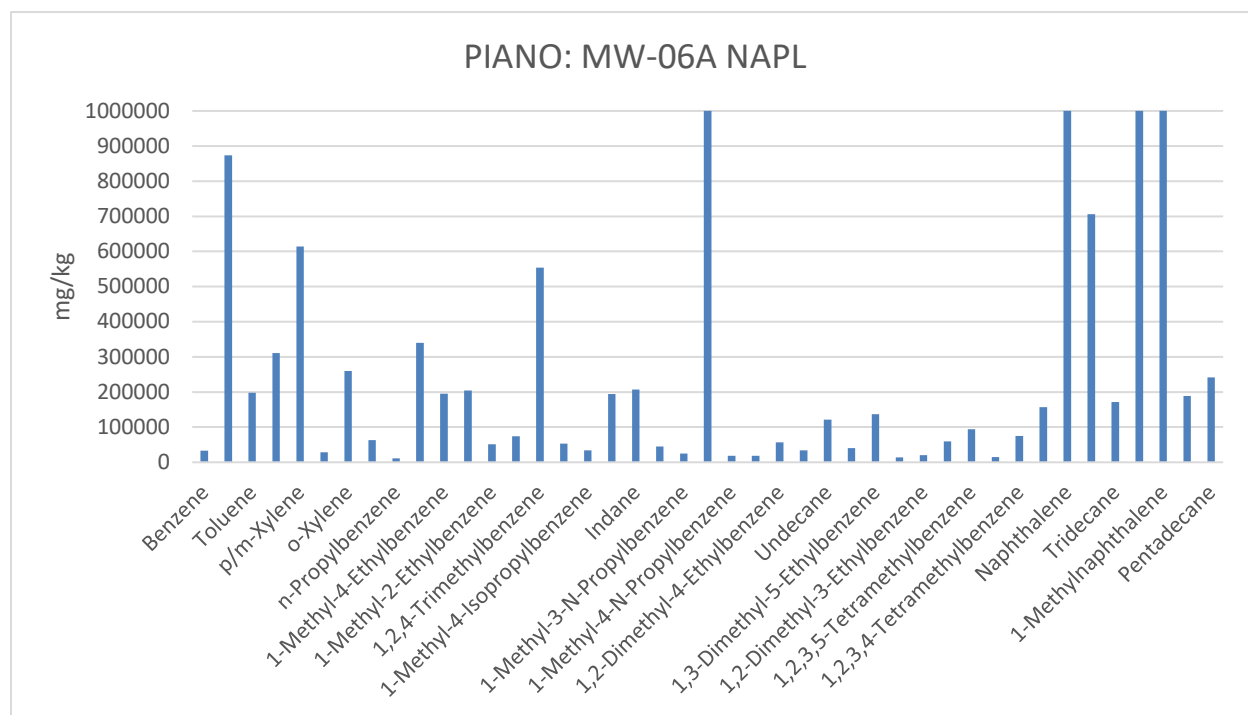
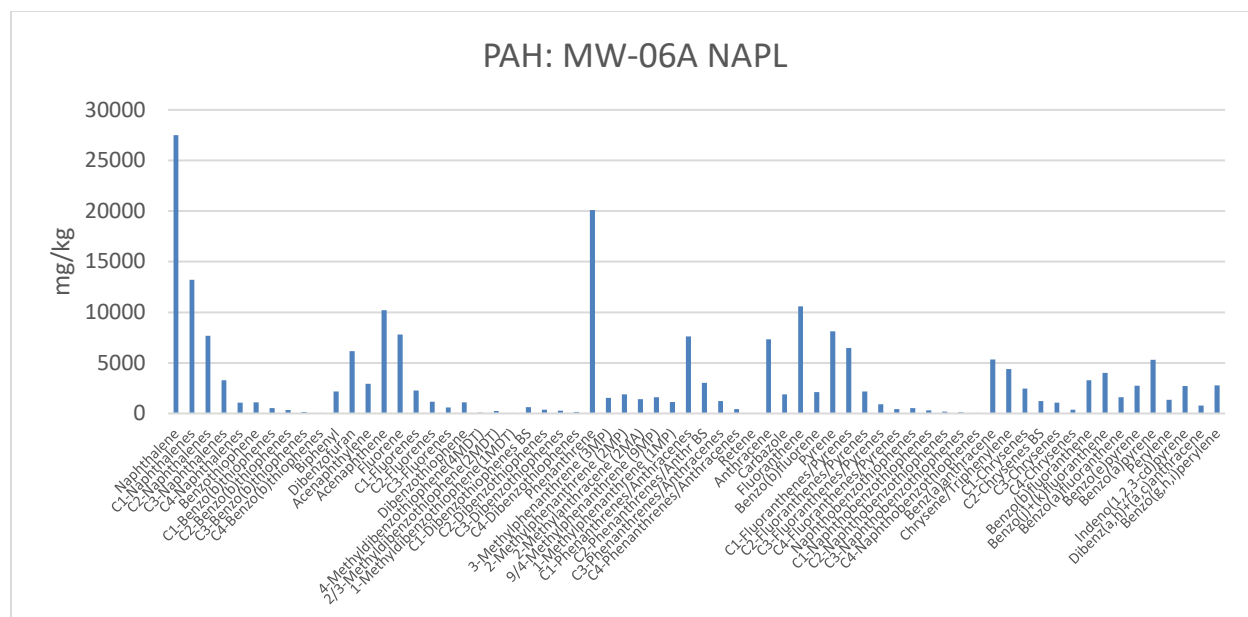


Figure 7.1 – PIANO Histogram



FL0/PY0 = 1.3

DF/F0 = 0.79

Figure 7.2 – PAH Histogram and Diagnostic Ratios

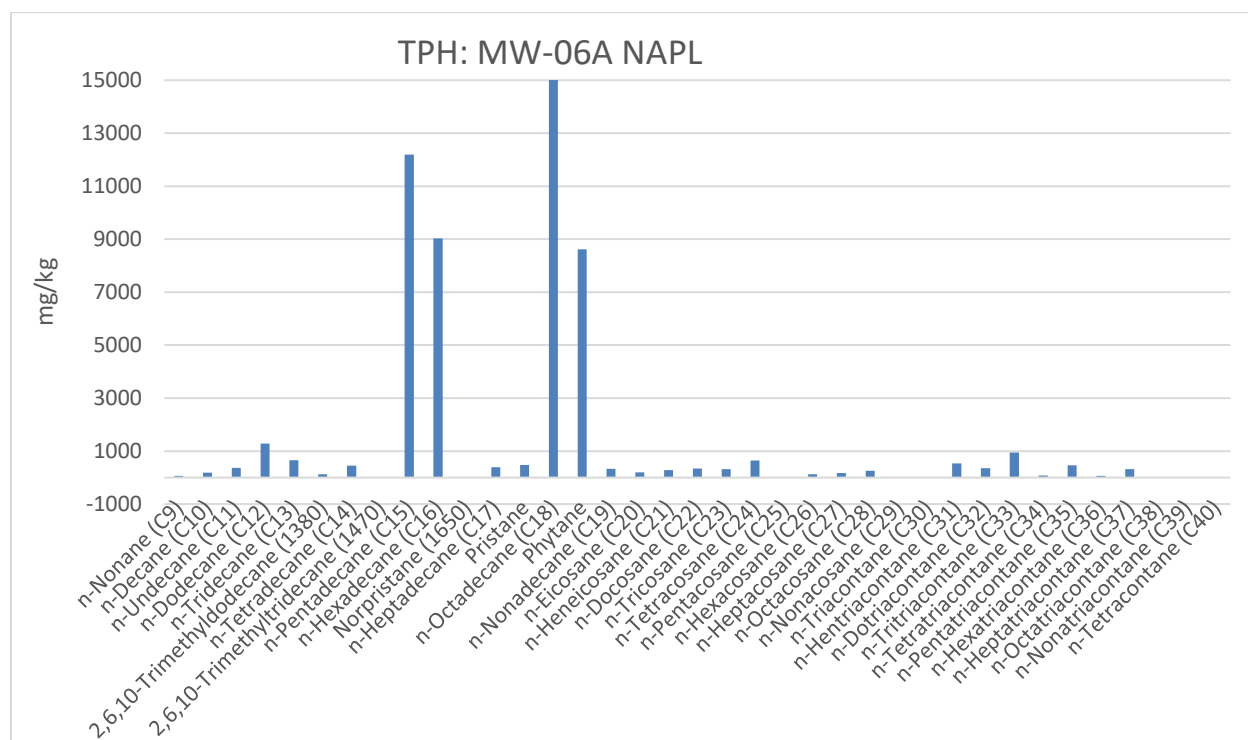


Figure 7.3 – TPH Histogram

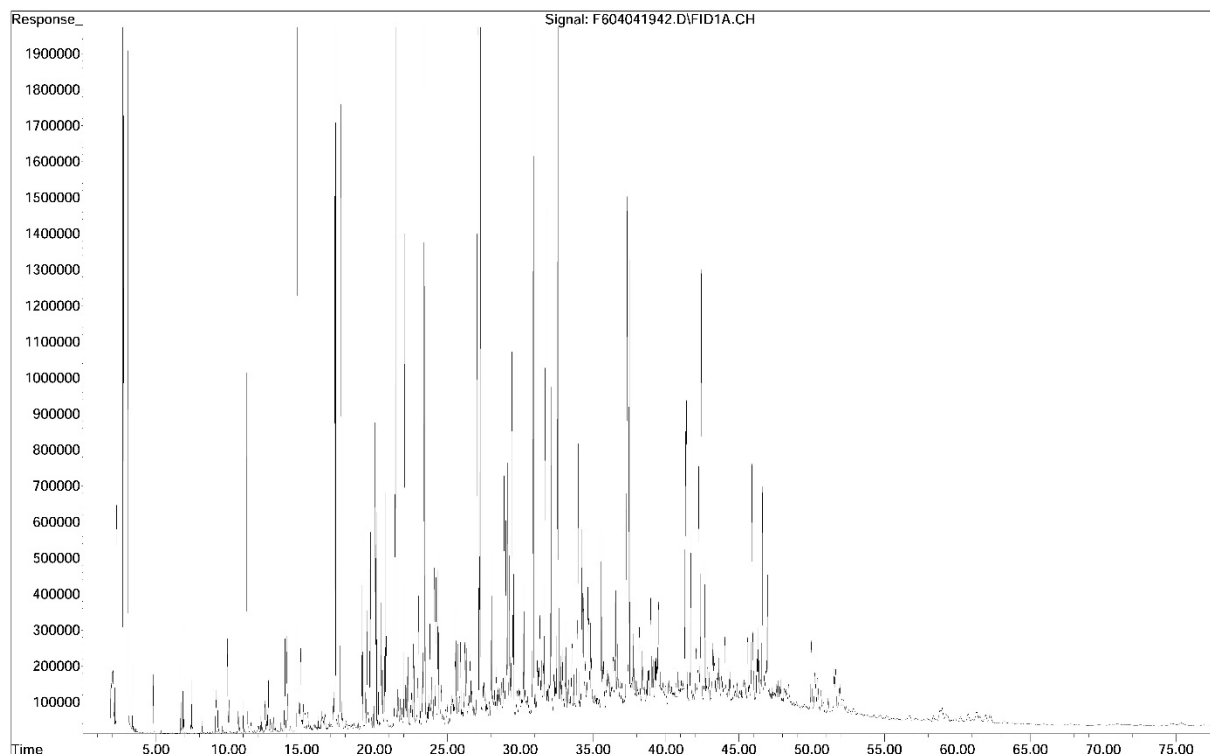


Figure 7.4 – TPH Chromatogram

The PIANO analysis reveals primarily heavier ends of the volatile range with some benzene present.

The PAH histogram reveals a pyrogenic source dominated by the naphthalenes. No petrogenic sources are indicated. Little to no weathering is indicated. The fluoranthene to pyrene ratio and the dibenzofuran to fluorene ratio are both indicative of a coal carbonization tar. There is no apparent evidence of urban background present as would be indicated by an increase in the heavier ends of the PAHs.

The TPH histogram does not show a regular pattern of hydrocarbons indicative of petroleum. There is no UCM present in the chromatogram.

The specific gravity of the sample is 1.18 at 70F. This is indicative of a DNAPL and heavier than a CWG tar.

Based on a review of this data, the results are consistent with the NAPL being a tar oil produced by a coal carbonization process. Little to no weathering is evident.



8 Forensic Evaluation of Sample MW-3BR NAPL

The sample was analyzed for PIANO volatiles, Alkylated PAHs, and TPH. For forensic analysis purposes, the data from the three chemical analyses were plotted on histograms and the TPH chromatogram was reviewed. The same diagnostic ratios for PAHs were calculated as for sample MW-6A NAPL. These histograms and chromatogram are shown in Figures 8.1 through 8.4. In the case of the PIANO Volatiles histogram, only detected constituents were plotted. The TPH histogram plots hydrocarbons C9-C40.

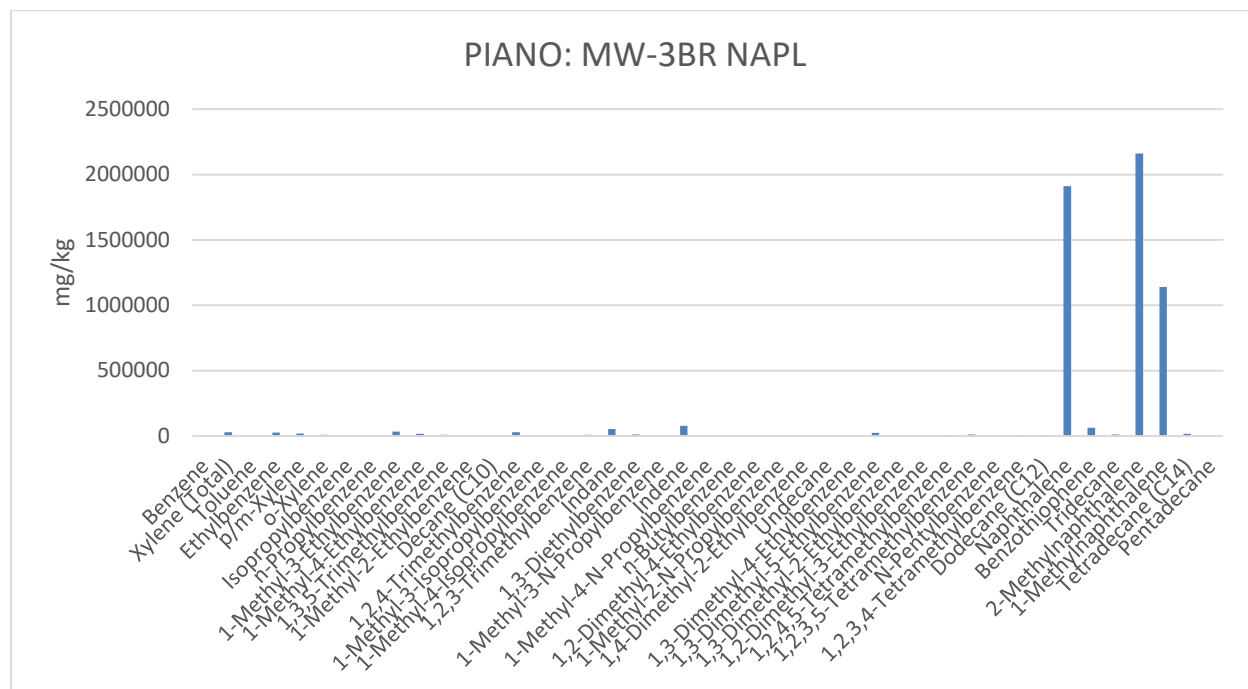
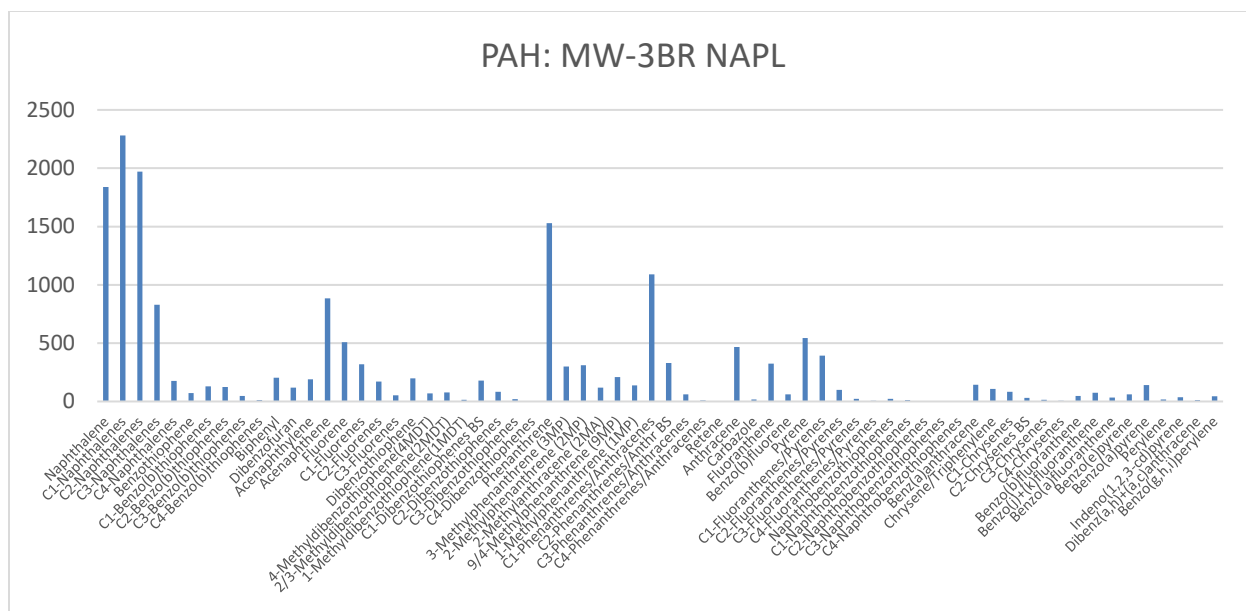


Figure 8.1 – PIANO Histogram



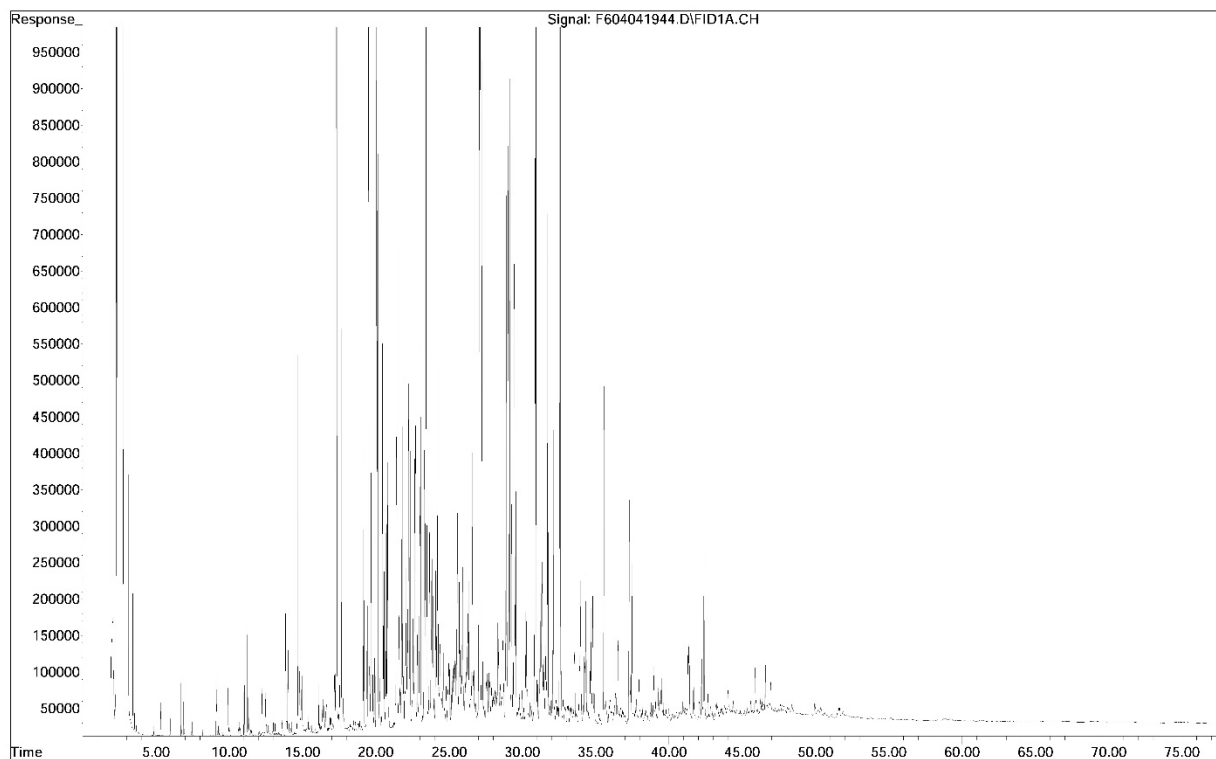


Figure 8.4 – TPH Chromatogram

The PIANO analysis reveals primarily heavier ends of the volatile range with some benzene present.

The PAH histogram reveals a pyrogenic source dominated by the naphthalenes. No petrogenic sources are indicated. The loss of the parent naphthalene is indicative of weathering. The PWR for this sample is determined to be 1. Light weathering is evident. The fluoranthene to pyrene ratio and the dibenzofuran to fluorene ratio are both indicative of a CWG tar. There is no apparent evidence of urban background present as would be indicated by an increase in the heavier ends of the PAHs.

The TPH histogram does not show a regular pattern of hydrocarbons indicative of a petroleum source. There is no evident UCM present in the chromatogram.

Based on a review of this data, the results are consistent with the NAPL being a tar oil produced by a CWG process. Light weathering (PWR =1) is evident.



9 References

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APPENDIX J

MANN-KENDALL ANALYSIS



MANN KENDALL ANALYSIS

FORMER BRAMLETTE MGP SITE

JUNE 2020

PREPARED FOR



DUKE ENERGY CAROLINAS, LLC

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1.0 THE MANN KENDALL TREND TEST

The Mann Kendall trend test evaluates data over time for monotonic trends, where monotonic indicates a trend that is solely increasing or decreasing. Mann Kendall is a useful trend test in that it is non-parametric and does not require that data follow a normal distribution.

To perform a Mann Kendall trend test, the data must first be processed as follows:

- Duplicate samples must be removed to prevent weighting one date more than others
- Non-detects greater than regulatory values are removed
- Non-detects are treated as the detection limit

Next, the data must meet the following requirements for a Mann Kendall trend test to be applicable:

- There must be at least 4 detect measurements
- Non-detects must make up less than or equal to 50% of measurements

In a Mann Kendall trend test, each value is compared to all of the proceeding values to calculate whether the value has increased, decreased, or stayed the same over time. These comparisons are recorded as simply 1 (increasing), -1 (decreasing), or 0 (stayed the same). A summation of these comparisons gives an S value, where S indicates the type of trend. A negative S value indicates a decreasing trend and a positive S value indicates an increasing trend. Whether or not these trends are statistically significant is dependent on the two-sided p value. A p value ranges from 0 to 1 and indicates whether the results are due to chance or statistically significant. Higher p values indicate a trend is not statistically significant, and a p value less than 0.1 indicates a statistically significant trend.

All Mann Kendall trend tests are performed in the program RStudio using the package 'Kendall'.

2.0 TIME VERSUS CONCENTRATION PLOTS

Plots of concentration over time provide a visual representation of possible trends in the data. Benzene and naphthalene concentrations over time for well MW-01 and MW-07/07R are shown in **Figure 1** and **Figure 2**. Analytical results are summarized in **Table 1**.

In well MW-01, concentrations of benzene remain fairly constant over the 11 year sampling period, with one exception of a single-event concentration reduction in November 2012 (**Figure 1**). Concentrations of naphthalene vary over time, but no consistent increasing or decreasing trend is apparent.

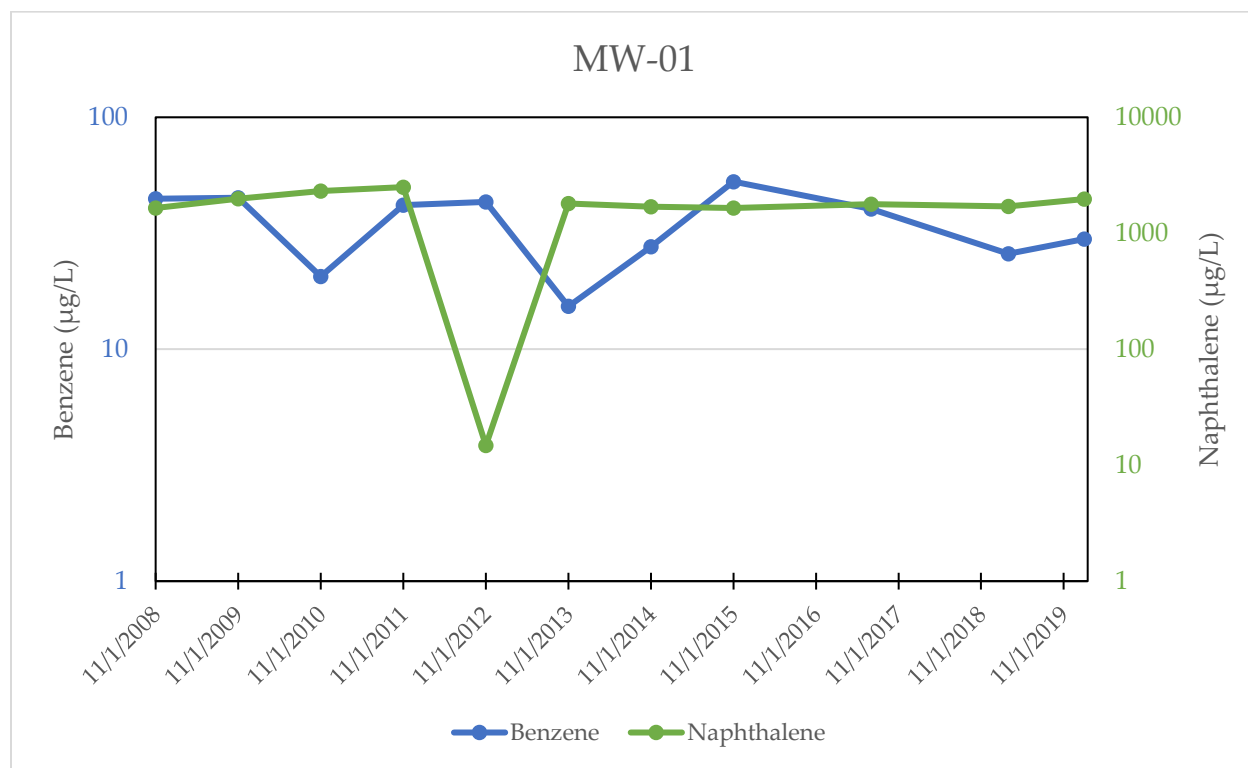


Figure 1: Time versus concentration plot of well MW-01 for benzene (left y-axis) and naphthalene (right y-axis).

In well MW-07/07R, concentrations of benzene and naphthalene generally decrease over the 11 year sampling period (**Figure 2**). Mann Kendall trend analysis will be used to determine if these are statistically significant decreasing trends.

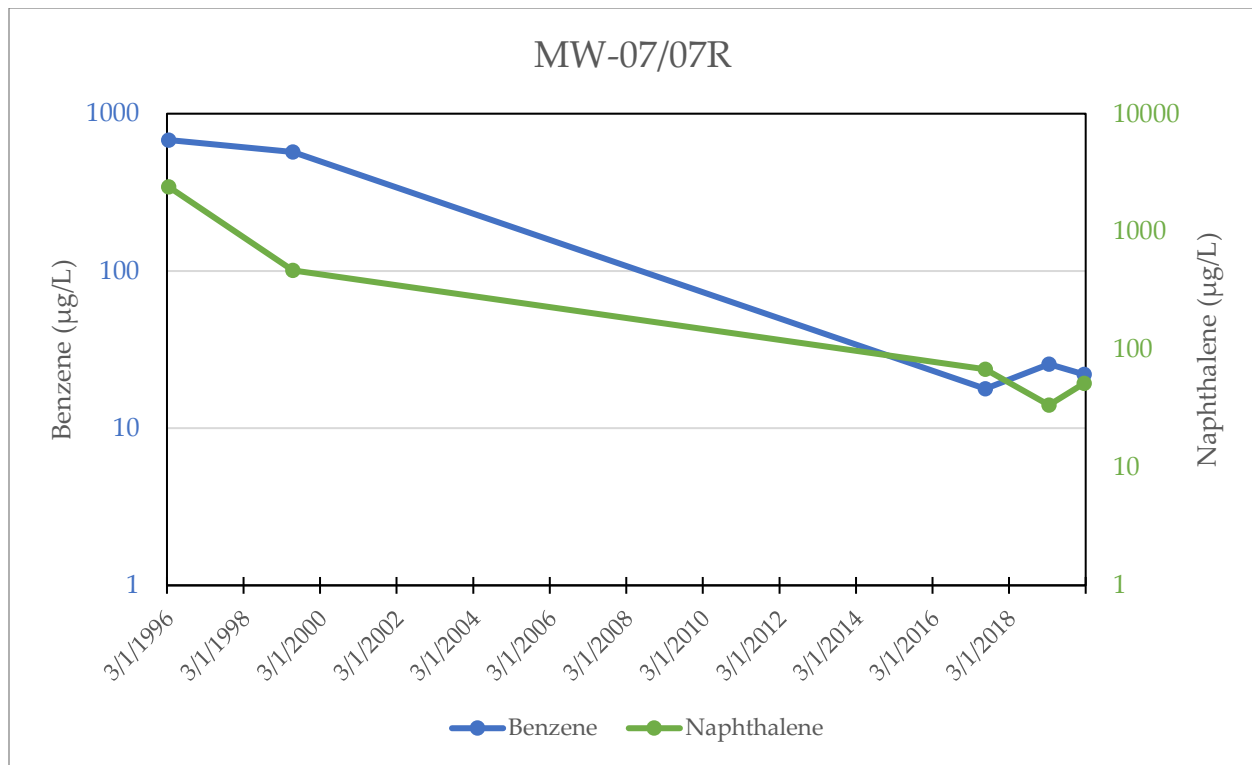


Figure 2: Time versus concentration plot of well MW-07/07R for benzene (left y-axis) and naphthalene (right y-axis).

Table 1: Analytical Results Summary

Well ID	Sample Date	Analytical Result	
		Benzene (µg/L)	Naphthalene (µg/L)
MW-1	11/19/2008	44.6	1650
	11/18/2009	45	1980
	11/18/2010	20.6	2310
	11/17/2011	41.8	2500
	11/14/2012	43.1	14.8
	11/13/2013	15.3	1810
	11/12/2014	27.7	1690
	11/10/2015	52.8	1650
	7/12/2017	40.2	1,780
	3/20/2019	25.8	1700
	2/17/2020	29.9	1970
MW-07	3/13/1996	680	2400
	6/1/1999	570	470
MW-7R	7/11/2017	17.8	68.1
	3/22/2019	25.5	33.8
	2/13/2020	22	51.7

3.0 MANN KENDALL ANALYSIS RESULTS

Results of the Mann Kendall analysis are displayed in **Table 2**.

For well MW-01 neither benzene nor naphthalene have statistically significant trends over time. The p values are both over 0.1 and are thus considered stable, with no monotonic trends.

For well MW-07/07R benzene does not have a statistically significant trend over time. While in **Figure 2** it appears as though a decreasing trend is present, the p value is over 0.1, and thus that trend is not considered to be statistically significant. This is most likely due to the 3/22/2019 and 2/13/2020 samples having a greater concentration than the 7/11/2017 sample. This creates a series of increases in the Mann Kendall calculations and effectively dilutes the trend, raising the p value.

Naphthalene, however, has a statistically significant trend over time in well MW-07/07R. The p value is 0.086, and S value is -8, indicating a statistically significant decreasing trend.

Table 2: Results of Mann Kendall Analysis

Well ID	Analyte	Number of Samples	Non-Detects	Detects	Percent Non-Detects	Is Trend Analysis Applicable?	Two-Sided P Value	S Value	Trend Conclusion
MW-01	Benzene	11	0	11	0%	Yes	0.436	-	Stable, no significant trend
MW-07/07R	Benzene	5	0	5	0%	Yes	0.221	-	Stable, no significant trend
MW-01	Naphthalene	11	0	11	0%	Yes	0.938	-	Stable, no significant trend
MW-07/07R	Naphthalene	5	0	5	0%	Yes	0.086	-8	Statistically significant decreasing trend

Notes:

-S values are not displayed unless trend analysis is applicable, and the two-sided p value is less than 0.1

APPENDIX K

EVALUATION OF SEDIMENT DATA

Prepared for

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526 South Church St
Charlotte, NC 28202

REMEDIAL INVESTIGATION TECHNICAL MEMORANDUM

SEDIMENT AND SURFACE WATER

**Former Bramlette Manufactured Gas Plant Site
Greenville, South Carolina
VCC 16-5857-RP**

Prepared by

Geosyntec 
consultants

engineers | scientists | innovators

2501 Blue Ridge Rd, Suite 430
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FR3737

April 2020

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1. INTRODUCTION

Duke Energy Carolinas, LLC (Duke Energy) entered into a Responsible Party Voluntary Cleanup Contract (VCC 16-5857-RP) with the South Carolina Department of Health and Environmental Control (SCDHEC) on July 26, 2016. The VCC pertains to the Former Bramlette Manufactured Gas Plant (MGP) Site (Site) located in Greenville, South Carolina. This Technical Memorandum (TM) has been prepared by Geosyntec Consultants, Inc. (Geosyntec) as a supplement to the Remedial Investigation (RI) report provided by SynTerra (lead project consultant for the Site). This TM describes the sampling objectives, methods used in data collection, and results of the surface water and sediment sampling performed on parcels 3, 4 and 5 of the Site during RI activities conducted at the Site in March and April of 2020.

2. OBJECTIVES

SynTerra and Geosyntec collected surface water and sediment samples from within the drainage ditch which traverses parcels 4 and 5 of the Site. The draining ditch ultimately discharges into the Reedy River to the southwest of parcel 5. Samples were collected to provide additional input for the screening level ecological risk assessment (SLERA), to assess current sediment quality in the areas between the landfill parcel and the Reedy River, and to verify non-aqueous phase liquid (NAPL) extent. Sampling locations and Site parcel boundaries are shown in **Figure 1**.

3. INVESTIGATION METHODS

3.1. Surface Water Sampling Methods

Surface water samples were collected at four locations (SW-13, SW-14, SW-15 and SW-16) prior to collecting sediment samples (**Figure 1**). Field parameters were measured prior to collecting samples. Samples were collected in accordance with the RI Work Plan and the QAPP (SynTerra, 2019).

The following field parameters were measured by submerging a caged YSI[™] probe into the water:

- pH (standard units; s.u.)
- Temperature (degrees Celsius; °C)
- Specific conductance (microsiemens per centimeter, µS/cm)
- Dissolved oxygen (milligrams per liter; mg/L)
- Oxidation/Reduction Potential (millivolts; mV)

Turbidity samples (nephelometric turbidity units; NTUs) were measured using a separate turbidity meter (Hach[™]). Samples were also observed for color and odor. Water quality sampling equipment was inspected by the field program on-Site supervisor and calibrated daily, as applicable, prior to use in the field according to manufacturer instructions. Field forms are provided in **Appendix A**.

Surface water samples were collected at the midpoint of the water column in approximately the center of the stream. Samples were collected by immersing unpreserved bottles directly in the stream. Samples for volatile organic compound (VOC) analysis were collected by decanting water from an unpreserved bottle filled by immersion.

Samples were properly preserved and submitted to a South Carolina certified laboratory for analysis of VOCs (USEPA Method 8260), semi-volatile organic compounds (SVOCs) (USEPA Method 8270), and total suspended solids (TSS) (Method SM2540D). **Table 1**

provides sample details including a summary of approximate “as-collected” coordinates and sample identifications.

3.2. Sediment Sampling Methods

Sediment samples were collected using a Vibracore Mini (by Specialty Devices, Inc [SDI]) with two- or three- inch diameter rigid acetate core barrels and core catchers on March 1-2 and April 10, 2020. A rigid acetate core barrel was attached to a high-frequency mechanical vibrating head; vibration was mechanically applied at the top of the core barrel to advance the barrel into the sediments. Cores were advanced to refusal, which occurred between 0.5 and 3 feet below top of sediments in sampled locations. Samples were collected in accordance with the Work Plan and the QAPP. **Figure 1** illustrates the sample locations relative to Site parcel boundaries.

Following collection, cores were maintained in an upright position throughout transport and processing. Overlying water was drained from cores by drilling a small hole just above the sediment surface and allowing the water to drain. Cores were sub-sectioned using pipe cutters into discrete samples corresponding to depths of 0.0 to 0.5-foot, 0.5-foot to 1-foot, 1-foot to 2-foot, 2-foot to 3-foot, as applicable based on core recovery. Care was taken to prevent material from flowing out of the core liner during sub-sectioning. Core sections were then emptied into stainless-steel bowls.

Sediment samples were visually classified in general accordance with the Unified Soil Classification System (USCS) per American Society of Testing and Materials (ASTM) D2488. After each sediment sample was visually classified, the sediment was homogenized using a stainless-steel spoon, and sediment was spooned into laboratory-supplied bottleware. Foreign materials present in the sediment (e.g., gravel, vegetation, shell fragments) were not included in sample containers.

Analytical chemistry sediment samples were placed in iced coolers and managed under chain-of-custody protocols for submittal to Pace Analytical for analysis of:

- VOCs by EPA Method 8260;
- SVOCs by EPA Method 8270;
- Moisture content by ASTM D2974-87; and

- Total organic carbon (TOC) by EPA Method 9060A [select samples only].

Select samples were also analyzed for grain size distribution by ASTM D422 at Bunnell-Lammons Engineering, Inc in Greenville, South Carolina.

All planned samples were collected. At locations SW-13 and SW-14, cores encountered refusal at shallow depths in the center of the drainage channel. Multiple core advancement attempts were made in these sampling locations, and refusal was consistently encountered between 0.5 and 1.0 feet below ground surface (ft bgs); collection attempts were made at locations spaced tens of feet apart. Shallow samples were collected in the channel center and named SW-13A and SW-14A. Cores were successfully advanced to greater depths on the edges of the channel, so additional cores were collected on the channel edge (SW-13 and SW-14) to inform constituent concentrations at greater depths. Additionally, a sampling location not originally included in the RI Work Plan, SW-17, was added to the scope following field reconnaissance to evaluate sediments located to the east of the former drainage ditch on Site parcel 5.

Table 1 provides sample details including a summary of as-collected coordinates, sample identification, total core penetration, and core recovery. Field forms are provided in **Appendix A**.

4. INVESTIGATION RESULTS AND DISCUSSION

4.1. Surface Water Analytical Results

Table 2 provides the analytical results from surface water samples and their reported concentrations are compared against water quality standards established in SCDHEC Regulation 61-68. Laboratory reports are provided as **Appendix B**.

There were no detections of VOCs or SVOCs in any of the collected surface water samples. TSS concentrations were detected in samples SW-13 and SW-14.

4.2. Sediment Texture

Sediment texture and particle size were evaluated to a maximum depth of 3 ft bgs during the sediment sampling. Field personnel qualitatively evaluated the dominant particle sizes in each sediment sample during sample processing. These data were supplemented by laboratory particle size analysis of select samples (analysis by ASTM D422) to provide a quantitative assessment of the particle size distribution.

Sediment textures were observed as follows, based on field visual classification and laboratory particle size testing:

- Samples from the channel centerline were silty in the surface intervals (0 to 1.0 ft bgs).
 - o Sediment samples from SW-13A (surface to 1.0 ft bgs) were fine-grained, unconsolidated silt with high moisture content and high organic content. The sediment sample from SW-14A (0 to 0.5 ft bgs) was silty sand with high moisture content and high organic content. SW-15 was predominantly sandy silt in both intervals collected.
 - o SW-16 and SW-17 contained sandy silt in the surface intervals.
- Where cores were able to be advanced to deeper than approximately 1.0 ft bgs, cores contained clay at deeper intervals.

- o Sediment from the edges of the channel (SW-13 and SW-14) were sandy silt (SW-13) or silty sand (SW-14) in the surface intervals and predominantly clay in deeper intervals.
- o Sediment from SW-16 and SW-17 contained primarily clay deeper in the cores.
- Because the coring technology was not able to collect a sample of the material causing refusal at any location, it is not known what type of material(s) caused refusal.

Sediment core logs are provided in **Appendix A**. **Appendix C** provides the results of laboratory particle size analysis. The laboratory particle size analysis generally agrees with the dominant grain sizes noted in the field.

4.3. Sediment Analytical Results

Table 3 provides the analytical results from sediment samples and their reported concentrations are compared against EPA Regional Screening Levels (RSLs) for industrial and residential soil (**Table 3**). Laboratory reports are provided as **Appendix B**. VOCs were analyzed in 18 of the 19 samples¹. SVOCs were analyzed in all 19 samples collected.

There were no exceedances of EPA RSLs for VOCs (EPA Method 8260B) in any of the 18 analyzed samples. The only detected VOC was acetone, which was detected in 11 of the 18 analyzed samples; acetone is a commonly detected laboratory artifact.

SVOCs were detected in 11 of the 19 analyzed samples. Constituents most frequently detected were benzo(a)anthracene (53% of samples), benzo(a)pyrene (47% of samples), benzo(b)fluoranthene (47% of samples), chrysene (53% of samples), fluoranthene (57% of samples), phenanthrene (47% of samples), and pyrene (58% of samples). Constituents exceeding EPA RSL for Residential Soil were benzo(a)pyrene (47% of samples), benzo(b)fluoranthene (26% of samples), and indeno(1,2,3-cd)pyrene (16% of samples). Constituents exceeding the EPA RSL for Industrial Soil were benzo(a)pyrene (16% of

¹ Recovery at SW-14 (2-3) was insufficient to analyze VOCs. Only SVOCs were analyzed in this sample.

samples), benzo(b)fluoranthene (5% of samples), and indeno(1,2,3-cd)pyrene (16% of samples).

TOC was analyzed and detected in three sediment samples. The sample with the highest TOC concentration was SW-14A (0-0.5). This sample also contained the highest concentrations of SVOCs, indicating that SVOCs are likely associated with organic material in sediment.

Generally, where compounds were detected in sediment cores, their concentrations were most significant in surface intervals (i.e., 0-0.5 ft bgs) and concentrations decreased with depth. This was not the case for SW-15, where concentrations in the deeper interval (0.5-1 ft bgs) were higher than in the surface interval. Vertical delineation of samples cannot be confirmed at this time due to the shallow refusal encountered at the sampling locations. Contaminant concentrations are higher in the channel centerline than on the channel edges.

There is no clear spatial trend when considering concentrations in samples from upstream to downstream. Except for acetone, there were no VOC or SVOC detections in SW-17.

4.4. Sediment PAH Source Evaluation

Analytical concentrations decreasing with depth indicates that contaminants are likely originating from depositional sources, such as runoff sources, which are likely depositing on the Site when rainwater arrives in the low-energy pooling water commonly present on the Site after major rain events. Particulates which sorb contaminants would settle from the water column and be deposited on top of existing sediment.

NAPL was not encountered in any of the sediment samples. Therefore, a full PAH fingerprint analysis was not completed. However, a commonly used forensic ratio (fluoranthene/pyrene (FL/PY)) was calculated and evaluated to assess potential sources of the detected polycyclic aromatic hydrocarbons (PAHs). This ratio is commonly used to distinguish between petrogenic and pyrogenic sources. Petrogenic PAHs are generally those derived from petroleum and can include gasoline/diesel fuels, crude oil, and lubricants. Pyrogenic PAHs are derived from oxygen-depleted, high-temperature processes including incomplete combustion of feedstocks such as coal or oils. Petrogenic sources typically have FL/PY ratio of <1, while pyrogenic material has a FL/PY ratio >1 (EPRI, 2000; Uhler, 2006). Results of the ratio analysis are provided in **Table 4**.

Ten of the eleven sediment samples evaluated² resulted in a FL/PY ratio close to 1 (ranging from 0.95 to 1.15). For comparison, tar-like material from Site monitoring well MW-6A has been analyzed for PAHs (Synterra, 2019) and its FL/PY ratio is 1.30. Although the FL/PY ratio is expected to remain somewhat stable in the environment, mixing with another source or heavy weathering could cause this ratio to decrease with time and/or distance from the source. Sediment sample SW-16 (0-0.5) differs from the other ten evaluated sediment samples with a FL/PY ratio of 1.38, which may indicate different source influences at this location.

4.5. Risk Assessment

An evaluation of ecological risk is discussed in the RI Report.

² Ratios were only performed in the case where compounds were detected.

5. CONCLUSIONS

Based on the results of the RI sediment investigation, the following conclusions can be made:

- Visible NAPL was not encountered in any sediment sample.
- The sediment and surface water sampling program achieved 100% completeness based upon the proposed sampling locations and samples specified in the RI Work Plan.
- The collected dataset is sufficient to inform the SLERA. Vertical delineation of sediment impacts may not have been achieved; deeper samples would be required to confirm lack of impacts at depth.
- Surface water samples were not found to contain any detectable concentrations of VOCs or SVOCs.
- The texture of the shallow sediment (to depths of 0.5 to 1.0 ft bgs) was predominately characterized as high moisture content, fine grained, unconsolidated silt. The sediment beneath the surface intervals consisted primarily of clay. No visible NAPL impacts were observed in any of the samples collected.
- Sediment impacts generally peak in the surface intervals and decrease with sample depth.
 - o Constituents most frequently detected were benzo(a)anthracene (53% of samples), benzo(a)pyrene (47% of samples), benzo(b)fluoranthene (47% of samples), chrysene (53% of samples), fluoranthene (57% of samples), phenanthrene (47% of samples), and pyrene (58% of samples).
 - o Constituents exceeding EPA RSL for Residential Soil were benzo(a)pyrene (47% of samples), benzo(b)fluoranthene (26% of samples), and indeno(1,2,3-cd)pyrene (16% of samples).

- Constituents exceeding the EPA RSL for Industrial Soil were benzo(a)pyrene (16% of samples), benzo(b)fluoranthene (5% of samples), and indeno(1,2,3-cd)pyrene (16% of samples).
- Contaminant concentrations are higher in the channel centerline than on the channel edges.
 - Core recovery in the northern portion of the sampling area was greater in the areas along the edge of the channel. The channel appears to have been armored at some point; consistent shallow refusal was encountered in the channel centerline.
- Results of a PAH ratio analysis indicate that the PAHs detected in sediment samples are inconsistent with the NAPL signature of tar like material previously collected from the Site at MW-6A (Parcel 3), and may be either heavily weathered or influenced by sources other than an MGP source.

6. REFERENCES

EPRI, 2000. Chemical Source Attribution at Former MGP Sites. Binghamton, NY. 1000728

SynTerra, 2019. Remedial Investigation Work Plan Addendum, Former Bramlette MGP Site. Prepared for Duke Energy Carolinas, LLC.

Uhler, A.D., Emsbo-Mattingly, S.D., 2006. *Environmental stability of PAH source indices in pyrogenic tars*. Bull. Environ. Contam. Toxicol. 76, 689-696.

TABLES

TABLE 1
SAMPLING DETAILS
REMEDIAL INVESTIGATION TECHNICAL MEMORANDUM: Sediment and Surface Water
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Location	Latitude	Longitude	Surface Water Sample Collection Date	Associated Surface Water Sample IDs	Sediment Sample Collection Date	Associated Sediment Sample IDs	Sediment Core Total Penetration (ft)	Sediment Core Recovery (ft)
SW-13	34.858329	-82.418689	3/1/2020	SW-13-WS-20200301	3/2/20	SW-13_SE_20200302 (0-0.5) SW-13_SE_20200302 (0.5-1.0) SW-13_SE_20200302 (1.0-2.0)	2.25	1.8
SW-13A			N/A	N/A	3/2/20	SW-13A_SE_20200302 (0-0.5) SW-13A_SE_20200302 (0.5-1.0)	1.6	1.03
SW-14	34.857191	-82.418038	3/1/2020	SW-14-WS-20200301	3/2/20	SW-14_SE_20200302 (0-0.5) SW-14_SE_20200302 (0.5-1.0) SW-14_SE_20200302 (1.0-2.0) SW-14_SE_20200302 (2.0-3.0)	3.9	2.25
SW-14A			N/A	N/A	3/2/20	SW-14A_SE_20200302 (0-0.5)	1	0.5
SW-15	34.856367	-82.417358	3/1/2020	SW-15-WS-20200301	3/1/20	SW-15_SE_20200301 (0-0.5) SW-15_SE_20200301 (0.5-1.0)	1.45	1.0
SW-16	34.855237	-82.416313	3/1/2020	SW-16-WS-20200301	3/1/20	SW-16_SE_20200301 (0-0.5) SW-16_SE_20200301 (0.5-1.0) SW-16_SE_20200301 (1.0-2.0) SW-16_SE_20200301 (2.0-3.0)	3.0	2.25
SW-17	34.855164	-82.416019	Not Collected	Not Collected	4/10/2020	SW-17_SE_20200410 (0-0.5) SW-17_SE_20200410 (0.5-1.0) SW-17_SE_20200410 (1.0-2.0)	2.3	1.6

Notes:

Sampling coordinates are approximated and have not been surveyed.

N/A indicates so sample was intended to be collected in associated location, so no sample was collected.

"Not collected" indicates no sample was able to be collected because no surface water was present at the time of sampling.

Samples SW-13 and SW-14 were collected along the channel edge in the vicinity of SW-13A and SW-14A, respectively.

TABLE 2
SURFACE WATER ANALYTICAL RESULTS SUMMARY
QUARTERLY PROGRESS REPORT - FIRST QUARTER 2020
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analytical Parameter		8260B (VOA and MTBE)							8260B (Other VOC)				8270D (PAH)					
		Benzene	Ethylbenzene	Toluene	Xylene			MTBE	2-Butanone (MEK)	2-Hexanone	Acetone	Trichloroethene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene
					m&p-Xylene	o-Xylene	Total Xylene											
Reporting Units		µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L
SCDHEC Regulation 61-68		5	700	1000	NE	NE	10000	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Sample ID	Sample Collection Date	Analytical Results																
SW-13	03/01/2020	<1	<1	<1	<2	<1	<1	<1	<5	<5	<25	<1	<1	<10	<10	<10	<10	<10
SW-14	03/01/2020	<1	<1	<1	<2	<1	<1	<1	<5	<5	<25	<1	<1	<10	<10	<10	<10	<10
SW-15	03/01/2020	<1	<1	<1	<2	<1	<1	<1	<5	<5	<25	<1	<1	<10	<10	<10	<10	<10
SW-16	03/01/2020	<1	<1	<1	<2	<1	<1	<1	<5	<5	<25	<1	<1	<10	<10	<10	<10	<10
QC SAMPLE RESULTS																		
SW-15 DUP	03/01/2020	<1	<1	<1	<2	<1	<1	<1	<5	<5	<25	<1	<1	<10	<10	<10	<10	<10
EB-01_WQ_20200301	03/01/2020	<1	<1	<1	<2	<1	<1	<1	<5	<5	<25	<1	<1	<10	<10	<10	<10	<10
EB-01_WQ_20200309	03/09/2020	<1	<1	<1	<2	<1	<1	<1	<5	<5	<25	<1	<1	<10	<10	<10	<10	<10
TB-01_WQ_20200301	03/01/2020	<1	<1	<1	<2	<1	<1	<1	<5	<5	<25	<1	<1	NA	NA	NA	NA	NA
TB-01_WQ_20200309	03/09/2020	<1	<1	<1	<2	<1	<1	<1	<5	<5	<25	<1	<1	NA	NA	NA	NA	NA

Prepared by: JPC Checked by: TCK

Notes:
Bold type indicates that the compound was detected above the adjusted method detection limit.
< - concentration not detected at or above the adjusted reporting limit.
MTBE - methyl-tert-butyl ether
NA - Not analyzed
NE - No regulatory standard established at this time. A site-specific target level may be established as part of the risk assessment outlined in Section 5.0 of the RIWP-A.
µg/L - micrograms per liter
PAH - polyaromatic hydrocarbons
SCDHEC - South Carolina Department of Health and Environmental Control
SVOC - semi-volatile organic compounds
VOA - volatile organic analysis
VOC - volatile organic compounds

TABLE 2
SURFACE WATER ANALYTICAL RESULTS SUMMARY
QUARTERLY PROGRESS REPORT - FIRST QUARTER 2020
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analytical Parameter		8270D (PAH)												8270D (Other SVOC)					Other
		Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Phenanthrene	Pyrene	2,4-Dimethylphenol	2,4-Dinitrotoluene	2-Methylphenol (o-Cresol)	Dibenzofuran	Phenol	Total Suspended Solids
Reporting Units		µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	mg / L
Regulatory Standard		NE	0.2	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Sample ID	Sample Collection Date	Analytical Results																	
SW-13	03/01/2020	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	8.6
SW-14	03/01/2020	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	6.4
SW-15	03/01/2020	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<4.8
SW-16	03/01/2020	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<4.6
QC SAMPLE RESULTS																			
SW-15 DUP	03/01/2020	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<4.9
EB-01_WQ_20200301	03/01/2020	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	NA
EB-01_WQ_20200309	03/09/2020	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	NA
TB-01_WQ_20200301	03/01/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB-01_WQ_20200309	03/09/2020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Prepared by: JPC Checked by: TCK

Notes:
Bold type indicates that the compound was detected above the adjusted method detection limit.
< - concentration not detected at or above the adjusted reporting limit.
MTBE - Methyl-tert-butyl ether
NA - Not analyzed
NE - No regulatory standard established at this time. A site-specific target level may be established as part of the risk assessment outlined in Section 5.0 of the RIWP-A.
µg/L - Micrograms per liter
PAH - polyaromatic hydrocarbons
SCDHEC - South Carolina Department of Health and Environmental Control
SVOC - semi-volatile organic compounds
VOA - volatile organic analysis
VOC - volatile organic compounds

TABLE 3
SEDIMENT ANALYTICAL RESULTS SUMMARY
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Laboratory Method		9060A	8260B (VOA and MTBE)							8260B (Other VOC)						8270D (PAH)		
Analytical Parameter	Total Organic Carbon	Benzene	Ethylbenzene	Toluene	Xylene			MTBE	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Methylene Chloride	p-Isopropyltoluene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	
					m&p-Xylene	o-Xylene	Xylene (Total)											
Reporting Units	mg / kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
EPA RSL for Industrial Soil	N / A	5100	25000	47000000	2400000	2800000	2500000	210000	NE	1800000	1500000	670000000	1000000	NE	17000	73000	3000000	
EPA RSL for Residential Soil	N / A	1200	5800	4900000	560000	650000	580000	47000	NE	300000	270000	61000000	57000	NE	3800	18000	240000	
Sample ID	Sample Collection Date		Analytical Results															
SW-13 (0-0.5)	03/02/2020	NA	<12.1	<12.1	<12.1	<24.2	<12.1	<24.2	<12.1	<12.1	<12.1	<12.1	68.3 j	<48.4	<12.1	<12.1	<470	<470
SW-13 (0.5-1)	03/02/2020	NA	<8.5	<8.5	<8.5	<17	<8.5	<17	<8.5	<8.5	<8.5	<8.5	<170	<34.1	<8.5	<8.5	<482	<482
SW-13 (1-2)	03/02/2020	NA	<8.2	<8.2	<8.2	<16.3	<8.2	<16.3	<8.2	<8.2	<8.2	<8.2	<163	<32.7	<8.2	<8.2	<510	<510
SW-13A (0-0.5)	03/02/2020	108000	<21.8	<21.8	<21.8	<43.7	<21.8	<43.7	<21.8	<21.8	<21.8	<21.8	65.5 j	<87.4	<21.8	379 j	<1300	<1300
SW-13A (0.5-1)	03/02/2020	NA	<20.1	<20.1	<20.1	<40.2	<20.1	<40.2	<20.1	<20.1	<20.1	<20.1	59.5 j	<80.3	<20.1	<933	<933	<933
SW-14 (0-0.5)	03/02/2020	NA	<9.9	<9.9	<9.9	<19.7	<9.9	<19.7	<9.9	<9.9	<9.9	<9.9	<197	<39.5	<9.9	<9.9	<514	<514
SW-14 (0.5-1)	03/02/2020	NA	<7.7	<7.7	<7.7	<15.5	<7.7	<15.5	<7.7	<7.7	<7.7	<7.7	81.2 j	<30.9	<7.7	<7.7	<504	<504
SW-14 (1-2)	03/02/2020	NA	<9.1	<9.1	<9.1	<18.1	<9.1	<18.1	<9.1	<9.1	<9.1	<9.1	252	<36.2	<9.1	<9.1	<429	<429
SW-14 (2-3)	03/02/2020	NA	NA	NA	NA	NA	NA	NA	NA	<487	NA	NA	NA	NA	NA	<487	<487	<487
SW-14A (0-0.5)	03/02/2020	207000	<31.3	<31.3	<31.3	<62.5	<31.3	<62.5	<31.3	<31.3	<31.3	<31.3	<625	<125	<31.3	2180 j	<6640	<6640
SW-15 (0-0.5)	03/01/2020	NA	<13.7	<13.7	<13.7	<27.5	<13.7	<27.5	<13.7	<13.7	<13.7	<13.7	48.8 j	<54.9	<13.7	<13.7	<789	<789
SW-15 (0.5-1)	03/01/2020	NA	<10.1	<10.1	<10.1	<20.1	<10.1	<20.1	<10.1	<10.1	<10.1	<10.1	39 j	<40.3	<10.1	<10.1	<3230	<3230
SW-16 (0-0.5)	03/01/2020	76300	<19.6	<19.6	<19.6	<39.3	<19.6	<39.3	<19.6	<19.6	<19.6	<19.6	184 j	<78.6	<19.6	240 j	<657	<657
SW-16 (0.5-1)	03/01/2020	NA	<20.6	<20.6	<20.6	<41.2	<20.6	<41.2	<20.6	<20.6	<20.6	<20.6	104 j	<82.3	23.3	<20.6	<553	<553
SW-16 (1-2)	03/01/2020	NA	<6.2	<6.2	<6.2	<12.4	<6.2	<12.4	<6.2	<6.2	<6.2	<6.2	<124	<24.8	<6.2	<6.2	<488	<488
SW-16 (2-3)	03/01/2020	NA	<7.5	<7.5	<7.5	<14.9	<7.5	<14.9	<7.5	<7.5	<7.5	<7.5	21.7 j	<29.8	<7.5	<7.5	<467	<467
SW-17 (0-0.5)	4/10/20	NA	<5.1	<5.1	<5.1	<10.3	<5.1	<10.3	<5.1	<5.1	<5.1	<5.1	<103	<20.6	<5.1	<5.1	<3900	<3900
SW-17 (0.5-1)	4/10/20	NA	<4.7	<4.7	<4.7	<9.4	<4.7	<9.4	<4.7	<2270	<4.7	<4.7	23.6 j,M1	<18.8	<4.7	<4.7	<2270	<2270
SW-17 (1-2)	4/10/20	NA	<5.1	<5.1	<5.1	<10.3	<5.1	<10.3	<5.1	<5.1	<5.1	<5.1	37.6 j	<20.6	<5.1	<5.1	<462	<462
QC SAMPLE RESULTS																		
SW-13A (0-0.5) DUP	03/02/2020		<22.1	<22.1	<22.1	<44.2	<22.1	<44.2	<22.1	<22.1	<22.1	<22.1	<442	<88.4	<22.1	<22.1	<1170	<1170

Notes:

- Indicates that the compound was detected above EPA RSL for Industrial Soil as listed in Section 4.11 of the RIWP-A

- Indicates that the compound was detected above EPA RSL for Residential Soil as listed in Section 4.11 of the RIWP-A

< - Concentration not detected at or above the adjusted reporting limit.

µg/kg - Micrograms per kilogram

ASTM - American Society for Testing and Materials

Dup - duplicate

EPA - Environmental Protection Agency

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

MTBE - Methyl tert-butyl ether

NA - Not analyzed

NE - No screening level established at this time. A site-specific risk-based screening level may be established as part of the risk assessment process outlined in Section 5.0 of the RIWP-A.

PAH - Poly Aromatic Hydrocarbons

R1 - Relative Percent Difference (RPD) value was outside control limits.

RSL - Regional Screening Level

SVOC - semi-volatile organic compounds

VOA - volatile organic analysis

VOC - volatile organic compounds

Prepared by: JPC

Checked by: TCK

TABLE 3
SEDIMENT ANALYTICAL RESULTS SUMMARY
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Laboratory Method		8270D (PAH)														8270D (Other SVOC)	
Analytical Parameter		Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Phenanthrene	Pyrene	Dibenzofuran
Reporting Units		µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
EPA RSL for Industrial Soil		45000000	NE	230000000	NE	2100	21000	NE	210000	2100000	2100	30000000	30000000	21000	NE	23000000	1000000
EPA RSL for Residential Soil		3600000	NE	18000000	NE	110	1100	NE	11000	110000	110	2400000	2400000	1100	NE	1800000	73000
Sample ID	Sample Collection Date	Analytical Results															
SW-13 (0-0.5)	03/02/2020	<470	287 j	490	1720	1680	1870	1030	748	1530	<470	3010	<470	876	1280	2860	<470
SW-13 (0.5-1)	03/02/2020	<482	142 j	<482	597	615	683	391 j	279 j	529	<482	942	<482	326 j	201 j	819	<482
SW-13 (1-2)	03/02/2020	<510	<510	<510	172 j	<510	<510	<510	<510	163 j	<510	301 j	<510	<510	<510	269 j	<510
SW-13A (0-0.5)	03/02/2020	<1300	516 j	1100 j	1990	1860	2160	1040 j	902 j	1810	<1300	4530	449 j	898 j	2380	4060	<1300
SW-13A (0.5-1)	03/02/2020	<933	<933	<933	432 j	421 j	469 j	<933	<933	396 j	<933	875 j,R1	<933	<933	389 j	901 j,R1	<933
SW-14 (0-0.5)	03/02/2020	<514	<514	<514	<514	<514	<514	<514	<514	<514	<514	182 j	<514	<514	<514	192 j	<514
SW-14 (0.5-1)	03/02/2020	<504	<504	<504	<504	<504	<504	<504	<504	<504	<504	<504	<504	<504	<504	<504	<504
SW-14 (1-2)	03/02/2020	<429	<429	<429	<429	<429	<429	<429	<429	<429	<429	<429	<429	<429	<429	<429	<429
SW-14 (2-3)	03/02/2020	<487	<487	<487	<487	<487	<487	<487	<487	<487	<487	<487	<487	<487	<487	<487	<487
SW-14A (0-0.5)	03/02/2020	<6640	3360 j	10500	22800	20800	23200	11400	8810	19700	<6640	44500	3230 j	10400	28600	43400	<6640
SW-15 (0-0.5)	03/01/2020	<789	<789	<789	593 j	573 j	613 j	<789	<789	515 j	<789	968	<789	<789	296 j	879	<789
SW-15 (0.5-1)	03/01/2020	<3230	1540 j	3580	8320	8060	8970	4600	3390	7280	<3230	16300	1420 j	4040	10400	16100	<3230
SW-16 (0-0.5)	03/01/2020	<657	566 j	1910	4710	3970	4540	2210	2070	4040	<657	11400	412 j	2000	6630	8250	242 j
SW-16 (0.5-1)	03/01/2020	<553	<553	<553	824	739	827	337 j	358 j	720	<553	1080	<553	338 j	143 j	962	<553
SW-16 (1-2)	03/01/2020	<488	<488	<488	<488	<488	<488	<488	<488	<488	<488	<488	<488	<488	<488	<488	<488
SW-16 (2-3)	03/01/2020	<467	<467	<467	<467	<467	<467	<467	<467	<467	<467	<467	<467	<467	<467	<467	<467
SW-17 (0-0.5)	4/10/20	<3900	<3900	<3900	<3900	<3900	<3900	<3900	<3900	<3900	<3900	<3900	<3900	<3900	<3900	<3900	<3900
SW-17 (0.5-1)	4/10/20	<2270	<2270	<2270	<2270	<2270	<2270	<2270	<2270	<2270	<2270	<2270	<2270	<2270	<2270	<2270	<2270
SW-17 (1-2)	4/10/20	<462	<462	<462	<462	<462	<462	<462	<462	<462	<462	<462	<462	<462	<462	<462	<462
QC SAMPLE RESULTS																	
SW-13A (0-0.5) DUP	03/02/2020	<1170	342 j	520 j	1020 j	978 j	976 j	545 j	<1170	935 j	<1170	2340	<1170	<1170	1060 j	1860	<1170

Notes:
Bold type indicates that the compound was detected above the adjusted method detection limit.
 - Indicates that the compound was detected above a potentially applicable screening level listed in Section 4.11 of the RIWP-A
 - Indicates that the compound was detected above a potentially applicable screening level listed in Section 4.11 of the RIWP-A
< - Concentration not detected at or above the adjusted reporting limit.
µg/kg - Micrograms per kilogram
ASTM - American Society for Testing and Materials
Dup - duplicate
EPA - Environmental Protection Agency
j - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MTBE - Methyl tert-butyl ether
NA - Not analyzed
NE - No screening level established at this time. A site-specific risk-based screening level may be established as part of the risk assessment process outlined in Section 5.0 of the RIWP-A.
PAH - Poly Aromatic Hydrocarbons
R1 - Relative Percent Difference (RPD) value was outside control limits.
RSL - Regional Screening Level
SVOC - semi-volatile organic compounds
VOA - volatile organic analysis
VOC - volatile organic compounds

Prepared by: JPC Checked by: TCK

TABLE 4
RATIO CALCULATIONS
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Location ID	FL (ug / kg)	PY (ug / kg)	FL / PY Ratio
SW-13 (0-0.5)	3010	2860	1.05
SW-13 (0.5-1)	942	819	1.15
SW-13 (1-2)	301 j	269 j	1.12
SW-13A (0-0.5)	4530	4060	1.12
SW-13A (0.5-1)	875 j,R1	901 j,R1	0.97
SW-14 (0-0.5)	182 j	192 j	0.95
SW-14 (0.5-1)	ND	ND	n/a
SW-14 (1-2)	ND	ND	n/a
SW-14 (2-3)	ND	ND	n/a
SW-14A (0-0.5)	44500	43400	1.03
SW-15 (0-0.5)	968	879	1.10
SW-15 (0.5-1)	16300	16100	1.01
SW-16 (0-0.5)	11400	8250	1.38
SW-16 (0.5-1)	1080	962	1.12
SW-16 (1-2)	ND	ND	n/a
SW-16 (2-3)	ND	ND	n/a
SW-17 (0-.0.5)	ND	ND	n/a
SW-17 (0.5-1.0)	ND	ND	n/a
SW-17 (1.0-2.0)	ND	ND	n/a
MW-6A (NAPL)	10600	8130	1.30

Notes:

FL=Fluoranthene

PY=Pyrene

ND=Non-detect

n/a=Ratio not calculated due to non-detected constituents

NAPL=Non-aqueous phase liquid

Ratios were calculated in sediment samples for comparison to tar-like material from the Site and to ranges published in EPRI, 2000.

FIGURE

NOTES:

¹ ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM 88 (NAVD 88).

² SURFACE WATER LOCATIONS, FORMER DRAINAGE DITCHES, EXCAVATION AREA, AND VAUGHN LANDFILL BOUNDARY FROM ERM GROUNDWATER REMEDIAL INVESTIGATION WORK PLAN ADDENDUM, APRIL 13, 2018. THESE LAYERS ARE GEOREFERENCED AND APPROXIMATE.

³ MONITORING WELL LOCATIONS AND ELEVATIONS SURVEYED BY A SOUTH CAROLINA LICENSED PROFESSIONAL LAND SURVEYOR

⁴ TOPOGRAPHIC CONTOURS FOR GREENVILLE COUNTY FROM SC DNR (2013).

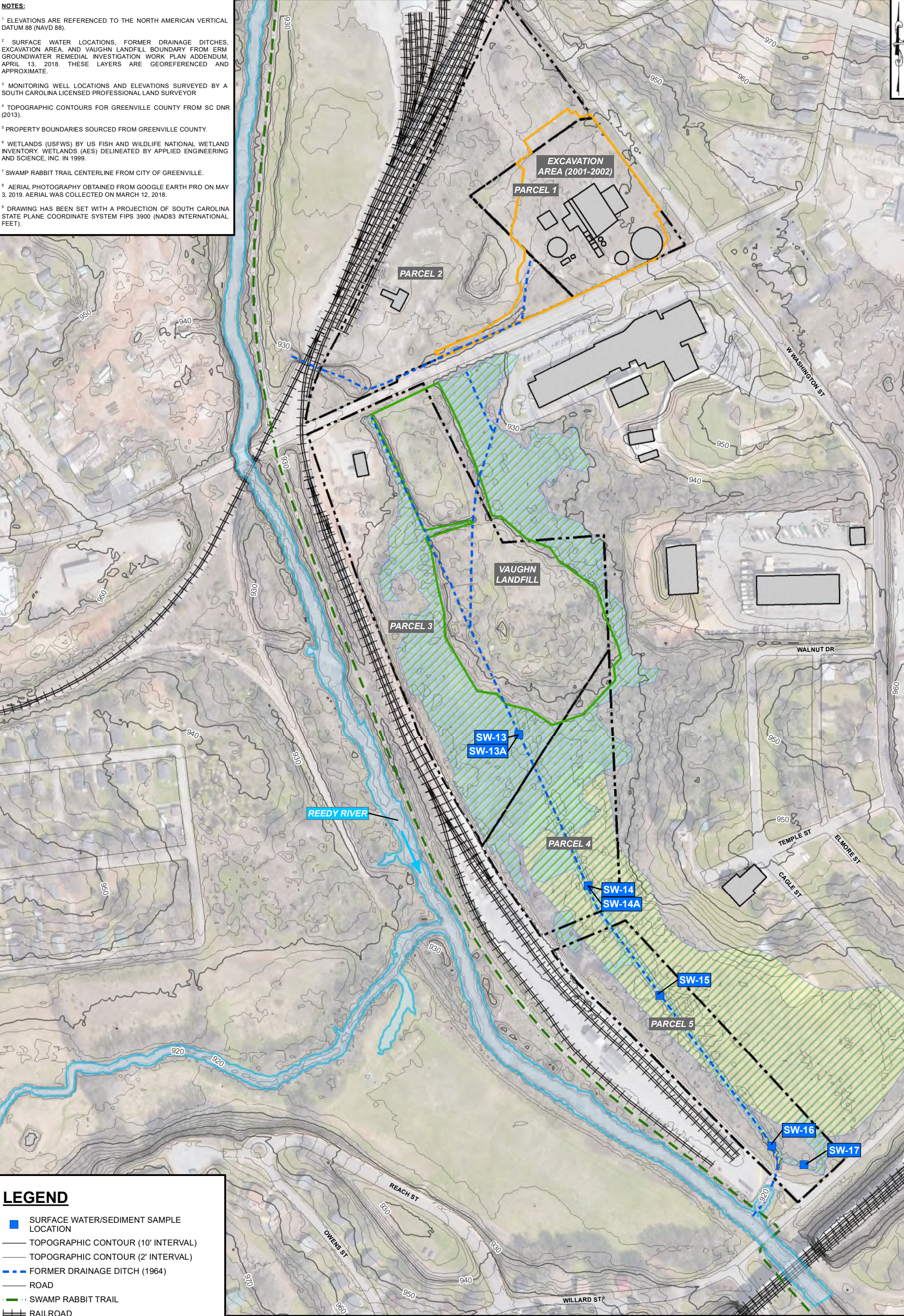
⁵ PROPERTY BOUNDARIES SOURCED FROM GREENVILLE COUNTY.

⁶ WETLANDS (USFWS) BY US FISH AND WILDLIFE NATIONAL WETLAND INVENTORY. WETLANDS (AES) DELINEATED BY APPLIED ENGINEERING AND SCIENCE, INC. IN 1999.

⁷ SWAMP RABBIT TRAIL CENTERLINE FROM CITY OF GREENVILLE.

⁸ AERIAL PHOTOGRAPHY OBTAINED FROM GOOGLE EARTH PRO ON MAY 3, 2019. AERIAL WAS COLLECTED ON MARCH 12, 2018.

⁹ DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83 INTERNATIONAL FEET).



LEGEND

- SURFACE WATER/SEDIMENT SAMPLE LOCATION
- TOPOGRAPHIC CONTOUR (10' INTERVAL)
- TOPOGRAPHIC CONTOUR (2' INTERVAL)
- FORMER DRAINAGE DITCH (1964)
- ROAD
- SWAMP RABBIT TRAIL
- + RAILROAD
- BUILDING
- EXCAVATED AREA (2001-2002)
- VAUGHN LANDFILL BOUNDARY
- HYDROLOGY
- PARCEL BOUNDARY
- WETLANDS (AES)
- WETLANDS (USFWS)



125

GRAPHIC SCALE

0 125 250

(IN FEET)

DRAWN BY: T. KING

REVISD BY: C. ALMOND

CHECKED BY:

APPROVED BY:

PROJECT MANAGER: T. PLATING

www.synterracorp.com

DATE: 05/21/2019

DATE: 04/28/2020

FIGURE 1
SAMPLING LOCATIONS
FORMER BRAMLETTE MGP SITE
EAST BRAMLETTE ROAD
GREENVILLE, SOUTH CAROLINA

APPENDIX A

Field Forms

SURFACE WATER SAMPLING LOG



148 River Street, Suite 220
Greenville, South Carolina 29601
(864) 421-9999 • (864) 421-9909 fax
www.synTerraCorp.com

CLIENT/PROJECT NO. 1026.800.09
LOCATION: Greenville, SC
FIELD PERSONNEL: TEL, TJL
WEATHER: ☒ SUNNY ☐ OVERCAST ☐ RAIN ☐ COOL ☐ WARM 50
MULTI METER TYPE/S#: VSI 16E100236
TURBIDITY METER TYPE/S#: HACH 17050017383

SAMPLE ID: SW-13-WS-20200301
SAMPLE DATE: 3/1/20
SAMPLE TIME: 1005

READING	TIME	TEMPERATURE	pH	CONDUCTANCE	DO	ORP	TURBIDITY	COLOR
		(Whole # ° Celsius)	(X.XX su)	(Whole # µS/cm)	(X.XX mg/L)	(Whole # mV)	(X.X NTU)	
1	1005	5.8	7.02	4.24	5.17	85	21.3	cloudy

429 TEL

CONSTITUENTS SAMPLED	NUMBER OF CONTAINERS							CONSTITUENTS SAMPLED	NUMBER OF CONTAINERS						
	125 ml POLY	250 ml POLY	500 ml POLY	40 ml VOA	125 ml AMBER	250 ml CLEAR	500 ml CLEAR		125 ml POLY	250 ml POLY	500 ml POLY	40 ml VOA	125 ml CLEAR	250 ml CLEAR	500 ml CLEAR
VOC, SVOC, TSS			1	3			2								

COMMENTS: NO ODOR, BOTTLES FILLED BY
IMMERSION AND DECANATING

FLOW: no apparent flow, flow rate not measured
width: 22'
Av. Depth: 0.9'
Deepest point: 1.0'

EB-01-SE changed to
EB-02-WA

SURFACE WATER SAMPLING LOG



148 River Street, Suite 220
Greenville, South Carolina 29601
(864) 421-9999 • (864) 421-9909 fax
www.synTerraCorp.com

CLIENT/PROJECT NO. 1026.800.09

LOCATION: Greenville, SC

FIELD PERSONNEL: TCV, TSG

WEATHER: ☒ SUNNY ☐ OVERCAST ☐ RAIN ☐ COOL ☐ WARM 45

MULTI METER TYPE/S#: YSI 16E100 236

TURBIDITY METER TYPE/S# HACH 1205 OCO 17383

SAMPLE ID:

SAMPLE DATE: 3/1/20

SW-14-WS-20200301

SAMPLE TIME: 0940

READING	TIME	TEMPERATURE	pH	CONDUCTANCE	DO	ORP	TURBIDITY	COLOR
		(Whole # ° Celsius)	(X.XX su)	(Whole # µS/cm)	(X.XX mg/L)	(Whole # mV)	(X.X NTU)	
1	0940	5.5	6.47	337	6.75	89	15.9	clear

CONSTITUENTS SAMPLED	NUMBER OF CONTAINERS							CONSTITUENTS SAMPLED	NUMBER OF CONTAINERS						
	125 ml POLY	250 ml POLY	500 ml POLY	40 ml VOA	125 ml AMBER	250 ml CLEAR	500 ml CLEAR		125 ml POLY	250 ml POLY	500 ml POLY	40 ml VOA	125 ml CLEAR	250 ml CLEAR	500 ml CLEAR
VOC, SVOC, TSS			13				2								

COMMENTS:

Visible sheen on water, NO ODOR,
BOTTLES FILLED BY IMMERSION + DECANTING
Width: 17' No apparent flow;
Av depth: 0.75' flow rate not measured
Deepest point: 1.0'

SURFACE WATER SAMPLING LOG



148 River Street, Suite 220
Greenville, South Carolina 29601
(864) 421-9999 • (864) 421-9909 fax
www.synTerraCorp.com

CLIENT/PROJECT NO. BRAMLETTE

LOCATION: DUKE ENERGY

FIELD PERSONNEL: TJB VCK

WEATHER: ☒ SUNNY ☐ OVERCAST ☐ RAIN ☒ COOL ☐ WARM

MULTI METER TYPE/S#: YSI 16E100236

TURBIDITY METER TYPE/S# HACH 120500017383

SAMPLE ID:

SAMPLE DATE: 3-1-20

SW-15-WG-20200301

SAMPLE TIME: 0900

READING	TIME	TEMPERATURE	pH	CONDUCTANCE	DO	ORP	TURBIDITY	COLOR
		(Whole # ° Celsius)	(X.XX su)	(Whole # µS/cm)	(X.XX mg/L)	(Whole # mV)	(X.X NTU)	
1	0900	5.2	6.88	340	7.22	78	10.7	CLEAR

CONSTITUENTS SAMPLED	NUMBER OF CONTAINERS								CONSTITUENTS SAMPLED	NUMBER OF CONTAINERS							
	125 ml POLY	250 ml POLY	500 ml POLY	40 ml VOA	125 ml AMBER	250 ml CLEAR	500 ml CLEAR	1 GAL AMBER		125 ml POLY	250 ml POLY	500 ml POLY	40 ml VOA	125 ml CLEAR	250 ml CLEAR	500 ml CLEAR	1 GAL AMBER
VOC, SVOC, TSS			1	3				2									
VOC, SVOC, TSS			1	3				2									

COMMENTS: FD-01-WG-20200301 COLLECTED @ 0900
NO ODOR, BOTTLES FILLED BY IMMERSION + DECANTING

Flow

Upstream: 0.35
Downstream: 0.24

760

276 GPM ÷ 0.6

46 GPM

SURFACE WATER SAMPLING LOG



148 River Street, Suite 220
Greenville, South Carolina 29601
(864) 421-9999 • (864) 421-9909 fax
www.synTerraCorp.com

CLIENT/PROJECT NO. 1026.400.001
LOCATION: Greenville, SC
FIELD PERSONNEL: TCK, T-50
WEATHER: ☒ SUNNY ☐ OVERCAST ☐ RAIN ☐ COOL ☐ WARM
MULTI METER TYPE/S#: VSI 16E100236
TURBIDITY METER TYPE/S#: HACH 12050C017383

SAMPLE ID: SW-16-WS-20200301 SAMPLE DATE: 3/1/20
SAMPLE TIME: 0830

READING	TIME	TEMPERATURE	pH	CONDUCTANCE	DO	ORP	TURBIDITY	COLOR
		(Whole # ° Celsius)	(X.XX su)	(Whole # µS/cm)	(X.XX mg/L)	(Whole # mV)	(X.X NTU)	
1	0830	4.9	6.70	346	8.72	72	9.6	clear

CONSTITUENTS SAMPLED	NUMBER OF CONTAINERS								NUMBER OF CONTAINERS						
	125 ml POLY	250 ml POLY	500 ml POLY	40 ml VOA	125 ml AMBER	250 ml CLEAR	500 ml CLEAR		125 ml POLY	250 ml POLY	500 ml POLY	40 ml VOA	125 ml CLEAR	250 ml CLEAR	500 ml CLEAR
VOC, SVOC, TSS			1	3			2								

COMMENTS:

Upstream: 0.48 0.49 95% of flow
Downstream: 0.20, NO ODOR, BOTTLES FILLED BY IMMERSION + DECANTING

DISCHARGE = $54.0 \text{ GPM} / 0.125 \text{ CFS} = 95$

56.8 GPM

51.3 GPM / 0.11875 CFS



Instrument Calibration Log

SynTerra Corporation
148 River Street, Suite 220
Greenville, South Carolina 29601
SC pH Certification No. 23614

Instrument ID: YSI Professional Plus

Serial #: 16E100236

Analyst: TSC

Date: 3-1-20

Sample Location: BRANLETTE

pH Initial Calibration (standard units)

Method: SM 4500 H+ B-2011

Calibrated at SynTerra Office - SC Certified Laboratory for pH

Cal. Time	Cal. Buffer (4.0)	Cal. Buffer (7.0)	Cal Buffer (10.0)	Check Buffer Measured Value
<u>5:30</u>	<u>7.01</u>	<u>7.13</u>	<u>10.04</u>	<u>7.1</u>

*pH buffer checks are to be within ± 0.1 pH units of the standards true value

4 Buffer Reference: 391

10 Buffer Reference: 404

7 Buffer Reference: 399

Check Buffer Reference: 399

pH Calibration Check (standard units)

Time	Check Buffer True Value	*Check Buffer Measured Value
Mid-Day	7.0	<u>7.0</u>
End-of-Day	7.0	<u>7.0</u>
Other	<u>7.0</u>	<u>7.0</u>

*pH buffer checks are to be within ± 0.1 pH units of the standards true value

Check Buffer Reference: 399

Action Required: NONE

Specific Conductance (umhos/cm)

Reference Method: SW846 9050A

Time	Calibration Standard True Value	Verification standard Measured Value
Initial Cal	1409	<u>1407</u>
Mid-Day	1409	<u>7.0</u>
End-of-Day	1409	<u>1275</u>

*Verification standard ± 10 percent of the standards true value

Calibration Standard Reference: 397

Verification Standard Reference: 2014 1409

Dissolved Oxygen (mg/L)

Reference Method: SM 4500 O G-2001

	Time	Temp °C	Barometric Pressure (mm Hg)	Meter DO Reading (mg/L)	Correction Factor	DO at Temperature (mg/L)	Theoretical DO (mg/L)
Initial*	<u>02:10</u>	<u>0.8</u>	<u>743</u>	<u>14.03</u>	<u>.98</u>	<u>14.10</u>	<u>13.82</u>
Mid-Day							<u>7.0</u>
End-of-Day	<u>11:05</u>	<u>5.4</u>	<u>743</u>	<u>12.00</u>	<u>.98</u>	<u>12.61</u>	<u>12.36</u>

*Initial meter calibration

Theoretical DO = DO from "Dissolved Oxygen Meter Calibration Verification" Table at ambient temp X Correction Factor at Barometric Pressure
Theoretical DO and Meter DO reading within ± 0.5 mg/l, if not recalibrate meter

Project Name: FORMER BRAMLETTE MGP
Project Number: 1026.800

Sediment Sampling Log
(Core Collection)

Sample Location ID: SW-13-SE-20200302

Sample Date: 3/2/2020

GPS Location Code: TG

Sampling Time: 1215

Weather Conditions: cloudy 50s

Sampling Personnel:

Tim Grant, Brian Spillane, Tom King
Amanda Caron, Lauren Wellborn

Target Sample Depth:

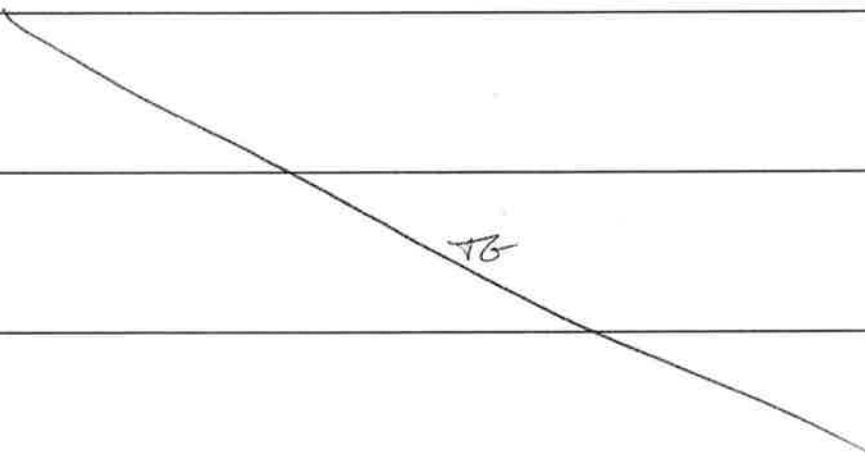
Sampling Method: Vibracore

Other: TG

Total Penetration (h): 2.25 ft

Water Depth (ft): 0.0 (dry sample)

Recovery (h): 1.80 ft

From (ft)	To (ft)	Description (Color, RPD, texture, cohesiveness, odor, sheen, bio structures)
0	0.5	VERY DARK BROWN (10YR 2/2) SANDY SILT, SAND MOSTLY FINE-GRAINED, HEAVY ORGANIC MATERIAL, WOODY DEBRIS, COHESIVE, NON-PLASTIC
0.5	1	BROWNISH YELLOW (10YR 6/6) AND LIGHT GRAY (5Y 7/1) SANDY LEAN CLAY, SAND FINE TO COARSE, MICACEOUS, TRACE ROOTS, COHESIVE, LOW PLASTICITY
1	2	Very dark gray (10YR 3/1) silty CLAY, trace sand, micaceous, trace roots, cohesive, high plasticity, moist
2	3	
3	4	
4	5	

QA/QC Report

QA/QC Type	QA/QC Sample ID	Time	Parent
			<u>TG</u>

Oversight During Core Collection?

No

Yes:

Oversight During Core Processing?

No

Yes:

Additional Comments

Photo of Core? (N) Other:

0-0.5: VOCs, SVOCs
0.5-1: VOCs, SVOCs
1-2: VOCs, SVOCs

Project Name: FORMER BRAMLETTE MCP Sediment Sampling Log
Project Number: 1026.804 (Core Collection)

SW-13A
Sample Location ID: SW-13-SE-20200302
Sample Date: 3/2/2020

GPS Location Code: — 16
Sampling Time: 0915
Weather Conditions: cloudy 50s

Sampling Personnel:

Tim Grant, Brian Spillane, Amanda Caron
Lauren Wellborn

Target Sample Depth:

Sampling Method: Vibracore

Other: 76

Total Penetration (in): 2.7 ft (incl. H₂O depth)

Water Depth (ft): 1.1 ft

Recovery (in): 1.03 ft

From (ft)	To (ft)	Description (Color, RPD, texture, cohesiveness, odor, sheen, bio structures)
0	0.5	SILT, sandy, loose, very fine, ~10% sand, no visible invertebrates High organic content, 10 YR 3/4 SM
0.5	1	SILT, clayey, some sand, loose, low plasticity, fine-med sand grains, no visible invertebrates 10 YR 2/2, some organic fibers ML-CL
1	2	76
2	3	
3	4	
4	5	

QA/QC Report

QA/QC Type	QA/QC Sample ID	Time	Parent
DWP	FD-01-SE-20200302	1700	SW-13A-SE-20200302 (0.0-0.5')
MS/MSD	SW-13-SE-20200302 (0.5-1.0) m/sd	0915	SW-13A-SE-20200302 (0.5-1')

Oversight During Core Collection?

☒ No

Yes:

Oversight During Core Processing?

☒ No

Yes:

Additional Comments

Photo of Core? (Y/N) Other:

2 cores collected + homogenized by interval

TOC collected from 0-0.5 (no dup TOC collected)

Project Name: Former Bramlette MGP
Project Number: 1026.801

Sediment Sampling Log
(Core Collection)

Sample Location ID: SW-14-SE-20200302
Sample Date: 3/2/2020

GPS Location Code: 7C
Sampling Time: 1150
Weather Conditions: cloudy 50s

Sampling Personnel:
Tim Grant, Brian Spillane, Tom King
Amanda Canon, Lauren Wellborn

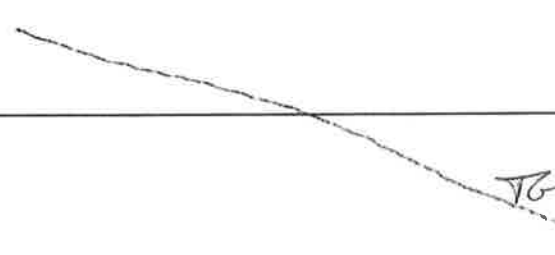
Target Sample Depth:

Sampling Method: Vibracore Other: SO

Total Penetration (in): 3.9 ft

Water Depth (ft): 0.0 ft (collected from bank)

Recovery (in): 2.25 ft

From (ft)	To (ft)	Description (Color, RPD, texture, cohesiveness, odor, sheen, bio structures)
0	0.5	<u>silty SAND</u> very dark gray 10 YR 3/1, sandy <u>SILT</u> , trace organic matter, fine grained mica sand, cohesive, med. plasticity, moist
0.5	1	very dark gray 10 YR 3/1, silty SAND, fine grained mica sand, trace organics, cohesive, low plasticity, moist
1	2	gray 10 YR 5/1, sandy CLAY, trace silty mica sand grains, organic matter, trace roots, moist, cohesive, high plasticity
2	3	gray 10 YR 5/1, sandy CLAY, trace mica sand, orange mottling, black decaying organics, cohesive, high plasticity, moist
3	4	
4	5	

QA/QC Report

QA/QC Type	QA/QC Sample ID	Time	Parent
			<u>TG</u>

Oversight During Core Collection?

No

Yes:

Oversight During Core Processing?

No

Yes:

Additional Comments

Photo of Core? (Y/N) Other:

0-0.5: VOCs, SVOCs,

0.5-1: VOCs, SVOCs, grain size

2-3: SVOCs only

Project Name: Former Bramlette MGP Sediment Sampling Log
Project Number: 1026.801 (Core Collection)

Sample Location ID: SW-14A-SE-20-00302
Sample Date: 3/2/2020

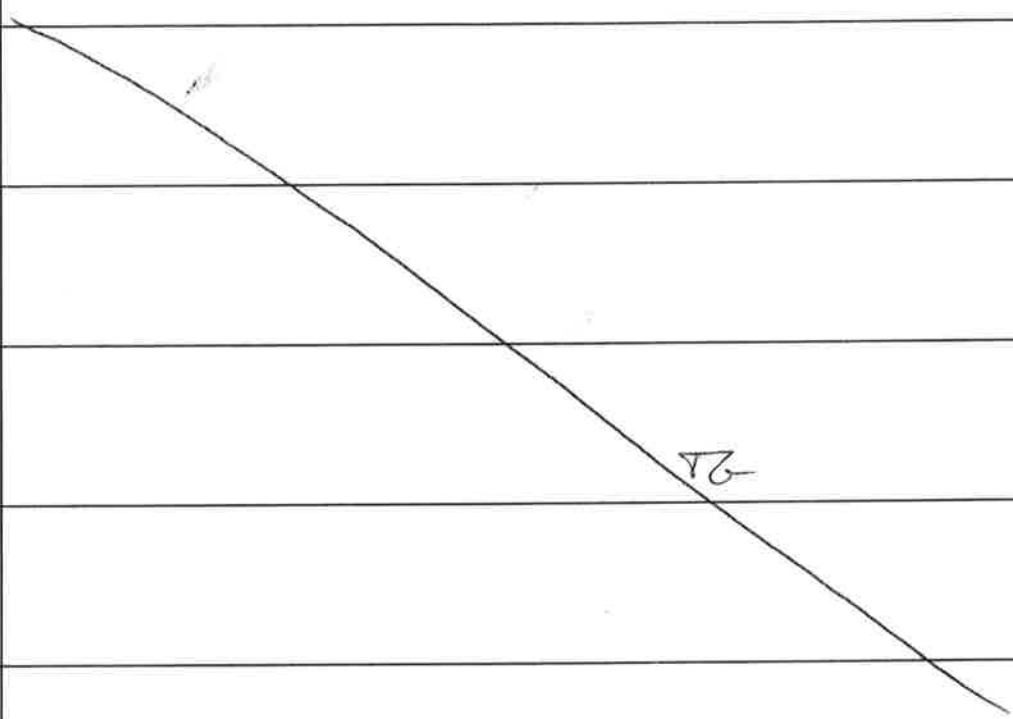
GPS Location Code: TG
Sampling Time: 1130
Weather Conditions: cloudy 50s

Sampling Personnel:
Tim Grant, Brian Spillane, Amanda Conon
Lauren Wellborn

Target Sample Depth:
Total Penetration (in): 2.0 ft (incl. H₂O depth)
Water Depth (ft): 1.0
Recovery (in): 1.5

Sampling Method: Vibracore

Other: TG

From (ft)	To (ft)	Description (Color, RPD, texture, cohesiveness, odor, sheen, bio structures)
0	0.5	very dark grayish brown 10 YR 3/2, silty SAND, abundant organics, non cohesive, non plastic, wet,
0.5	1	
1	2	
2	3	
3	4	
4	5	

QA/QC Report

QA/QC Type	QA/QC Sample ID	Time	Parent
			<u>TG</u>

Oversight During Core Collection? No Yes: _____
Oversight During Core Processing? No Yes: _____

Additional Comments

Photo of Core? (Y/N) Other: SVOCs
VOCs 3 0-0.5
TOC

Project Name: FORMER BRAMLETTE MGP Sediment Sampling Log
Project Number: 1026.801 (Core Collection)

Sample Location ID: SW-15-SE-20206301
Sample Date: 3/1/20

GPS Location Code: TG
Sampling Time: 1640
Weather Conditions: gray 60°F

Sampling Personnel:
Tim Grant, Tom King, Tudd Plating (Syn)
Lauren Wellborn (Biosynthesis)
Rick Powell (DE)

Target Sample Depth:

Total Penetration (ft): 1.7 ft

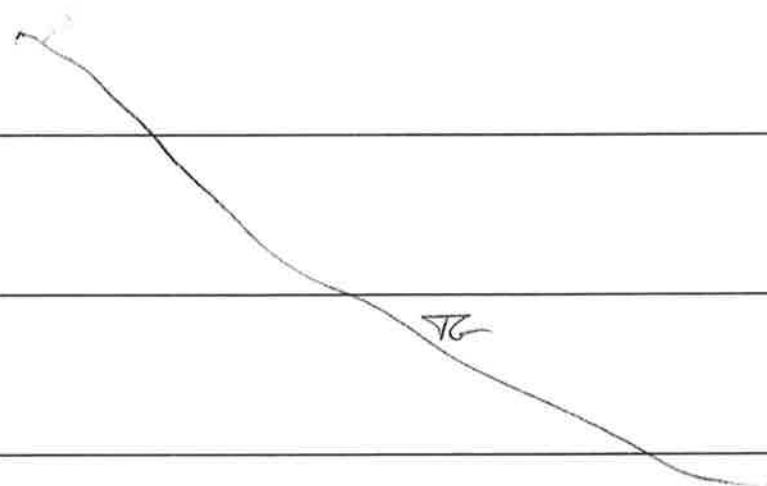
Water Depth (ft): 3 in

Recovery (%): 1.0 ft

Sampling Method: VibraCore

Other: TG

Handheld

From (ft)	To (ft)	Description (Color, RPD, texture, cohesiveness, odor, sheen, bio structures)
0	0.5	very dark gray/brown 10 YR 3/2, sandy SILT, abundant organics, trace coarse sand, cohesive, low plasticity, wet
0.5	1	very dark gray 10 YR 3/1, sandy SILT, trace coarse sand, trace organics, cohesive, low plasticity, wet
1	2	
2	3	
3	4	
4	5	

QA/QC Report

QA/QC Type	QA/QC Sample ID	Time	Parent
		<u>TG</u>	

Oversight During Core Collection?

No

Yes

RICK POWELL

Oversight During Core Processing?

No

Yes

RICK POWELL

Additional Comments

Photo of Core? (Y/N) Other:

VOCS/4VOCS 0-0.5 / 0.5-1

Project Name: Former Bramlette MGP Sediment Sampling Log
Project Number: 1026.801 (Core Collection)

Sample Location ID: SW-16-SE-7020.0301

Sample Date: 03/01/2020

GPS Location Code: 76
Sampling Time: 1500
Weather Conditions: Sunny 60F

Sampling Personnel:
Jim Grant, Tom King, Todd Plating (Syn)
Lauren Wellborn (Geo), Rick Powell (Data)

Target Sample Depth:

Total Penetration (in): 40.5 in

Water Depth (ft): 4.5 in

Recovery (in): 2.7 in

Sampling Method: Vibracore Other: Handheld

	From (ft)	To (ft)	Description (Color, RPD, texture, cohesiveness, odor, sheen, bio structures)
VOCS SVOCs	0	0.5	very dark grayish brown 10 YR 3/2, sandy SILT, abundant organics (tree roots, leaves, worms) trace coarse sand, cohesive low plasticity, wet
VOCS SVOCs	0.5	1	yellowish brown 10 YR 5/8, sandy CLAY, gray mottling, cohesive, high plasticity, moist
VOCS SVOCs	1	2	gray 10 YR 5/1, sandy CLAY, fine micaceous sand, orange mottling, trace organics, black staining from decaying organics, cohesive, high plasticity, moist
VOCS SVOCs	2	3	gray 10 YR 5/1, sandy CLAY, fine micaceous sand, trace organics, slight orange mottling, cohesive, high plasticity, moist
	3	4	TG
	4	5	

QA/QC Report

QA/QC Type	QA/QC Sample ID	Time	Parent
			76

Oversight During Core Collection? No Yes: Rick Powell
Oversight During Core Processing? No Yes: Rick Powell

Additional Comments

Photo of Core? (Y/N) Other:

TOC from 0.0-0.5
grain size from 0.5-1.0

Project Name: DUKE - BRAMLETTE
Project Number: 1026.801

Sediment Sampling Log
(Core Collection)

Sample Location ID: SW-17-SE-20200410
Sample Date: 4/10/2020

GPS Location Code: TG
Sampling Time: 1000/1020/1040
Weather Conditions: CLEAR, SUNNY,
WARM

Sampling Personnel:

BJS, TJG

Target Sample Depth:

Total Penetration (in): 2.3'

Water Depth (ft): 0

Recovery (in): 1.6'
FT

Sampling Method: Vibracore
TG

Other: HAND-DRIVEN 2" POLY TUBE

From (ft)	To (ft)	Description (Color, RPD, texture, cohesiveness, odor, sheen, bio structures)
0	0.5	MEDIUM BROWN COARSE SAND, SOME SMALL GRAVEL, LITTLE SILT, NON-COHESIVE VOC x 6 SVOC x 1
0.5	1	AS DESCRIBED ABOVE FROM 0.5-0.65' 0.65-1.0': DARK BROWN SILTY CLAY, MICACEOUS, COHESIVE, MEDIUM PLASTICITY VOC x 6 SVOC x 1
1	2	MEDIUM TO DARK BROWN SILTY CLAY, MICACEOUS, SOME Fe-OXIDATION, COHESIVE, MEDIUM PLASTICITY GRAIN-SIZE VOC x 6 SVOC x 1
2	3	TG
3	4	
4	5	

QA/QC Report			
QA/QC Type	QA/QC Sample ID	Time	Parent
	<u>TG</u>		

Oversight During Core Collection?

No

Yes:

Oversight During Core Processing?

No

Yes:

Additional Comments

Photo of Core? (Y/N) Other:

FB-01-WQ-20200410 COLLECTED AT 1130

TB-01-WQ-20200410 INCLUDED

APPENDIX B

Analytical Results

March 11, 2020

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

RE: Project: FORMER BRAMLETTE MGP J20030082
Pace Project No.: 92467724

Dear Program Manager:

Enclosed are the analytical results for sample(s) received by the laboratory on March 03, 2020. 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: Tom King
Program Manager, Duke Energy
Mike Mastbaum
Todd Plating, Synterra
Rick Powell
B. Russo
Heather Smith



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Pace Analytical Services Charlotte

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

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92467724001	SW-13_WS_20200301	Water	03/01/20 10:05	03/03/20 14:00
92467724002	SW-14_WS_20200301	Water	03/01/20 09:40	03/03/20 14:00
92467724003	SW-15_WS_20200301	Water	03/01/20 09:00	03/03/20 14:00
92467724004	SW-16_WS_20200301	Water	03/01/20 08:30	03/03/20 14:00
92467724005	FD-01_WG_20200301	Water	03/01/20 09:00	03/03/20 14:00
92467724006	TB-01_WQ_20200301	Water	03/01/20 00:00	03/03/20 14:00
92467724007	EB-01_WQ_20200301	Water	03/01/20 17:00	03/03/20 14:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92467724001	SW-13_WS_20200301	EPA 8270E	PKS	74	PASI-C
		EPA 8260D	SAS	62	PASI-C
		SM 2540D-2011	MJP	1	PASI-A
92467724002	SW-14_WS_20200301	EPA 8270E	PKS	74	PASI-C
		EPA 8260D	SAS	62	PASI-C
		SM 2540D-2011	MJP	1	PASI-A
92467724003	SW-15_WS_20200301	EPA 8270E	PKS	74	PASI-C
		EPA 8260D	DLK	62	PASI-C
		SM 2540D-2011	MJP	1	PASI-A
92467724004	SW-16_WS_20200301	EPA 8270E	PKS	74	PASI-C
		EPA 8260D	DLK	62	PASI-C
		SM 2540D-2011	MJP	1	PASI-A
92467724005	FD-01_WG_20200301	EPA 8270E	PKS	74	PASI-C
		EPA 8260D	DLK	62	PASI-C
		SM 2540D-2011	MJP	1	PASI-A
92467724006	TB-01_WQ_20200301	EPA 8260D	SAS	62	PASI-C
92467724007	EB-01_WQ_20200301	EPA 8270E	PKS	74	PASI-C
		EPA 8260D	DLK	62	PASI-C

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92467724001	SW-13_WS_20200301					
SM 2540D-2011	Total Suspended Solids	8.6	mg/L	4.8	03/04/20 11:23	
92467724002	SW-14_WS_20200301					
SM 2540D-2011	Total Suspended Solids	6.4	mg/L	4.6	03/04/20 11:23	

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Method: EPA 8270E

Description: 8270E RVE

Client: Duke Energy

Date: March 11, 2020

General Information:

6 samples were analyzed for EPA 8270E. 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.

QC Batch: 528828

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- BLANK (Lab ID: 2824599)
 - Di-n-octylphthalate
- EB-01_WQ_20200301 (Lab ID: 92467724007)
 - Di-n-octylphthalate
- FD-01_WG_20200301 (Lab ID: 92467724005)
 - Di-n-octylphthalate
- LCS (Lab ID: 2824600)
 - Di-n-octylphthalate
- MS (Lab ID: 2824601)
 - Di-n-octylphthalate
- MSD (Lab ID: 2824602)
 - Di-n-octylphthalate
- SW-13_WS_20200301 (Lab ID: 92467724001)
 - Di-n-octylphthalate
- SW-14_WS_20200301 (Lab ID: 92467724002)
 - Di-n-octylphthalate
- SW-15_WS_20200301 (Lab ID: 92467724003)
 - Di-n-octylphthalate
- SW-16_WS_20200301 (Lab ID: 92467724004)
 - Di-n-octylphthalate

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.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Method: EPA 8270E

Description: 8270E RVE

Client: Duke Energy

Date: March 11, 2020

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: 528828

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: 2824600)
- Di-n-octylphthalate

Matrix Spikes:

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

QC Batch: 528828

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92467724001

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

- MSD (Lab ID: 2824602)
- Di-n-octylphthalate

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Method: EPA 8260D

Description: 8260 MSV Low Level SC

Client: Duke Energy

Date: March 11, 2020

General Information:

7 samples were analyzed for EPA 8260D. 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.

QC Batch: 528517

IK: The recalculated concentration of the calibration standard(s) did not meet method acceptance criteria; this result should be considered an estimated value.

- BLANK (Lab ID: 2822905)
 - Bromomethane
- LCS (Lab ID: 2822906)
 - Bromomethane
- MS (Lab ID: 2823618)
 - Bromomethane
- MSD (Lab ID: 2823619)
 - Bromomethane
- SW-13_WS_20200301 (Lab ID: 92467724001)
 - Bromomethane
- SW-14_WS_20200301 (Lab ID: 92467724002)
 - Bromomethane
- TB-01_WQ_20200301 (Lab ID: 92467724006)
 - Bromomethane

QC Batch: 529066

IK: The recalculated concentration of the calibration standard(s) did not meet method acceptance criteria; this result should be considered an estimated value.

- BLANK (Lab ID: 2825749)
 - Bromoform
- EB-01_WQ_20200301 (Lab ID: 92467724007)
 - Bromoform
- FD-01_WG_20200301 (Lab ID: 92467724005)
 - Bromoform
- LCS (Lab ID: 2825750)
 - Bromoform
- MS (Lab ID: 2825751)
 - Bromoform
- MSD (Lab ID: 2825752)
 - Bromoform
- SW-15_WS_20200301 (Lab ID: 92467724003)
 - Bromoform
- SW-16_WS_20200301 (Lab ID: 92467724004)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Method: EPA 8260D

Description: 8260 MSV Low Level SC

Client: Duke Energy

Date: March 11, 2020

QC Batch: 529066

IK: The recalculated concentration of the calibration standard(s) did not meet method acceptance criteria; this result should be considered an estimated value.

- Bromoform

Continuing Calibration:

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

QC Batch: 528517

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- BLANK (Lab ID: 2822905)
 - Bromomethane
- LCS (Lab ID: 2822906)
 - Bromomethane
- SW-13_WS_20200301 (Lab ID: 92467724001)
 - Bromomethane
- SW-14_WS_20200301 (Lab ID: 92467724002)
 - Bromomethane
- TB-01_WQ_20200301 (Lab ID: 92467724006)
 - Bromomethane

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: 528517

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: 2822906)
 - Bromomethane

QC Batch: 529066

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: 2825750)
 - Bromomethane

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Method: EPA 8260D

Description: 8260 MSV Low Level SC

Client: Duke Energy

Date: March 11, 2020

Matrix Spikes:

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

QC Batch: 528517

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92467161002

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

- MS (Lab ID: 2823618)
 - cis-1,2-Dichloroethene
- MSD (Lab ID: 2823619)
 - cis-1,2-Dichloroethene

QC Batch: 529066

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92467161001

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

- MSD (Lab ID: 2825752)
 - 1,1,1,2-Tetrachloroethane
 - 1,1,1-Trichloroethane
 - 1,1,2,2-Tetrachloroethane
 - 1,1,2-Trichloroethane
 - 1,1-Dichloroethane
 - 1,1-Dichloroethene
 - 1,1-Dichloropropene
 - 1,2,3-Trichlorobenzene
 - 1,2,3-Trichloropropane
 - 1,2,4-Trichlorobenzene
 - 1,2-Dibromo-3-chloropropane
 - 1,2-Dichlorobenzene
 - 1,2-Dichloroethane
 - 1,2-Dichloropropane
 - 1,3-Dichlorobenzene
 - 1,3-Dichloropropane
 - 1,4-Dichlorobenzene
 - 2,2-Dichloropropane
 - 2-Butanone (MEK)
 - 2-Chlorotoluene
 - 2-Hexanone
 - 4-Chlorotoluene
 - 4-Methyl-2-pentanone (MIBK)
 - Acetone
 - Benzene
 - Bromobenzene
 - Bromochloromethane
 - Bromodichloromethane
 - Bromoform
 - Carbon tetrachloride
 - Chlorobenzene

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Method: EPA 8260D

Description: 8260 MSV Low Level SC

Client: Duke Energy

Date: March 11, 2020

QC Batch: 529066

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92467161001

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

- Chloroform
- Dibromochloromethane
- Dibromomethane
- Diisopropyl ether
- Hexachloro-1,3-butadiene
- Methyl-tert-butyl ether
- Methylene Chloride
- Naphthalene
- Styrene
- Tetrachloroethene
- Toluene
- Trichloroethene
- Vinyl acetate
- cis-1,2-Dichloroethene
- cis-1,3-Dichloropropene
- o-Xylene
- p-Isopropyltoluene
- trans-1,2-Dichloroethene
- trans-1,3-Dichloropropene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2825752)
 - 2-Butanone (MEK)
 - 4-Methyl-2-pentanone (MIBK)
- Acetone
- Bromomethane
- Chloromethane
- trans-1,3-Dichloropropene

Additional Comments:

Analyte Comments:

QC Batch: 529066

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 2825751)
 - cis-1,2-Dichloroethene
- MSD (Lab ID: 2825752)
 - cis-1,2-Dichloroethene

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Method: SM 2540D-2011

Description: 2540D Total Suspended Solids

Client: Duke Energy

Date: March 11, 2020

General Information:

5 samples were analyzed for SM 2540D-2011. 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.

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.

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.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-13_WS_20200301 Lab ID: 92467724001 Collected: 03/01/20 10:05 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E RVE Analytical Method: EPA 8270E Preparation Method: EPA 3510C									
Acenaphthene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 17:20	208-96-8	
Aniline	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 17:20	62-53-3	
Anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 17:20	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 17:20	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 17:20	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 17:20	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 17:20	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 17:20	207-08-9	
Benzoic Acid	ND	ug/L	50.0	19.5	1	03/05/20 18:44	03/06/20 17:20	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	2.6	1	03/05/20 18:44	03/06/20 17:20	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 17:20	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1.9	1	03/05/20 18:44	03/06/20 17:20	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	10.0	2.8	1	03/05/20 18:44	03/06/20 17:20	59-50-7	
4-Chloroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 17:20	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 17:20	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 17:20	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 17:20	7005-72-3	
Chrysene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 17:20	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 17:20	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 17:20	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	2.7	1	03/05/20 18:44	03/06/20 17:20	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 17:20	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 17:20	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 17:20	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 17:20	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	4.5	1	03/05/20 18:44	03/06/20 17:20	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	7.3	1	03/05/20 18:44	03/06/20 17:20	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 17:20	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 17:20	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	2.2	1	03/05/20 18:44	03/06/20 17:20	117-84-0	L1,M0, v1
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.0	1	03/05/20 18:44	03/06/20 17:20	117-81-7	
Fluoranthene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 17:20	206-44-0	
Fluorene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 17:20	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 17:20	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	2.4	1	03/05/20 18:44	03/06/20 17:20	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 17:20	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 17:20	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-13_WS_20200301 Lab ID: 92467724001 Collected: 03/01/20 10:05 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E RVE Analytical Method: EPA 8270E Preparation Method: EPA 3510C									
Isophorone	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 17:20	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 17:20	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 17:20	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 17:20	91-20-3	
2-Nitroaniline	ND	ug/L	20.0	3.0	1	03/05/20 18:44	03/06/20 17:20	88-74-4	
3-Nitroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 17:20	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	3.1	1	03/05/20 18:44	03/06/20 17:20	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 17:20	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 17:20	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	9.4	1	03/05/20 18:44	03/06/20 17:20	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 17:20	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 17:20	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 17:20	108-60-1	
Pentachlorophenol	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 17:20	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	85-01-8	
Phenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 17:20	108-95-2	
Pyrene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 17:20	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 17:20	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 17:20	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 17:20	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	61	%	13-130		1	03/05/20 18:44	03/06/20 17:20	4165-60-0	
2-Fluorobiphenyl (S)	55	%	13-130		1	03/05/20 18:44	03/06/20 17:20	321-60-8	
Terphenyl-d14 (S)	110	%	25-130		1	03/05/20 18:44	03/06/20 17:20	1718-51-0	
Phenol-d6 (S)	38	%	10-130		1	03/05/20 18:44	03/06/20 17:20	13127-88-3	
2-Fluorophenol (S)	49	%	10-130		1	03/05/20 18:44	03/06/20 17:20	367-12-4	
2,4,6-Tribromophenol (S)	62	%	10-137		1	03/05/20 18:44	03/06/20 17:20	118-79-6	
8260 MSV Low Level SC Analytical Method: EPA 8260D									
Acetone	ND	ug/L	25.0	6.2	1		03/04/20 18:18	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		03/04/20 18:18	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		03/04/20 18:18	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		03/04/20 18:18	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		03/04/20 18:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		03/04/20 18:18	75-25-2	
Bromomethane	ND	ug/L	2.0	0.62	1		03/04/20 18:18	74-83-9	IH,IK, L1,v1
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		03/04/20 18:18	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		03/04/20 18:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		03/04/20 18:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		03/04/20 18:18	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		03/04/20 18:18	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		03/04/20 18:18	74-87-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-13_WS_20200301 Lab ID: 92467724001 Collected: 03/01/20 10:05 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 18:18	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 18:18	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		03/04/20 18:18	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		03/04/20 18:18	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		03/04/20 18:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		03/04/20 18:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 18:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		03/04/20 18:18	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		03/04/20 18:18	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		03/04/20 18:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		03/04/20 18:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		03/04/20 18:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		03/04/20 18:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		03/04/20 18:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		03/04/20 18:18	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		03/04/20 18:18	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		03/04/20 18:18	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		03/04/20 18:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		03/04/20 18:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		03/04/20 18:18	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		03/04/20 18:18	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		03/04/20 18:18	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		03/04/20 18:18	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		03/04/20 18:18	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		03/04/20 18:18	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		03/04/20 18:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		03/04/20 18:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		03/04/20 18:18	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		03/04/20 18:18	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		03/04/20 18:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		03/04/20 18:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		03/04/20 18:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.16	1		03/04/20 18:18	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		03/04/20 18:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		03/04/20 18:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 18:18	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		03/04/20 18:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		03/04/20 18:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		03/04/20 18:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		03/04/20 18:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		03/04/20 18:18	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		03/04/20 18:18	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		03/04/20 18:18	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		03/04/20 18:18	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.41	1		03/04/20 18:18	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		03/04/20 18:18	95-47-6	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-13_WS_20200301		Lab ID: 92467724001		Collected: 03/01/20 10:05		Received: 03/03/20 14:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		03/04/20 18:18	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		03/04/20 18:18	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		03/04/20 18:18	2037-26-5	
2540D Total Suspended Solids		Analytical Method: SM 2540D-2011							
Total Suspended Solids	8.6	mg/L	4.8	4.8	1		03/04/20 11:23		

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-14_WS_20200301 Lab ID: 92467724002 Collected: 03/01/20 09:40 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270E RVE	Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	83-32-9	L1,v1
Acenaphthylene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 18:36	208-96-8	
Aniline	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 18:36	62-53-3	
Anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 18:36	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 18:36	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 18:36	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 18:36	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 18:36	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 18:36	207-08-9	
Benzoic Acid	ND	ug/L	50.0	19.5	1	03/05/20 18:44	03/06/20 18:36	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	2.6	1	03/05/20 18:44	03/06/20 18:36	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 18:36	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1.9	1	03/05/20 18:44	03/06/20 18:36	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	10.0	2.8	1	03/05/20 18:44	03/06/20 18:36	59-50-7	
4-Chloroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 18:36	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 18:36	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 18:36	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 18:36	7005-72-3	
Chrysene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 18:36	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 18:36	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 18:36	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	2.7	1	03/05/20 18:44	03/06/20 18:36	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 18:36	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 18:36	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 18:36	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 18:36	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	4.5	1	03/05/20 18:44	03/06/20 18:36	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	7.3	1	03/05/20 18:44	03/06/20 18:36	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 18:36	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 18:36	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	2.2	1	03/05/20 18:44	03/06/20 18:36	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.0	1	03/05/20 18:44	03/06/20 18:36	117-81-7	
Fluoranthene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 18:36	206-44-0	
Fluorene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 18:36	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 18:36	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	2.4	1	03/05/20 18:44	03/06/20 18:36	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 18:36	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 18:36	193-39-5	
Isophorone	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 18:36	78-59-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-14_WS_20200301 Lab ID: 92467724002 Collected: 03/01/20 09:40 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E RVE Analytical Method: EPA 8270E Preparation Method: EPA 3510C									
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 18:36	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 18:36	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 18:36	91-20-3	
2-Nitroaniline	ND	ug/L	20.0	3.0	1	03/05/20 18:44	03/06/20 18:36	88-74-4	
3-Nitroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 18:36	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	3.1	1	03/05/20 18:44	03/06/20 18:36	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 18:36	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 18:36	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	9.4	1	03/05/20 18:44	03/06/20 18:36	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 18:36	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 18:36	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 18:36	108-60-1	
Pentachlorophenol	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 18:36	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	85-01-8	
Phenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 18:36	108-95-2	
Pyrene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 18:36	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 18:36	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 18:36	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 18:36	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	58	%	13-130		1	03/05/20 18:44	03/06/20 18:36	4165-60-0	
2-Fluorobiphenyl (S)	50	%	13-130		1	03/05/20 18:44	03/06/20 18:36	321-60-8	
Terphenyl-d14 (S)	104	%	25-130		1	03/05/20 18:44	03/06/20 18:36	1718-51-0	
Phenol-d6 (S)	33	%	10-130		1	03/05/20 18:44	03/06/20 18:36	13127-88-3	
2-Fluorophenol (S)	45	%	10-130		1	03/05/20 18:44	03/06/20 18:36	367-12-4	
2,4,6-Tribromophenol (S)	59	%	10-137		1	03/05/20 18:44	03/06/20 18:36	118-79-6	
8260 MSV Low Level SC Analytical Method: EPA 8260D									
Acetone	ND	ug/L	25.0	6.2	1		03/04/20 18:36	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		03/04/20 18:36	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		03/04/20 18:36	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		03/04/20 18:36	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		03/04/20 18:36	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		03/04/20 18:36	75-25-2	
Bromomethane	ND	ug/L	2.0	0.62	1		03/04/20 18:36	74-83-9	IH,IK, L1,v1
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		03/04/20 18:36	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		03/04/20 18:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		03/04/20 18:36	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		03/04/20 18:36	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		03/04/20 18:36	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		03/04/20 18:36	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 18:36	95-49-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-14_WS_20200301 Lab ID: 92467724002 Collected: 03/01/20 09:40 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 18:36	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		03/04/20 18:36	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		03/04/20 18:36	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		03/04/20 18:36	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		03/04/20 18:36	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 18:36	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		03/04/20 18:36	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		03/04/20 18:36	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		03/04/20 18:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		03/04/20 18:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		03/04/20 18:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		03/04/20 18:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		03/04/20 18:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		03/04/20 18:36	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		03/04/20 18:36	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		03/04/20 18:36	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		03/04/20 18:36	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		03/04/20 18:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		03/04/20 18:36	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		03/04/20 18:36	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		03/04/20 18:36	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		03/04/20 18:36	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		03/04/20 18:36	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		03/04/20 18:36	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		03/04/20 18:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		03/04/20 18:36	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		03/04/20 18:36	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		03/04/20 18:36	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		03/04/20 18:36	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		03/04/20 18:36	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		03/04/20 18:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.16	1		03/04/20 18:36	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		03/04/20 18:36	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		03/04/20 18:36	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 18:36	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		03/04/20 18:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		03/04/20 18:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		03/04/20 18:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		03/04/20 18:36	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		03/04/20 18:36	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		03/04/20 18:36	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		03/04/20 18:36	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		03/04/20 18:36	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.41	1		03/04/20 18:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		03/04/20 18:36	95-47-6	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-14_WS_20200301		Lab ID: 92467724002		Collected: 03/01/20 09:40		Received: 03/03/20 14:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		03/04/20 18:36	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		03/04/20 18:36	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		03/04/20 18:36	2037-26-5	
2540D Total Suspended Solids		Analytical Method: SM 2540D-2011							
Total Suspended Solids	6.4	mg/L	4.6	4.6	1		03/04/20 11:23		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-15_WS_20200301 Lab ID: 92467724003 Collected: 03/01/20 09:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270E RVE	Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	83-32-9	L1,v1
Acenaphthylene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:02	208-96-8	
Aniline	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:02	62-53-3	
Anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:02	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:02	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 19:02	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:02	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:02	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:02	207-08-9	
Benzoic Acid	ND	ug/L	50.0	19.5	1	03/05/20 18:44	03/06/20 19:02	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	2.6	1	03/05/20 18:44	03/06/20 19:02	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 19:02	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1.9	1	03/05/20 18:44	03/06/20 19:02	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	10.0	2.8	1	03/05/20 18:44	03/06/20 19:02	59-50-7	
4-Chloroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 19:02	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:02	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:02	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:02	7005-72-3	
Chrysene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:02	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:02	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:02	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	2.7	1	03/05/20 18:44	03/06/20 19:02	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:02	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:02	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:02	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:02	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	4.5	1	03/05/20 18:44	03/06/20 19:02	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	7.3	1	03/05/20 18:44	03/06/20 19:02	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:02	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:02	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	2.2	1	03/05/20 18:44	03/06/20 19:02	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.0	1	03/05/20 18:44	03/06/20 19:02	117-81-7	
Fluoranthene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:02	206-44-0	
Fluorene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:02	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:02	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	2.4	1	03/05/20 18:44	03/06/20 19:02	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:02	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:02	193-39-5	
Isophorone	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:02	78-59-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-15_WS_20200301 Lab ID: 92467724003 Collected: 03/01/20 09:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E RVE Analytical Method: EPA 8270E Preparation Method: EPA 3510C									
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 19:02	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 19:02	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:02	91-20-3	
2-Nitroaniline	ND	ug/L	20.0	3.0	1	03/05/20 18:44	03/06/20 19:02	88-74-4	
3-Nitroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 19:02	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	3.1	1	03/05/20 18:44	03/06/20 19:02	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:02	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:02	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	9.4	1	03/05/20 18:44	03/06/20 19:02	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 19:02	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:02	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:02	108-60-1	
Pentachlorophenol	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 19:02	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	85-01-8	
Phenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:02	108-95-2	
Pyrene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:02	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:02	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:02	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:02	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	64	%	13-130		1	03/05/20 18:44	03/06/20 19:02	4165-60-0	
2-Fluorobiphenyl (S)	55	%	13-130		1	03/05/20 18:44	03/06/20 19:02	321-60-8	
Terphenyl-d14 (S)	118	%	25-130		1	03/05/20 18:44	03/06/20 19:02	1718-51-0	
Phenol-d6 (S)	39	%	10-130		1	03/05/20 18:44	03/06/20 19:02	13127-88-3	
2-Fluorophenol (S)	51	%	10-130		1	03/05/20 18:44	03/06/20 19:02	367-12-4	
2,4,6-Tribromophenol (S)	66	%	10-137		1	03/05/20 18:44	03/06/20 19:02	118-79-6	
8260 MSV Low Level SC Analytical Method: EPA 8260D									
Acetone	ND	ug/L	25.0	6.2	1		03/06/20 16:59	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		03/06/20 16:59	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		03/06/20 16:59	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		03/06/20 16:59	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		03/06/20 16:59	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		03/06/20 16:59	75-25-2	IK
Bromomethane	ND	ug/L	2.0	0.62	1		03/06/20 16:59	74-83-9	L1
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		03/06/20 16:59	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		03/06/20 16:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		03/06/20 16:59	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		03/06/20 16:59	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		03/06/20 16:59	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		03/06/20 16:59	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/06/20 16:59	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/06/20 16:59	106-43-4	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-15_WS_20200301 Lab ID: 92467724003 Collected: 03/01/20 09:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC Analytical Method: EPA 8260D									
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		03/06/20 16:59	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		03/06/20 16:59	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		03/06/20 16:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		03/06/20 16:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		03/06/20 16:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		03/06/20 16:59	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		03/06/20 16:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		03/06/20 16:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		03/06/20 16:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		03/06/20 16:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		03/06/20 16:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		03/06/20 16:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		03/06/20 16:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		03/06/20 16:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		03/06/20 16:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		03/06/20 16:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		03/06/20 16:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		03/06/20 16:59	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		03/06/20 16:59	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		03/06/20 16:59	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		03/06/20 16:59	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		03/06/20 16:59	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		03/06/20 16:59	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		03/06/20 16:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		03/06/20 16:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		03/06/20 16:59	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		03/06/20 16:59	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		03/06/20 16:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		03/06/20 16:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		03/06/20 16:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.16	1		03/06/20 16:59	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		03/06/20 16:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		03/06/20 16:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		03/06/20 16:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		03/06/20 16:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		03/06/20 16:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		03/06/20 16:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		03/06/20 16:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		03/06/20 16:59	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		03/06/20 16:59	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		03/06/20 16:59	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		03/06/20 16:59	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.41	1		03/06/20 16:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		03/06/20 16:59	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		03/06/20 16:59	460-00-4	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-15_WS_20200301		Lab ID: 92467724003		Collected: 03/01/20 09:00		Received: 03/03/20 14:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		03/06/20 16:59	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		03/06/20 16:59	2037-26-5	
2540D Total Suspended Solids		Analytical Method: SM 2540D-2011							
Total Suspended Solids	ND	mg/L	4.8	4.8	1		03/04/20 11:23		

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-16_WS_20200301 Lab ID: 92467724004 Collected: 03/01/20 08:30 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270E RVE	Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	83-32-9	L1,v1
Acenaphthylene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:27	208-96-8	
Aniline	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:27	62-53-3	
Anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:27	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:27	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 19:27	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:27	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:27	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:27	207-08-9	
Benzoic Acid	ND	ug/L	50.0	19.5	1	03/05/20 18:44	03/06/20 19:27	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	2.6	1	03/05/20 18:44	03/06/20 19:27	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 19:27	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1.9	1	03/05/20 18:44	03/06/20 19:27	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	10.0	2.8	1	03/05/20 18:44	03/06/20 19:27	59-50-7	
4-Chloroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 19:27	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:27	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:27	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:27	7005-72-3	
Chrysene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:27	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:27	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:27	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	2.7	1	03/05/20 18:44	03/06/20 19:27	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:27	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:27	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:27	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:27	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	4.5	1	03/05/20 18:44	03/06/20 19:27	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	7.3	1	03/05/20 18:44	03/06/20 19:27	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:27	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:27	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	2.2	1	03/05/20 18:44	03/06/20 19:27	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.0	1	03/05/20 18:44	03/06/20 19:27	117-81-7	
Fluoranthene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:27	206-44-0	
Fluorene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:27	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:27	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	2.4	1	03/05/20 18:44	03/06/20 19:27	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:27	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:27	193-39-5	
Isophorone	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:27	78-59-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-16_WS_20200301 Lab ID: 92467724004 Collected: 03/01/20 08:30 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E RVE Analytical Method: EPA 8270E Preparation Method: EPA 3510C									
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 19:27	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 19:27	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:27	91-20-3	
2-Nitroaniline	ND	ug/L	20.0	3.0	1	03/05/20 18:44	03/06/20 19:27	88-74-4	
3-Nitroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 19:27	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	3.1	1	03/05/20 18:44	03/06/20 19:27	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:27	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:27	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	9.4	1	03/05/20 18:44	03/06/20 19:27	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 19:27	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:27	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:27	108-60-1	
Pentachlorophenol	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 19:27	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	85-01-8	
Phenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:27	108-95-2	
Pyrene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:27	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:27	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:27	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:27	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	56	%	13-130		1	03/05/20 18:44	03/06/20 19:27	4165-60-0	
2-Fluorobiphenyl (S)	48	%	13-130		1	03/05/20 18:44	03/06/20 19:27	321-60-8	
Terphenyl-d14 (S)	99	%	25-130		1	03/05/20 18:44	03/06/20 19:27	1718-51-0	
Phenol-d6 (S)	39	%	10-130		1	03/05/20 18:44	03/06/20 19:27	13127-88-3	
2-Fluorophenol (S)	48	%	10-130		1	03/05/20 18:44	03/06/20 19:27	367-12-4	
2,4,6-Tribromophenol (S)	58	%	10-137		1	03/05/20 18:44	03/06/20 19:27	118-79-6	
8260 MSV Low Level SC Analytical Method: EPA 8260D									
Acetone	ND	ug/L	25.0	6.2	1		03/06/20 17:17	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		03/06/20 17:17	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		03/06/20 17:17	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		03/06/20 17:17	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		03/06/20 17:17	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		03/06/20 17:17	75-25-2	IK
Bromomethane	ND	ug/L	2.0	0.62	1		03/06/20 17:17	74-83-9	L1
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		03/06/20 17:17	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		03/06/20 17:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		03/06/20 17:17	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		03/06/20 17:17	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		03/06/20 17:17	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		03/06/20 17:17	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/06/20 17:17	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/06/20 17:17	106-43-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-16_WS_20200301 Lab ID: 92467724004 Collected: 03/01/20 08:30 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC Analytical Method: EPA 8260D									
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		03/06/20 17:17	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		03/06/20 17:17	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		03/06/20 17:17	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		03/06/20 17:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		03/06/20 17:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		03/06/20 17:17	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		03/06/20 17:17	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		03/06/20 17:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		03/06/20 17:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		03/06/20 17:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		03/06/20 17:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		03/06/20 17:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		03/06/20 17:17	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		03/06/20 17:17	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		03/06/20 17:17	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		03/06/20 17:17	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		03/06/20 17:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		03/06/20 17:17	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		03/06/20 17:17	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		03/06/20 17:17	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		03/06/20 17:17	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		03/06/20 17:17	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		03/06/20 17:17	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		03/06/20 17:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		03/06/20 17:17	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		03/06/20 17:17	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		03/06/20 17:17	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		03/06/20 17:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		03/06/20 17:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		03/06/20 17:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.16	1		03/06/20 17:17	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		03/06/20 17:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		03/06/20 17:17	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		03/06/20 17:17	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		03/06/20 17:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		03/06/20 17:17	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		03/06/20 17:17	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		03/06/20 17:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		03/06/20 17:17	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		03/06/20 17:17	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		03/06/20 17:17	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		03/06/20 17:17	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.41	1		03/06/20 17:17	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		03/06/20 17:17	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		03/06/20 17:17	460-00-4	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: SW-16_WS_20200301		Lab ID: 92467724004		Collected: 03/01/20 08:30		Received: 03/03/20 14:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		03/06/20 17:17	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		03/06/20 17:17	2037-26-5	
2540D Total Suspended Solids		Analytical Method: SM 2540D-2011							
Total Suspended Solids	ND	mg/L	4.6	4.6	1		03/04/20 11:23		

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: FD-01_WG_20200301 Lab ID: 92467724005 Collected: 03/01/20 09:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report	MDL	DF	Prepared	Analyzed	CAS No.	Qual
			Limit						
8270E RVE	Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	83-32-9	L1,v1
Acenaphthylene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:52	208-96-8	
Aniline	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:52	62-53-3	
Anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:52	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:52	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 19:52	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:52	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:52	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:52	207-08-9	
Benzoic Acid	ND	ug/L	50.0	19.5	1	03/05/20 18:44	03/06/20 19:52	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	2.6	1	03/05/20 18:44	03/06/20 19:52	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 19:52	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1.9	1	03/05/20 18:44	03/06/20 19:52	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	10.0	2.8	1	03/05/20 18:44	03/06/20 19:52	59-50-7	
4-Chloroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 19:52	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:52	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:52	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:52	7005-72-3	
Chrysene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:52	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:52	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:52	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	2.7	1	03/05/20 18:44	03/06/20 19:52	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:52	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:52	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:52	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:52	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	4.5	1	03/05/20 18:44	03/06/20 19:52	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	7.3	1	03/05/20 18:44	03/06/20 19:52	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:52	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:52	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	2.2	1	03/05/20 18:44	03/06/20 19:52	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.0	1	03/05/20 18:44	03/06/20 19:52	117-81-7	
Fluoranthene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:52	206-44-0	
Fluorene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:52	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:52	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	2.4	1	03/05/20 18:44	03/06/20 19:52	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:52	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:52	193-39-5	
Isophorone	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:52	78-59-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: FD-01_WG_20200301 Lab ID: 92467724005 Collected: 03/01/20 09:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E RVE Analytical Method: EPA 8270E Preparation Method: EPA 3510C									
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 19:52	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 19:52	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:52	91-20-3	
2-Nitroaniline	ND	ug/L	20.0	3.0	1	03/05/20 18:44	03/06/20 19:52	88-74-4	
3-Nitroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 19:52	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	3.1	1	03/05/20 18:44	03/06/20 19:52	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:52	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 19:52	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	9.4	1	03/05/20 18:44	03/06/20 19:52	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 19:52	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:52	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 19:52	108-60-1	
Pentachlorophenol	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 19:52	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	85-01-8	
Phenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:52	108-95-2	
Pyrene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:52	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 19:52	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 19:52	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 19:52	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	66	%	13-130		1	03/05/20 18:44	03/06/20 19:52	4165-60-0	
2-Fluorobiphenyl (S)	56	%	13-130		1	03/05/20 18:44	03/06/20 19:52	321-60-8	
Terphenyl-d14 (S)	122	%	25-130		1	03/05/20 18:44	03/06/20 19:52	1718-51-0	
Phenol-d6 (S)	41	%	10-130		1	03/05/20 18:44	03/06/20 19:52	13127-88-3	
2-Fluorophenol (S)	53	%	10-130		1	03/05/20 18:44	03/06/20 19:52	367-12-4	
2,4,6-Tribromophenol (S)	61	%	10-137		1	03/05/20 18:44	03/06/20 19:52	118-79-6	
8260 MSV Low Level SC Analytical Method: EPA 8260D									
Acetone	ND	ug/L	25.0	6.2	1		03/06/20 17:34	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		03/06/20 17:34	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		03/06/20 17:34	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		03/06/20 17:34	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		03/06/20 17:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		03/06/20 17:34	75-25-2	IK
Bromomethane	ND	ug/L	2.0	0.62	1		03/06/20 17:34	74-83-9	L1
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		03/06/20 17:34	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		03/06/20 17:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		03/06/20 17:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		03/06/20 17:34	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		03/06/20 17:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		03/06/20 17:34	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/06/20 17:34	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/06/20 17:34	106-43-4	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: FD-01_WG_20200301 **Lab ID:** 92467724005 **Collected:** 03/01/20 09:00 **Received:** 03/03/20 14:00 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC Analytical Method: EPA 8260D									
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		03/06/20 17:34	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		03/06/20 17:34	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		03/06/20 17:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		03/06/20 17:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		03/06/20 17:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		03/06/20 17:34	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		03/06/20 17:34	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		03/06/20 17:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		03/06/20 17:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		03/06/20 17:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		03/06/20 17:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		03/06/20 17:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		03/06/20 17:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		03/06/20 17:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		03/06/20 17:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		03/06/20 17:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		03/06/20 17:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		03/06/20 17:34	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		03/06/20 17:34	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		03/06/20 17:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		03/06/20 17:34	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		03/06/20 17:34	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		03/06/20 17:34	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		03/06/20 17:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		03/06/20 17:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		03/06/20 17:34	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		03/06/20 17:34	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		03/06/20 17:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		03/06/20 17:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		03/06/20 17:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.16	1		03/06/20 17:34	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		03/06/20 17:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		03/06/20 17:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		03/06/20 17:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		03/06/20 17:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		03/06/20 17:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		03/06/20 17:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		03/06/20 17:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		03/06/20 17:34	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		03/06/20 17:34	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		03/06/20 17:34	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		03/06/20 17:34	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.41	1		03/06/20 17:34	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		03/06/20 17:34	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		03/06/20 17:34	460-00-4	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: FD-01_WG_20200301		Lab ID: 92467724005		Collected: 03/01/20 09:00		Received: 03/03/20 14:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
Surrogates									
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		03/06/20 17:34	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		03/06/20 17:34	2037-26-5	
2540D Total Suspended Solids		Analytical Method: SM 2540D-2011							
Total Suspended Solids	ND	mg/L	4.9	4.9	1		03/05/20 11:45		

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: TB-01_WQ_20200301 Lab ID: 92467724006 Collected: 03/01/20 00:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
Acetone	ND	ug/L	25.0	6.2	1		03/04/20 16:48	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		03/04/20 16:48	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		03/04/20 16:48	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		03/04/20 16:48	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		03/04/20 16:48	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		03/04/20 16:48	75-25-2	
Bromomethane	ND	ug/L	2.0	0.62	1		03/04/20 16:48	74-83-9	IH,IK, L1,v1
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		03/04/20 16:48	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		03/04/20 16:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		03/04/20 16:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		03/04/20 16:48	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		03/04/20 16:48	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		03/04/20 16:48	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 16:48	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 16:48	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		03/04/20 16:48	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		03/04/20 16:48	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		03/04/20 16:48	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		03/04/20 16:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 16:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		03/04/20 16:48	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		03/04/20 16:48	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		03/04/20 16:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		03/04/20 16:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		03/04/20 16:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		03/04/20 16:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		03/04/20 16:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		03/04/20 16:48	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		03/04/20 16:48	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		03/04/20 16:48	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		03/04/20 16:48	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		03/04/20 16:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		03/04/20 16:48	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		03/04/20 16:48	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		03/04/20 16:48	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		03/04/20 16:48	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		03/04/20 16:48	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		03/04/20 16:48	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		03/04/20 16:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		03/04/20 16:48	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		03/04/20 16:48	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		03/04/20 16:48	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		03/04/20 16:48	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		03/04/20 16:48	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		03/04/20 16:48	79-34-5	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: TB-01_WQ_20200301 **Lab ID:** 92467724006 **Collected:** 03/01/20 00:00 **Received:** 03/03/20 14:00 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC Analytical Method: EPA 8260D									
Tetrachloroethene	ND	ug/L	1.0	0.16	1		03/04/20 16:48	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		03/04/20 16:48	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		03/04/20 16:48	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 16:48	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		03/04/20 16:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		03/04/20 16:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		03/04/20 16:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		03/04/20 16:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		03/04/20 16:48	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		03/04/20 16:48	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		03/04/20 16:48	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		03/04/20 16:48	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.41	1		03/04/20 16:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		03/04/20 16:48	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	106	%	70-130		1		03/04/20 16:48	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		03/04/20 16:48	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		03/04/20 16:48	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: EB-01_WQ_20200301 Lab ID: 92467724007 Collected: 03/01/20 17:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270E RVE	Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	83-32-9	L1,v1
Acenaphthylene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:18	208-96-8	
Aniline	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:18	62-53-3	
Anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:18	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:18	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 20:18	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:18	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:18	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:18	207-08-9	
Benzoic Acid	ND	ug/L	50.0	19.5	1	03/05/20 18:44	03/06/20 20:18	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	2.6	1	03/05/20 18:44	03/06/20 20:18	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 20:18	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1.9	1	03/05/20 18:44	03/06/20 20:18	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	10.0	2.8	1	03/05/20 18:44	03/06/20 20:18	59-50-7	
4-Chloroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 20:18	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:18	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:18	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:18	7005-72-3	
Chrysene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:18	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:18	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:18	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	2.7	1	03/05/20 18:44	03/06/20 20:18	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:18	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:18	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:18	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:18	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	4.5	1	03/05/20 18:44	03/06/20 20:18	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	7.3	1	03/05/20 18:44	03/06/20 20:18	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:18	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:18	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	2.2	1	03/05/20 18:44	03/06/20 20:18	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.0	1	03/05/20 18:44	03/06/20 20:18	117-81-7	
Fluoranthene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:18	206-44-0	
Fluorene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:18	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:18	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	2.4	1	03/05/20 18:44	03/06/20 20:18	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:18	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:18	193-39-5	
Isophorone	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:18	78-59-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: EB-01_WQ_20200301 Lab ID: 92467724007 Collected: 03/01/20 17:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E RVE Analytical Method: EPA 8270E Preparation Method: EPA 3510C									
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 20:18	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 20:18	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:18	91-20-3	
2-Nitroaniline	ND	ug/L	20.0	3.0	1	03/05/20 18:44	03/06/20 20:18	88-74-4	
3-Nitroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 20:18	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	3.1	1	03/05/20 18:44	03/06/20 20:18	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:18	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:18	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	9.4	1	03/05/20 18:44	03/06/20 20:18	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 20:18	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:18	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:18	108-60-1	
Pentachlorophenol	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 20:18	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	85-01-8	
Phenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:18	108-95-2	
Pyrene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:18	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:18	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:18	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:18	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	67	%	13-130		1	03/05/20 18:44	03/06/20 20:18	4165-60-0	
2-Fluorobiphenyl (S)	58	%	13-130		1	03/05/20 18:44	03/06/20 20:18	321-60-8	
Terphenyl-d14 (S)	122	%	25-130		1	03/05/20 18:44	03/06/20 20:18	1718-51-0	
Phenol-d6 (S)	35	%	10-130		1	03/05/20 18:44	03/06/20 20:18	13127-88-3	
2-Fluorophenol (S)	49	%	10-130		1	03/05/20 18:44	03/06/20 20:18	367-12-4	
2,4,6-Tribromophenol (S)	65	%	10-137		1	03/05/20 18:44	03/06/20 20:18	118-79-6	
8260 MSV Low Level SC Analytical Method: EPA 8260D									
Acetone	ND	ug/L	25.0	6.2	1		03/06/20 17:51	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		03/06/20 17:51	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		03/06/20 17:51	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		03/06/20 17:51	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		03/06/20 17:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		03/06/20 17:51	75-25-2	IK
Bromomethane	ND	ug/L	2.0	0.62	1		03/06/20 17:51	74-83-9	L1
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		03/06/20 17:51	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		03/06/20 17:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		03/06/20 17:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		03/06/20 17:51	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		03/06/20 17:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		03/06/20 17:51	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/06/20 17:51	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/06/20 17:51	106-43-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: EB-01_WQ_20200301 Lab ID: 92467724007 Collected: 03/01/20 17:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC Analytical Method: EPA 8260D									
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		03/06/20 17:51	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		03/06/20 17:51	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		03/06/20 17:51	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		03/06/20 17:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		03/06/20 17:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		03/06/20 17:51	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		03/06/20 17:51	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		03/06/20 17:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		03/06/20 17:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		03/06/20 17:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		03/06/20 17:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		03/06/20 17:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		03/06/20 17:51	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		03/06/20 17:51	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		03/06/20 17:51	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		03/06/20 17:51	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		03/06/20 17:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		03/06/20 17:51	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		03/06/20 17:51	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		03/06/20 17:51	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		03/06/20 17:51	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		03/06/20 17:51	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		03/06/20 17:51	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		03/06/20 17:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		03/06/20 17:51	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		03/06/20 17:51	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		03/06/20 17:51	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		03/06/20 17:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		03/06/20 17:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		03/06/20 17:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.16	1		03/06/20 17:51	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		03/06/20 17:51	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		03/06/20 17:51	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		03/06/20 17:51	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		03/06/20 17:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		03/06/20 17:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		03/06/20 17:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		03/06/20 17:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		03/06/20 17:51	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		03/06/20 17:51	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		03/06/20 17:51	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		03/06/20 17:51	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.41	1		03/06/20 17:51	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		03/06/20 17:51	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		03/06/20 17:51	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Sample: EB-01_WQ_20200301		Lab ID: 92467724007		Collected: 03/01/20 17:00		Received: 03/03/20 14:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
Surrogates									
1,2-Dichloroethane-d4 (S)	105	%	70-130		1		03/06/20 17:51	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		03/06/20 17:51	2037-26-5	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

QC Batch:	528517	Analysis Method:	EPA 8260D
QC Batch Method:	EPA 8260D	Analysis Description:	8260 MSV Low Level SC
Associated Lab Samples:	92467724001, 92467724002, 92467724006		

METHOD BLANK: 2822905 Matrix: Water

Associated Lab Samples: 92467724001, 92467724002, 92467724006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.34	03/04/20 14:24	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.18	03/04/20 14:24	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.22	03/04/20 14:24	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.24	03/04/20 14:24	
1,1-Dichloroethane	ug/L	ND	1.0	0.27	03/04/20 14:24	
1,1-Dichloroethene	ug/L	ND	1.0	0.24	03/04/20 14:24	
1,1-Dichloropropene	ug/L	ND	1.0	0.21	03/04/20 14:24	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.34	03/04/20 14:24	
1,2,3-Trichloropropane	ug/L	ND	1.0	0.35	03/04/20 14:24	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.22	03/04/20 14:24	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	0.26	03/04/20 14:24	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.29	03/04/20 14:24	
1,2-Dichloroethane	ug/L	ND	1.0	0.34	03/04/20 14:24	
1,2-Dichloropropane	ug/L	ND	1.0	0.19	03/04/20 14:24	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.22	03/04/20 14:24	
1,3-Dichloropropane	ug/L	ND	1.0	0.16	03/04/20 14:24	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.26	03/04/20 14:24	
2,2-Dichloropropane	ug/L	ND	1.0	0.27	03/04/20 14:24	
2-Butanone (MEK)	ug/L	ND	5.0	3.3	03/04/20 14:24	
2-Chlorotoluene	ug/L	ND	1.0	0.20	03/04/20 14:24	
2-Hexanone	ug/L	ND	5.0	0.57	03/04/20 14:24	
4-Chlorotoluene	ug/L	ND	1.0	0.20	03/04/20 14:24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	4.5	03/04/20 14:24	
Acetone	ug/L	ND	25.0	6.2	03/04/20 14:24	
Benzene	ug/L	ND	1.0	0.15	03/04/20 14:24	
Bromobenzene	ug/L	ND	1.0	0.22	03/04/20 14:24	
Bromochloromethane	ug/L	ND	1.0	0.34	03/04/20 14:24	
Bromodichloromethane	ug/L	ND	1.0	0.26	03/04/20 14:24	
Bromoform	ug/L	ND	1.0	0.62	03/04/20 14:24	
Bromomethane	ug/L	ND	2.0	0.62	03/04/20 14:24	IH,IK,v1
Carbon tetrachloride	ug/L	ND	1.0	0.22	03/04/20 14:24	
Chlorobenzene	ug/L	ND	1.0	0.23	03/04/20 14:24	
Chloroethane	ug/L	ND	1.0	0.49	03/04/20 14:24	
Chloroform	ug/L	ND	5.0	2.3	03/04/20 14:24	
Chloromethane	ug/L	ND	1.0	0.39	03/04/20 14:24	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.29	03/04/20 14:24	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.30	03/04/20 14:24	
Dibromochloromethane	ug/L	ND	1.0	0.41	03/04/20 14:24	
Dibromomethane	ug/L	ND	1.0	0.46	03/04/20 14:24	
Dichlorodifluoromethane	ug/L	ND	1.0	0.23	03/04/20 14:24	
Diisopropyl ether	ug/L	ND	1.0	0.22	03/04/20 14:24	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

METHOD BLANK: 2822905

Matrix: Water

Associated Lab Samples: 92467724001, 92467724002, 92467724006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethylbenzene	ug/L	ND	1.0	0.26	03/04/20 14:24	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.44	03/04/20 14:24	
m&p-Xylene	ug/L	ND	2.0	0.41	03/04/20 14:24	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.28	03/04/20 14:24	
Methylene Chloride	ug/L	ND	5.0	3.7	03/04/20 14:24	
Naphthalene	ug/L	ND	1.0	0.35	03/04/20 14:24	
o-Xylene	ug/L	ND	1.0	0.22	03/04/20 14:24	
p-Isopropyltoluene	ug/L	ND	1.0	0.21	03/04/20 14:24	
Styrene	ug/L	ND	1.0	0.27	03/04/20 14:24	
Tetrachloroethene	ug/L	ND	1.0	0.16	03/04/20 14:24	
Toluene	ug/L	ND	1.0	0.24	03/04/20 14:24	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.25	03/04/20 14:24	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.31	03/04/20 14:24	
Trichloroethene	ug/L	ND	1.0	0.22	03/04/20 14:24	
Trichlorofluoromethane	ug/L	ND	1.0	0.31	03/04/20 14:24	
Vinyl acetate	ug/L	ND	2.0	1.4	03/04/20 14:24	
Vinyl chloride	ug/L	ND	1.0	0.24	03/04/20 14:24	
Xylene (Total)	ug/L	ND	1.0	0.63	03/04/20 14:24	
1,2-Dichloroethane-d4 (S)	%	99	70-130		03/04/20 14:24	
4-Bromofluorobenzene (S)	%	104	70-130		03/04/20 14:24	
Toluene-d8 (S)	%	105	70-130		03/04/20 14:24	

LABORATORY CONTROL SAMPLE: 2822906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	53.1	106	70-130	
1,1,1-Trichloroethane	ug/L	50	48.6	97	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	52.1	104	70-130	
1,1,2-Trichloroethane	ug/L	50	52.2	104	70-130	
1,1-Dichloroethane	ug/L	50	46.3	93	70-130	
1,1-Dichloroethene	ug/L	50	47.6	95	70-130	
1,1-Dichloropropene	ug/L	50	53.8	108	70-130	
1,2,3-Trichlorobenzene	ug/L	50	54.4	109	70-130	
1,2,3-Trichloropropane	ug/L	50	54.0	108	70-130	
1,2,4-Trichlorobenzene	ug/L	50	53.7	107	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	59.6	119	70-130	
1,2-Dichlorobenzene	ug/L	50	50.3	101	70-130	
1,2-Dichloroethane	ug/L	50	46.1	92	70-130	
1,2-Dichloropropane	ug/L	50	50.5	101	70-130	
1,3-Dichlorobenzene	ug/L	50	48.4	97	70-130	
1,3-Dichloropropane	ug/L	50	51.6	103	70-130	
1,4-Dichlorobenzene	ug/L	50	47.9	96	70-130	
2,2-Dichloropropane	ug/L	50	48.7	97	70-130	
2-Butanone (MEK)	ug/L	100	102	102	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

LABORATORY CONTROL SAMPLE: 2822906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chlorotoluene	ug/L	50	49.7	99	70-130	
2-Hexanone	ug/L	100	109	109	70-130	
4-Chlorotoluene	ug/L	50	49.1	98	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	107	107	70-130	
Acetone	ug/L	100	107	107	70-130	
Benzene	ug/L	50	48.8	98	70-130	
Bromobenzene	ug/L	50	50.6	101	70-130	
Bromochloromethane	ug/L	50	50.5	101	70-130	
Bromodichloromethane	ug/L	50	49.9	100	70-130	
Bromoform	ug/L	50	52.3	105	70-130	
Bromomethane	ug/L	50	79.3	159	70-130	IH,IK,L1,v1
Carbon tetrachloride	ug/L	50	49.4	99	70-130	
Chlorobenzene	ug/L	50	47.9	96	70-130	
Chloroethane	ug/L	50	37.7	75	70-130	
Chloroform	ug/L	50	48.4	97	70-130	
Chloromethane	ug/L	50	41.1	82	70-130	
cis-1,2-Dichloroethene	ug/L	50	46.3	93	70-130	
cis-1,3-Dichloropropene	ug/L	50	52.4	105	70-130	
Dibromochloromethane	ug/L	50	55.1	110	70-130	
Dibromomethane	ug/L	50	50.3	101	70-130	
Dichlorodifluoromethane	ug/L	50	43.4	87	70-130	
Diisopropyl ether	ug/L	50	50.7	101	70-130	
Ethylbenzene	ug/L	50	45.9	92	70-130	
Hexachloro-1,3-butadiene	ug/L	50	52.6	105	70-130	
m&p-Xylene	ug/L	100	91.6	92	70-130	
Methyl-tert-butyl ether	ug/L	50	52.7	105	70-130	
Methylene Chloride	ug/L	50	46.8	94	70-130	
Naphthalene	ug/L	50	53.5	107	70-130	
o-Xylene	ug/L	50	47.1	94	70-130	
p-Isopropyltoluene	ug/L	50	49.0	98	70-130	
Styrene	ug/L	50	50.4	101	70-130	
Tetrachloroethene	ug/L	50	48.0	96	70-130	
Toluene	ug/L	50	45.7	91	70-130	
trans-1,2-Dichloroethene	ug/L	50	47.3	95	70-130	
trans-1,3-Dichloropropene	ug/L	50	53.1	106	70-130	
Trichloroethene	ug/L	50	50.4	101	70-130	
Trichlorofluoromethane	ug/L	50	41.9	84	70-130	
Vinyl acetate	ug/L	100	99.8	100	70-130	
Vinyl chloride	ug/L	50	43.9	88	70-130	
Xylene (Total)	ug/L	150	139	92	70-130	
1,2-Dichloroethane-d4 (S)	%			92	70-130	
4-Bromofluorobenzene (S)	%			96	70-130	
Toluene-d8 (S)	%			99	70-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			2823618		2823619								
Parameter	Units	92467161002	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Max	Qual
		Result	Spike	Spike									
1,1,1,2-Tetrachloroethane	ug/L	ND	80	80	87.6	86.5	110	108	73-134	1	30		
1,1,1-Trichloroethane	ug/L	ND	80	80	87.8	89.1	110	111	82-143	1	30		
1,1,2,2-Tetrachloroethane	ug/L	ND	80	80	86.2	83.9	108	105	70-136	3	30		
1,1,2-Trichloroethane	ug/L	ND	80	80	90.7	91.0	113	114	70-135	0	30		
1,1-Dichloroethane	ug/L	ND	80	80	83.6	85.1	105	106	70-139	2	30		
1,1-Dichloroethene	ug/L	ND	80	80	89.0	88.2	111	110	70-154	1	30		
1,1-Dichloropropene	ug/L	ND	80	80	94.6	95.6	118	119	70-149	1	30		
1,2,3-Trichlorobenzene	ug/L	ND	80	80	87.5	89.4	109	112	70-135	2	30		
1,2,3-Trichloropropane	ug/L	ND	80	80	85.6	83.8	107	105	71-137	2	30		
1,2,4-Trichlorobenzene	ug/L	ND	80	80	85.1	87.0	106	109	73-140	2	30		
1,2-Dibromo-3-chloropropane	ug/L	ND	80	80	93.8	91.0	117	114	65-134	3	30		
1,2-Dichlorobenzene	ug/L	ND	80	80	86.5	88.1	108	110	70-133	2	30		
1,2-Dichloroethane	ug/L	ND	80	80	79.6	82.1	99	103	70-137	3	30		
1,2-Dichloropropane	ug/L	ND	80	80	89.0	89.3	111	112	70-140	0	30		
1,3-Dichlorobenzene	ug/L	ND	80	80	85.0	86.3	106	108	70-135	1	30		
1,3-Dichloropropane	ug/L	ND	80	80	86.3	86.7	108	108	70-143	1	30		
1,4-Dichlorobenzene	ug/L	ND	80	80	85.0	85.0	106	106	70-133	0	30		
2,2-Dichloropropane	ug/L	ND	80	80	85.4	86.4	107	108	61-148	1	30		
2-Butanone (MEK)	ug/L	ND	160	160	174	171	109	107	60-139	2	30		
2-Chlorotoluene	ug/L	ND	80	80	86.5	88.6	108	111	70-144	2	30		
2-Hexanone	ug/L	ND	160	160	185	176	116	110	65-138	5	30		
4-Chlorotoluene	ug/L	ND	80	80	86.2	90.0	108	113	70-137	4	30		
4-Methyl-2-pentanone (MIBK)	ug/L	ND	160	160	179	174	112	109	65-135	3	30		
Acetone	ug/L	372	160	160	500	491	80	74	60-148	2	30		
Benzene	ug/L	3.3J	80	80	90.5	91.6	109	110	70-151	1	30		
Bromobenzene	ug/L	ND	80	80	90.1	89.7	113	112	70-136	0	30		
Bromochloromethane	ug/L	ND	80	80	87.6	87.6	109	110	70-141	0	30		
Bromodichloromethane	ug/L	ND	80	80	84.9	87.3	106	109	70-138	3	30		
Bromoform	ug/L	ND	80	80	84.1	80.7	105	101	63-130	4	30		
Bromomethane	ug/L	ND	80	80	76.2	69.8	95	87	15-152	9	30	IH,IK	
Carbon tetrachloride	ug/L	ND	80	80	89.0	92.9	111	116	70-143	4	30		
Chlorobenzene	ug/L	ND	80	80	85.4	84.5	107	106	70-138	1	30		
Chloroethane	ug/L	ND	80	80	86.6	95.1	108	119	52-163	9	30		
Chloroform	ug/L	ND	80	80	85.9	86.9	107	109	70-139	1	30		
Chloromethane	ug/L	ND	80	80	69.5	70.9	87	89	41-139	2	30		
cis-1,2-Dichloroethene	ug/L	559	80	80	553	575	-7	20	70-141	4	30	M1	
cis-1,3-Dichloropropene	ug/L	ND	80	80	85.9	86.2	107	108	70-137	0	30		
Dibromochloromethane	ug/L	ND	80	80	86.8	87.3	109	109	70-134	1	30		
Dibromomethane	ug/L	ND	80	80	85.3	87.0	107	109	70-138	2	30		
Dichlorodifluoromethane	ug/L	ND	80	80	72.8	73.6	91	92	47-155	1	30		
Diisopropyl ether	ug/L	ND	80	80	86.1	86.2	108	108	63-144	0	30		
Ethylbenzene	ug/L	ND	80	80	83.2	81.7	104	102	66-153	2	30		
Hexachloro-1,3-butadiene	ug/L	ND	80	80	82.9	84.8	104	106	65-149	2	30		
m&p-Xylene	ug/L	ND	160	160	167	169	104	106	69-152	1	30		

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2823618 2823619											
Parameter	Units	92467161002		MS	MSD	MS		MS	MSD	% Rec	Max
		Result	Conc.	Spike	Spike	Result	Result	% Rec	% Rec	Limits	RPD
Methyl-tert-butyl ether	ug/L	2.6J	80	80	80	91.6	92.4	111	112	54-156	1 30
Methylene Chloride	ug/L	ND	80	80	80	84.0	86.1	105	108	42-159	3 30
Naphthalene	ug/L	ND	80	80	80	87.8	88.6	110	111	61-148	1 30
o-Xylene	ug/L	ND	80	80	80	83.5	86.1	104	108	70-148	3 30
p-Isopropyltoluene	ug/L	ND	80	80	80	82.3	85.0	103	106	70-146	3 30
Styrene	ug/L	ND	80	80	80	86.4	87.2	108	109	70-135	1 30
Tetrachloroethene	ug/L	ND	80	80	80	85.0	86.4	106	108	59-143	2 30
Toluene	ug/L	1.5J	80	80	80	82.9	83.6	102	103	59-148	1 30
trans-1,2-Dichloroethene	ug/L	ND	80	80	80	85.4	87.0	107	109	70-146	2 30
trans-1,3-Dichloropropene	ug/L	ND	80	80	80	84.1	85.1	105	106	70-135	1 30
Trichloroethene	ug/L	50.7	80	80	80	155	157	130	133	70-147	2 30
Trichlorofluoromethane	ug/L	ND	80	80	80	77.9	80.3	97	100	70-148	3 30
Vinyl acetate	ug/L	ND	160	160	160	168	170	105	106	49-151	1 30
Vinyl chloride	ug/L	ND	80	80	80	78.6	80.5	98	101	70-156	2 30
Xylene (Total)	ug/L	ND	240	240	240	250	255	104	106	63-158	2 30
1,2-Dichloroethane-d4 (S)	%							101	103	70-130	
4-Bromofluorobenzene (S)	%							98	96	70-130	
Toluene-d8 (S)	%							99	99	70-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

QC Batch: 529066 Analysis Method: EPA 8260D
QC Batch Method: EPA 8260D Analysis Description: 8260 MSV Low Level SC
Associated Lab Samples: 92467724003, 92467724004, 92467724005, 92467724007

METHOD BLANK: 2825749 Matrix: Water
Associated Lab Samples: 92467724003, 92467724004, 92467724005, 92467724007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.34	03/06/20 14:06	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.18	03/06/20 14:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.22	03/06/20 14:06	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.24	03/06/20 14:06	
1,1-Dichloroethane	ug/L	ND	1.0	0.27	03/06/20 14:06	
1,1-Dichloroethene	ug/L	ND	1.0	0.24	03/06/20 14:06	
1,1-Dichloropropene	ug/L	ND	1.0	0.21	03/06/20 14:06	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.34	03/06/20 14:06	
1,2,3-Trichloropropane	ug/L	ND	1.0	0.35	03/06/20 14:06	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.22	03/06/20 14:06	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	0.26	03/06/20 14:06	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.29	03/06/20 14:06	
1,2-Dichloroethane	ug/L	ND	1.0	0.34	03/06/20 14:06	
1,2-Dichloropropane	ug/L	ND	1.0	0.19	03/06/20 14:06	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.22	03/06/20 14:06	
1,3-Dichloropropane	ug/L	ND	1.0	0.16	03/06/20 14:06	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.26	03/06/20 14:06	
2,2-Dichloropropane	ug/L	ND	1.0	0.27	03/06/20 14:06	
2-Butanone (MEK)	ug/L	ND	5.0	3.3	03/06/20 14:06	
2-Chlorotoluene	ug/L	ND	1.0	0.20	03/06/20 14:06	
2-Hexanone	ug/L	ND	5.0	0.57	03/06/20 14:06	
4-Chlorotoluene	ug/L	ND	1.0	0.20	03/06/20 14:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	4.5	03/06/20 14:06	
Acetone	ug/L	ND	25.0	6.2	03/06/20 14:06	
Benzene	ug/L	ND	1.0	0.15	03/06/20 14:06	
Bromobenzene	ug/L	ND	1.0	0.22	03/06/20 14:06	
Bromochloromethane	ug/L	ND	1.0	0.34	03/06/20 14:06	
Bromodichloromethane	ug/L	ND	1.0	0.26	03/06/20 14:06	
Bromoform	ug/L	ND	1.0	0.62	03/06/20 14:06	IK
Bromomethane	ug/L	ND	2.0	0.62	03/06/20 14:06	
Carbon tetrachloride	ug/L	ND	1.0	0.22	03/06/20 14:06	
Chlorobenzene	ug/L	ND	1.0	0.23	03/06/20 14:06	
Chloroethane	ug/L	ND	1.0	0.49	03/06/20 14:06	
Chloroform	ug/L	ND	5.0	2.3	03/06/20 14:06	
Chloromethane	ug/L	ND	1.0	0.39	03/06/20 14:06	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.29	03/06/20 14:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.30	03/06/20 14:06	
Dibromochloromethane	ug/L	ND	1.0	0.41	03/06/20 14:06	
Dibromomethane	ug/L	ND	1.0	0.46	03/06/20 14:06	
Dichlorodifluoromethane	ug/L	ND	1.0	0.23	03/06/20 14:06	
Diisopropyl ether	ug/L	ND	1.0	0.22	03/06/20 14:06	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

METHOD BLANK: 2825749

Matrix: Water

Associated Lab Samples: 92467724003, 92467724004, 92467724005, 92467724007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethylbenzene	ug/L	ND	1.0	0.26	03/06/20 14:06	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.44	03/06/20 14:06	
m&p-Xylene	ug/L	ND	2.0	0.41	03/06/20 14:06	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.28	03/06/20 14:06	
Methylene Chloride	ug/L	ND	5.0	3.7	03/06/20 14:06	
Naphthalene	ug/L	ND	1.0	0.35	03/06/20 14:06	
o-Xylene	ug/L	ND	1.0	0.22	03/06/20 14:06	
p-Isopropyltoluene	ug/L	ND	1.0	0.21	03/06/20 14:06	
Styrene	ug/L	ND	1.0	0.27	03/06/20 14:06	
Tetrachloroethene	ug/L	ND	1.0	0.16	03/06/20 14:06	
Toluene	ug/L	ND	1.0	0.24	03/06/20 14:06	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.25	03/06/20 14:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.31	03/06/20 14:06	
Trichloroethene	ug/L	ND	1.0	0.22	03/06/20 14:06	
Trichlorofluoromethane	ug/L	ND	1.0	0.31	03/06/20 14:06	
Vinyl acetate	ug/L	ND	2.0	1.4	03/06/20 14:06	
Vinyl chloride	ug/L	ND	1.0	0.24	03/06/20 14:06	
Xylene (Total)	ug/L	ND	1.0	0.63	03/06/20 14:06	
1,2-Dichloroethane-d4 (S)	%	99	70-130		03/06/20 14:06	
4-Bromofluorobenzene (S)	%	100	70-130		03/06/20 14:06	
Toluene-d8 (S)	%	99	70-130		03/06/20 14:06	

LABORATORY CONTROL SAMPLE: 2825750

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	56.2	112	70-130	
1,1,1-Trichloroethane	ug/L	50	56.1	112	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	55.6	111	70-130	
1,1,2-Trichloroethane	ug/L	50	55.3	111	70-130	
1,1-Dichloroethane	ug/L	50	54.4	109	70-130	
1,1-Dichloroethene	ug/L	50	57.9	116	70-130	
1,1-Dichloropropene	ug/L	50	57.1	114	70-130	
1,2,3-Trichlorobenzene	ug/L	50	61.6	123	70-130	
1,2,3-Trichloropropane	ug/L	50	53.2	106	70-130	
1,2,4-Trichlorobenzene	ug/L	50	59.7	119	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	60.6	121	70-130	
1,2-Dichlorobenzene	ug/L	50	57.9	116	70-130	
1,2-Dichloroethane	ug/L	50	52.5	105	70-130	
1,2-Dichloropropane	ug/L	50	54.3	109	70-130	
1,3-Dichlorobenzene	ug/L	50	56.9	114	70-130	
1,3-Dichloropropane	ug/L	50	55.0	110	70-130	
1,4-Dichlorobenzene	ug/L	50	57.2	114	70-130	
2,2-Dichloropropane	ug/L	50	54.8	110	70-130	
2-Butanone (MEK)	ug/L	100	110	110	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

LABORATORY CONTROL SAMPLE: 2825750

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chlorotoluene	ug/L	50	57.4	115	70-130	
2-Hexanone	ug/L	100	117	117	70-130	
4-Chlorotoluene	ug/L	50	56.4	113	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	111	111	70-130	
Acetone	ug/L	100	117	117	70-130	
Benzene	ug/L	50	53.3	107	70-130	
Bromobenzene	ug/L	50	56.4	113	70-130	
Bromochloromethane	ug/L	50	53.4	107	70-130	
Bromodichloromethane	ug/L	50	57.8	116	70-130	
Bromoform	ug/L	50	50.5	101	70-130	IK
Bromomethane	ug/L	50	68.2	136	70-130	L1
Carbon tetrachloride	ug/L	50	55.8	112	70-130	
Chlorobenzene	ug/L	50	57.1	114	70-130	
Chloroethane	ug/L	50	44.0	88	70-130	
Chloroform	ug/L	50	54.1	108	70-130	
Chloromethane	ug/L	50	44.4	89	70-130	
cis-1,2-Dichloroethene	ug/L	50	54.2	108	70-130	
cis-1,3-Dichloropropene	ug/L	50	55.5	111	70-130	
Dibromochloromethane	ug/L	50	59.7	119	70-130	
Dibromomethane	ug/L	50	53.6	107	70-130	
Dichlorodifluoromethane	ug/L	50	45.9	92	70-130	
Diisopropyl ether	ug/L	50	55.1	110	70-130	
Ethylbenzene	ug/L	50	53.3	107	70-130	
Hexachloro-1,3-butadiene	ug/L	50	64.7	129	70-130	
m&p-Xylene	ug/L	100	107	107	70-130	
Methyl-tert-butyl ether	ug/L	50	53.7	107	70-130	
Methylene Chloride	ug/L	50	53.1	106	70-130	
Naphthalene	ug/L	50	61.9	124	70-130	
o-Xylene	ug/L	50	55.3	111	70-130	
p-Isopropyltoluene	ug/L	50	60.2	120	70-130	
Styrene	ug/L	50	58.9	118	70-130	
Tetrachloroethene	ug/L	50	55.7	111	70-130	
Toluene	ug/L	50	52.9	106	70-130	
trans-1,2-Dichloroethene	ug/L	50	56.5	113	70-130	
trans-1,3-Dichloropropene	ug/L	50	58.2	116	70-130	
Trichloroethene	ug/L	50	54.7	109	70-130	
Trichlorofluoromethane	ug/L	50	46.0	92	70-130	
Vinyl acetate	ug/L	100	110	110	70-130	
Vinyl chloride	ug/L	50	54.0	108	70-130	
Xylene (Total)	ug/L	150	163	108	70-130	
1,2-Dichloroethane-d4 (S)	%			99	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			99	70-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			2825751		2825752								
Parameter	Units	92467161001	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Max	Qual
		Result	Spike	Spike									
1,1,1,2-Tetrachloroethane	ug/L	ND	1000	1000	1180	1560	118	156	73-134	28	30	M1	
1,1,1-Trichloroethane	ug/L	ND	1000	1000	1210	1640	121	164	82-143	30	30	M1	
1,1,2,2-Tetrachloroethane	ug/L	ND	1000	1000	1220	1620	122	162	70-136	28	30	M1	
1,1,2-Trichloroethane	ug/L	ND	1000	1000	1250	1600	125	160	70-135	25	30	M1	
1,1-Dichloroethane	ug/L	ND	1000	1000	1220	1620	122	162	70-139	28	30	M1	
1,1-Dichloroethene	ug/L	ND	1000	1000	1360	1780	136	178	70-154	27	30	M1	
1,1-Dichloropropene	ug/L	ND	1000	1000	1290	1660	129	166	70-149	25	30	M1	
1,2,3-Trichlorobenzene	ug/L	ND	1000	1000	1140	1520	114	152	70-135	29	30	M1	
1,2,3-Trichloropropane	ug/L	ND	1000	1000	1220	1640	122	164	71-137	29	30	M1	
1,2,4-Trichlorobenzene	ug/L	ND	1000	1000	1160	1520	116	152	73-140	26	30	M1	
1,2-Dibromo-3-chloropropane	ug/L	ND	1000	1000	1260	1640	126	164	65-134	26	30	M1	
1,2-Dichlorobenzene	ug/L	ND	1000	1000	1200	1510	120	151	70-133	23	30	M1	
1,2-Dichloroethane	ug/L	ND	1000	1000	1230	1580	123	158	70-137	25	30	M1	
1,2-Dichloropropane	ug/L	ND	1000	1000	1210	1590	121	159	70-140	27	30	M1	
1,3-Dichlorobenzene	ug/L	ND	1000	1000	1170	1440	117	144	70-135	21	30	M1	
1,3-Dichloropropane	ug/L	ND	1000	1000	1220	1620	122	162	70-143	28	30	M1	
1,4-Dichlorobenzene	ug/L	ND	1000	1000	1150	1460	115	146	70-133	24	30	M1	
2,2-Dichloropropane	ug/L	ND	1000	1000	1220	1600	122	160	61-148	27	30	M1	
2-Butanone (MEK)	ug/L	ND	2000	2000	2470	3400	124	170	60-139	32	30	M1,R1	
2-Chlorotoluene	ug/L	ND	1000	1000	1160	1470	116	147	70-144	24	30	M1	
2-Hexanone	ug/L	ND	2000	2000	2630	3540	132	177	65-138	29	30	M1	
4-Chlorotoluene	ug/L	ND	1000	1000	1180	1490	118	149	70-137	23	30	M1	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	2000	2000	2500	3420	125	171	65-135	31	30	M1,R1	
Acetone	ug/L	ND	2000	2000	2500	3480	125	174	60-148	33	30	M1,R1	
Benzene	ug/L	12.8J	1000	1000	1230	1640	122	162	70-151	28	30	M1	
Bromobenzene	ug/L	ND	1000	1000	1170	1470	117	147	70-136	22	30	M1	
Bromochloromethane	ug/L	ND	1000	1000	1310	1640	131	164	70-141	22	30	M1	
Bromodichloromethane	ug/L	ND	1000	1000	1290	1670	129	167	70-138	26	30	M1	
Bromoform	ug/L	ND	1000	1000	1220	1560	122	156	63-130	25	30	IK,M1	
Bromomethane	ug/L	ND	1000	1000	842	1250	84	125	15-152	39	30	R1	
Carbon tetrachloride	ug/L	ND	1000	1000	1260	1620	126	162	70-143	25	30	M1	
Chlorobenzene	ug/L	ND	1000	1000	1230	1570	123	157	70-138	24	30	M1	
Chloroethane	ug/L	ND	1000	1000	1150	1420	115	142	52-163	21	30		
Chloroform	ug/L	ND	1000	1000	1220	1590	122	159	70-139	26	30	M1	
Chloromethane	ug/L	ND	1000	1000	825	1190	82	119	41-139	36	30	R1	
cis-1,2-Dichloroethene	ug/L	9090	1000	1000	10200	10900	114	183	70-141	6	30	E,M1	
cis-1,3-Dichloropropene	ug/L	ND	1000	1000	1170	1590	117	159	70-137	30	30	M1	
Dibromochloromethane	ug/L	ND	1000	1000	1250	1660	125	166	70-134	29	30	M1	
Dibromomethane	ug/L	ND	1000	1000	1230	1570	123	157	70-138	24	30	M1	
Dichlorodifluoromethane	ug/L	ND	1000	1000	1050	1390	105	139	47-155	27	30		
Diisopropyl ether	ug/L	ND	1000	1000	1210	1630	121	163	63-144	29	30	M1	
Ethylbenzene	ug/L	ND	1000	1000	1150	1450	115	145	66-153	23	30		
Hexachloro-1,3-butadiene	ug/L	ND	1000	1000	1210	1550	121	155	65-149	25	30	M1	
m&p-Xylene	ug/L	ND	2000	2000	2280	2930	114	146	69-152	25	30		

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2825751 2825752											
Parameter	Units	92467161001		MS		MSD		MS		MSD	
		Result	Conc.	Spike	Conc.	Result	Conc.	% Rec	% Rec	Limits	Max
											RPD
Methyl-tert-butyl ether	ug/L	ND	1000	1000	1000	1200	1610	120	161	54-156	30
Methylene Chloride	ug/L	ND	1000	1000	1000	1230	1630	123	163	42-159	27
Naphthalene	ug/L	ND	1000	1000	1000	1190	1570	119	157	61-148	28
o-Xylene	ug/L	ND	1000	1000	1000	1180	1520	118	152	70-148	26
p-Isopropyltoluene	ug/L	ND	1000	1000	1000	1200	1530	120	153	70-146	24
Styrene	ug/L	ND	1000	1000	1000	1240	1610	124	161	70-135	26
Tetrachloroethene	ug/L	ND	1000	1000	1000	1150	1510	115	151	59-143	27
Toluene	ug/L	ND	1000	1000	1000	1160	1500	116	150	59-148	26
trans-1,2-Dichloroethene	ug/L	ND	1000	1000	1000	1280	1670	128	167	70-146	27
trans-1,3-Dichloropropene	ug/L	ND	1000	1000	1000	1200	1650	120	165	70-135	31
Trichloroethene	ug/L	5540	1000	1000	1000	6860	7400	132	187	70-147	8
Trichlorofluoromethane	ug/L	ND	1000	1000	1000	1060	1380	106	138	70-148	26
Vinyl acetate	ug/L	ND	2000	2000	2000	2450	3320	123	166	49-151	30
Vinyl chloride	ug/L	114	1000	1000	1000	1280	1640	117	152	70-156	24
Xylene (Total)	ug/L	ND	3000	3000	3000	3460	4450	115	148	63-158	25
1,2-Dichloroethane-d4 (S)	%							100	100	70-130	
4-Bromofluorobenzene (S)	%							102	101	70-130	
Toluene-d8 (S)	%							100	101	70-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

QC Batch: 528828 Analysis Method: EPA 8270E
QC Batch Method: EPA 3510C Analysis Description: 8270E Water MSSV RVE
Associated Lab Samples: 92467724001, 92467724002, 92467724003, 92467724004, 92467724005, 92467724007

METHOD BLANK: 2824599 Matrix: Water
Associated Lab Samples: 92467724001, 92467724002, 92467724003, 92467724004, 92467724005, 92467724007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	10.0	1.6	03/06/20 16:29	
1,2-Dichlorobenzene	ug/L	ND	10.0	1.4	03/06/20 16:29	
1,3-Dichlorobenzene	ug/L	ND	10.0	1.4	03/06/20 16:29	
1,4-Dichlorobenzene	ug/L	ND	10.0	1.5	03/06/20 16:29	
1-Methylnaphthalene	ug/L	ND	10.0	1.4	03/06/20 16:29	
2,2'-Oxybis(1-chloropropane)	ug/L	ND	10.0	1.3	03/06/20 16:29	
2,4,5-Trichlorophenol	ug/L	ND	10.0	1.5	03/06/20 16:29	
2,4,6-Trichlorophenol	ug/L	ND	10.0	1.4	03/06/20 16:29	
2,4-Dichlorophenol	ug/L	ND	10.0	1.5	03/06/20 16:29	
2,4-Dimethylphenol	ug/L	ND	10.0	1.5	03/06/20 16:29	
2,4-Dinitrophenol	ug/L	ND	50.0	7.3	03/06/20 16:29	
2,4-Dinitrotoluene	ug/L	ND	10.0	1.7	03/06/20 16:29	
2,6-Dinitrotoluene	ug/L	ND	10.0	1.7	03/06/20 16:29	
2-Chloronaphthalene	ug/L	ND	10.0	1.4	03/06/20 16:29	
2-Chlorophenol	ug/L	ND	10.0	1.4	03/06/20 16:29	
2-Methylnaphthalene	ug/L	ND	10.0	1.4	03/06/20 16:29	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	1.2	03/06/20 16:29	
2-Nitroaniline	ug/L	ND	20.0	3.0	03/06/20 16:29	
2-Nitrophenol	ug/L	ND	10.0	1.7	03/06/20 16:29	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	1.2	03/06/20 16:29	
3,3'-Dichlorobenzidine	ug/L	ND	20.0	2.7	03/06/20 16:29	
3-Nitroaniline	ug/L	ND	20.0	2.8	03/06/20 16:29	
4,6-Dinitro-2-methylphenol	ug/L	ND	20.0	4.5	03/06/20 16:29	
4-Bromophenylphenyl ether	ug/L	ND	10.0	1.2	03/06/20 16:29	
4-Chloro-3-methylphenol	ug/L	ND	10.0	2.8	03/06/20 16:29	
4-Chloroaniline	ug/L	ND	20.0	2.8	03/06/20 16:29	
4-Chlorophenylphenyl ether	ug/L	ND	10.0	1.5	03/06/20 16:29	
4-Nitroaniline	ug/L	ND	20.0	3.1	03/06/20 16:29	
4-Nitrophenol	ug/L	ND	50.0	9.4	03/06/20 16:29	
Acenaphthene	ug/L	ND	10.0	1.4	03/06/20 16:29	
Acenaphthylene	ug/L	ND	10.0	1.5	03/06/20 16:29	
Aniline	ug/L	ND	10.0	1.6	03/06/20 16:29	
Anthracene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Benzo(a)anthracene	ug/L	ND	10.0	1.5	03/06/20 16:29	
Benzo(a)pyrene	ug/L	ND	10.0	1.8	03/06/20 16:29	
Benzo(b)fluoranthene	ug/L	ND	10.0	1.7	03/06/20 16:29	
Benzo(g,h,i)perylene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Benzo(k)fluoranthene	ug/L	ND	10.0	1.5	03/06/20 16:29	
Benzoic Acid	ug/L	ND	50.0	19.5	03/06/20 16:29	
Benzyl alcohol	ug/L	ND	20.0	2.6	03/06/20 16:29	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	1.3	03/06/20 16:29	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

METHOD BLANK: 2824599

Matrix: Water

Associated Lab Samples: 92467724001, 92467724002, 92467724003, 92467724004, 92467724005, 92467724007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Chloroethyl) ether	ug/L	ND	10.0	1.7	03/06/20 16:29	
bis(2-Ethylhexyl)phthalate	ug/L	ND	6.0	2.0	03/06/20 16:29	
Butylbenzylphthalate	ug/L	ND	10.0	1.9	03/06/20 16:29	
Chrysene	ug/L	ND	10.0	1.4	03/06/20 16:29	
Di-n-butylphthalate	ug/L	ND	10.0	1.6	03/06/20 16:29	
Di-n-octylphthalate	ug/L	ND	10.0	2.2	03/06/20 16:29	v1
Dibenz(a,h)anthracene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Dibenzofuran	ug/L	ND	10.0	1.3	03/06/20 16:29	
Diethylphthalate	ug/L	ND	10.0	1.6	03/06/20 16:29	
Dimethylphthalate	ug/L	ND	10.0	1.4	03/06/20 16:29	
Fluoranthene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Fluorene	ug/L	ND	10.0	1.4	03/06/20 16:29	
Hexachloro-1,3-butadiene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Hexachlorobenzene	ug/L	ND	10.0	1.3	03/06/20 16:29	
Hexachlorocyclopentadiene	ug/L	ND	10.0	2.4	03/06/20 16:29	
Hexachloroethane	ug/L	ND	10.0	1.3	03/06/20 16:29	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10.0	1.7	03/06/20 16:29	
Isophorone	ug/L	ND	10.0	1.3	03/06/20 16:29	
N-Nitroso-di-n-propylamine	ug/L	ND	10.0	1.3	03/06/20 16:29	
N-Nitrosodimethylamine	ug/L	ND	10.0	1.8	03/06/20 16:29	
N-Nitrosodiphenylamine	ug/L	ND	10.0	1.4	03/06/20 16:29	
Naphthalene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Nitrobenzene	ug/L	ND	10.0	1.5	03/06/20 16:29	
Pentachlorophenol	ug/L	ND	20.0	2.8	03/06/20 16:29	
Phenanthrene	ug/L	ND	10.0	1.4	03/06/20 16:29	
Phenol	ug/L	ND	10.0	1.5	03/06/20 16:29	
Pyrene	ug/L	ND	10.0	1.5	03/06/20 16:29	
2,4,6-Tribromophenol (S)	%	59	10-137		03/06/20 16:29	
2-Fluorobiphenyl (S)	%	55	13-130		03/06/20 16:29	
2-Fluorophenol (S)	%	50	10-130		03/06/20 16:29	
Nitrobenzene-d5 (S)	%	62	13-130		03/06/20 16:29	
Phenol-d6 (S)	%	36	10-130		03/06/20 16:29	
Terphenyl-d14 (S)	%	90	25-130		03/06/20 16:29	

LABORATORY CONTROL SAMPLE: 2824600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	18.1	36	30-130	
1,2-Dichlorobenzene	ug/L	50	19.6	39	30-130	
1,3-Dichlorobenzene	ug/L	50	18.6	37	20-130	
1,4-Dichlorobenzene	ug/L	50	20.0	40	30-130	
1-Methylnaphthalene	ug/L	50	21.9	44	30-130	
2,2'-Oxybis(1-chloropropane)	ug/L	50	32.2	64	20-130	
2,4,5-Trichlorophenol	ug/L	50	30.0	60	40-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

LABORATORY CONTROL SAMPLE: 2824600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,6-Trichlorophenol	ug/L	50	29.1	58	40-130	
2,4-Dichlorophenol	ug/L	50	29.7	59	31-130	
2,4-Dimethylphenol	ug/L	50	29.0	58	30-130	
2,4-Dinitrophenol	ug/L	250	171	69	30-130	
2,4-Dinitrotoluene	ug/L	50	41.5	83	49-130	
2,6-Dinitrotoluene	ug/L	50	33.0	66	50-130	
2-Chloronaphthalene	ug/L	50	23.5	47	30-130	
2-Chlorophenol	ug/L	50	31.9	64	30-130	
2-Methylnaphthalene	ug/L	50	21.9	44	30-130	
2-Methylphenol(o-Cresol)	ug/L	50	31.4	63	30-130	
2-Nitroaniline	ug/L	100	58.0	58	40-130	
2-Nitrophenol	ug/L	50	34.6	69	20-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	29.6	59	20-130	
3,3'-Dichlorobenzidine	ug/L	100	99.8	100	10-150	
3-Nitroaniline	ug/L	100	69.1	69	40-130	
4,6-Dinitro-2-methylphenol	ug/L	100	95.5	95	40-130	
4-Bromophenylphenyl ether	ug/L	50	28.2	56	30-130	
4-Chloro-3-methylphenol	ug/L	100	59.8	60	30-130	
4-Chloroaniline	ug/L	100	59.6	60	20-130	
4-Chlorophenylphenyl ether	ug/L	50	25.5	51	20-130	
4-Nitroaniline	ug/L	100	93.5	93	40-130	
4-Nitrophenol	ug/L	250	126	51	10-130	
Acenaphthene	ug/L	50	26.5	53	30-130	
Acenaphthylene	ug/L	50	27.2	54	30-130	
Aniline	ug/L	50	27.2	54	20-130	
Anthracene	ug/L	50	36.3	73	50-130	
Benzo(a)anthracene	ug/L	50	54.1	108	50-130	
Benzo(a)pyrene	ug/L	50	55.1	110	50-130	
Benzo(b)fluoranthene	ug/L	50	55.0	110	50-130	
Benzo(g,h,i)perylene	ug/L	50	56.8	114	50-130	
Benzo(k)fluoranthene	ug/L	50	55.9	112	50-130	
Benzoic Acid	ug/L	250	86.4	35	10-130	
Benzyl alcohol	ug/L	100	60.7	61	20-130	
bis(2-Chloroethoxy)methane	ug/L	50	30.3	61	30-130	
bis(2-Chloroethyl) ether	ug/L	50	31.4	63	30-130	
bis(2-Ethylhexyl)phthalate	ug/L	50	64.7	129	50-130	
Butylbenzylphthalate	ug/L	50	63.7	127	50-150	
Chrysene	ug/L	50	53.0	106	50-130	
Di-n-butylphthalate	ug/L	50	57.6	115	50-130	
Di-n-octylphthalate	ug/L	50	68.3	137	50-130 L1,v1	
Dibenz(a,h)anthracene	ug/L	50	57.4	115	40-130	
Dibenzofuran	ug/L	50	27.5	55	40-130	
Diethylphthalate	ug/L	50	37.3	75	40-130	
Dimethylphthalate	ug/L	50	31.5	63	40-130	
Fluoranthene	ug/L	50	49.4	99	30-130	
Fluorene	ug/L	50	28.6	57	20-130	
Hexachloro-1,3-butadiene	ug/L	50	15.2	30	10-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

LABORATORY CONTROL SAMPLE: 2824600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachlorobenzene	ug/L	50	31.6	63	30-130	
Hexachlorocyclopentadiene	ug/L	50	15.0	30	10-150	
Hexachloroethane	ug/L	50	16.6	33	10-130	
Indeno(1,2,3-cd)pyrene	ug/L	50	57.0	114	40-130	
Isophorone	ug/L	50	30.2	60	30-130	
N-Nitroso-di-n-propylamine	ug/L	50	30.8	62	30-130	
N-Nitrosodimethylamine	ug/L	50	27.3	55	10-130	
N-Nitrosodiphenylamine	ug/L	50	33.3	67	30-130	
Naphthalene	ug/L	50	22.8	46	20-130	
Nitrobenzene	ug/L	50	30.1	60	20-130	
Pentachlorophenol	ug/L	100	91.8	92	10-140	
Phenanthrene	ug/L	50	36.2	72	50-130	
Phenol	ug/L	50	23.5	47	10-130	
Pyrene	ug/L	50	51.5	103	50-130	
2,4,6-Tribromophenol (S)	%			76	10-137	
2-Fluorobiphenyl (S)	%			60	13-130	
2-Fluorophenol (S)	%			55	10-130	
Nitrobenzene-d5 (S)	%			69	13-130	
Phenol-d6 (S)	%			44	10-130	
Terphenyl-d14 (S)	%			107	25-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2824601 2824602

Parameter	Units	92467724001		MS		MSD		MS	MSD	% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Conc.	Result	Result						
1,2,4-Trichlorobenzene	ug/L	ND	50	50	50	17.8	17.6	36	35	30-130	1	30			
1,2-Dichlorobenzene	ug/L	ND	50	50	50	20.2	19.0	40	38	30-130	6	30			
1,3-Dichlorobenzene	ug/L	ND	50	50	50	19.3	18.2	39	36	20-130	6	30			
1,4-Dichlorobenzene	ug/L	ND	50	50	50	20.8	19.6	42	39	30-130	6	30			
1-Methylnaphthalene	ug/L	ND	50	50	50	21.7	21.3	43	43	30-130	2	30			
2,2'-Oxybis(1-chloropropane)	ug/L	ND	50	50	50	31.8	30.6	64	61	20-130	4	30			
2,4,5-Trichlorophenol	ug/L	ND	50	50	50	25.9	28.0	52	56	40-130	8	30			
2,4,6-Trichlorophenol	ug/L	ND	50	50	50	25.6	27.0	51	54	40-130	6	30			
2,4-Dichlorophenol	ug/L	ND	50	50	50	27.0	28.2	54	56	31-130	5	30			
2,4-Dimethylphenol	ug/L	ND	50	50	50	27.2	29.1	54	58	30-130	7	30			
2,4-Dinitrophenol	ug/L	ND	250	250	250	113	109	45	44	30-130	4	30			
2,4-Dinitrotoluene	ug/L	ND	50	50	50	39.1	40.1	78	80	49-130	2	30			
2,6-Dinitrotoluene	ug/L	ND	50	50	50	30.5	31.9	61	64	50-130	5	30			
2-Chloronaphthalene	ug/L	ND	50	50	50	22.7	22.7	45	45	30-130	0	30			
2-Chlorophenol	ug/L	ND	50	50	50	30.0	29.6	60	59	30-130	1	30			
2-Methylnaphthalene	ug/L	ND	50	50	50	22.3	21.4	45	43	30-130	4	30			
2-Methylphenol(o-Cresol)	ug/L	ND	50	50	50	27.8	27.5	56	55	30-130	1	30			
2-Nitroaniline	ug/L	ND	100	100	100	53.1	56.1	53	56	40-130	6	30			
2-Nitrophenol	ug/L	ND	50	50	50	31.4	33.0	63	66	20-130	5	30			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			2824601		2824602							
			MS	MSD								
		92467724001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
3&4-Methylphenol(m&p Cresol)	ug/L	ND	50	50	25.7	25.7	51	51	20-130	0	30	
3,3'-Dichlorobenzidine	ug/L	ND	100	100	76.1	90.8	76	91	10-150	18	30	
3-Nitroaniline	ug/L	ND	100	100	62.0	65.8	62	66	40-130	6	30	
4,6-Dinitro-2-methylphenol	ug/L	ND	100	100	73.9	77.4	74	77	40-130	5	30	
4-Bromophenylphenyl ether	ug/L	ND	50	50	27.1	28.6	54	57	30-130	5	30	
4-Chloro-3-methylphenol	ug/L	ND	100	100	52.1	55.4	52	55	30-130	6	30	
4-Chloroaniline	ug/L	ND	100	100	48.9	56.5	49	56	20-130	14	30	
4-Chlorophenylphenyl ether	ug/L	ND	50	50	23.1	24.7	46	49	20-130	7	30	
4-Nitroaniline	ug/L	ND	100	100	85.2	93.7	85	94	40-130	9	30	
4-Nitrophenol	ug/L	ND	250	250	107	103	43	41	10-130	4	30	
Acenaphthene	ug/L	ND	50	50	24.6	25.2	49	50	30-130	2	30	
Acenaphthylene	ug/L	ND	50	50	25.6	26.0	51	52	30-130	2	30	
Aniline	ug/L	ND	50	50	23.8	25.9	48	52	20-130	8	30	
Anthracene	ug/L	ND	50	50	35.6	37.7	71	75	50-130	6	30	
Benzo(a)anthracene	ug/L	ND	50	50	46.4	52.1	93	104	50-130	12	30	
Benzo(a)pyrene	ug/L	ND	50	50	46.8	52.7	94	105	50-130	12	30	
Benzo(b)fluoranthene	ug/L	ND	50	50	46.6	52.6	93	105	50-130	12	30	
Benzo(g,h,i)perylene	ug/L	ND	50	50	46.1	51.9	92	104	50-130	12	30	
Benzo(k)fluoranthene	ug/L	ND	50	50	48.2	54.5	96	109	50-130	12	30	
Benzoic Acid	ug/L	ND	250	250	48.0J	39.9J	19	16	10-130		30	
Benzyl alcohol	ug/L	ND	100	100	56.0	55.6	56	56	20-130	1	30	
bis(2-Chloroethoxy)methane	ug/L	ND	50	50	27.4	28.4	55	57	30-130	3	30	
bis(2-Chloroethyl) ether	ug/L	ND	50	50	29.2	29.2	58	58	30-130	0	30	
bis(2-Ethylhexyl)phthalate	ug/L	ND	50	50	55.9	63.7	112	127	50-130	13	30	
Butylbenzylphthalate	ug/L	ND	50	50	56.8	64.2	114	128	50-150	12	30	
Chrysene	ug/L	ND	50	50	45.5	50.4	91	101	50-130	10	30	
Di-n-butylphthalate	ug/L	ND	50	50	50.5	56.5	101	113	50-130	11	30	
Di-n-octylphthalate	ug/L	ND	50	50	58.2	66.0	116	132	50-130	13	30	M0,v1
Dibenz(a,h)anthracene	ug/L	ND	50	50	46.8	53.0	94	106	40-130	12	30	
Dibenzofuran	ug/L	ND	50	50	25.2	26.2	50	52	40-130	4	30	
Diethylphthalate	ug/L	ND	50	50	36.1	36.3	72	73	40-130	1	30	
Dimethylphthalate	ug/L	ND	50	50	29.5	30.0	59	60	40-130	2	30	
Fluoranthene	ug/L	ND	50	50	43.1	47.8	86	96	30-130	10	30	
Fluorene	ug/L	ND	50	50	26.0	27.0	52	54	20-130	4	30	
Hexachloro-1,3-butadiene	ug/L	ND	50	50	14.2	14.4	28	29	10-130	2	30	
Hexachlorobenzene	ug/L	ND	50	50	31.2	33.0	62	66	30-130	6	30	
Hexachlorocyclopentadiene	ug/L	ND	50	50	14.3	13.8	29	28	10-150	4	30	
Hexachloroethane	ug/L	ND	50	50	16.8	16.4	34	33	10-130	2	30	
Indeno(1,2,3-cd)pyrene	ug/L	ND	50	50	46.5	52.8	93	106	40-130	13	30	
Isophorone	ug/L	ND	50	50	27.2	28.8	54	58	30-130	6	30	
N-Nitroso-di-n-propylamine	ug/L	ND	50	50	28.5	28.3	57	57	30-130	1	30	
N-Nitrosodimethylamine	ug/L	ND	50	50	26.4	24.5	53	49	10-130	7	30	
N-Nitrosodiphenylamine	ug/L	ND	50	50	32.4	34.2	65	68	30-130	5	30	
Naphthalene	ug/L	ND	50	50	23.1	22.6	46	45	20-130	2	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2824601 2824602												
Parameter	Units	92467724001		MS	MSD	2824602		MS	MSD			Qual
		Result	Conc.	Spike	Spike	Result	Result	% Rec	% Rec	% Rec	Max	
										Limits	RPD	RPD
Nitrobenzene	ug/L	ND	50	50	50	28.4	29.1	57	58	20-130	2	30
Pentachlorophenol	ug/L	ND	100	100	100	76.6	84.1	77	84	10-140	9	30
Phenanthrene	ug/L	ND	50	50	50	35.6	37.4	71	75	50-130	5	30
Phenol	ug/L	ND	50	50	50	21.0	19.6	42	39	10-130	7	30
Pyrene	ug/L	ND	50	50	50	47.6	53.3	95	107	50-130	11	30
2,4,6-Tribromophenol (S)	%							73	78	10-137		
2-Fluorobiphenyl (S)	%							52	54	13-130		
2-Fluorophenol (S)	%							50	48	10-130		
Nitrobenzene-d5 (S)	%							61	63	13-130		
Phenol-d6 (S)	%							38	35	10-130		
Terphenyl-d14 (S)	%							91	105	25-130		

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

QC Batch: 528422 Analysis Method: SM 2540D-2011
QC Batch Method: SM 2540D-2011 Analysis Description: 2540D Total Suspended Solids
Associated Lab Samples: 92467724001, 92467724002, 92467724003, 92467724004

METHOD BLANK: 2822425 Matrix: Water
Associated Lab Samples: 92467724001, 92467724002, 92467724003, 92467724004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	2.5	2.5	03/04/20 11:19	

LABORATORY CONTROL SAMPLE: 2822426

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Suspended Solids	mg/L	250	258	103	90-110	

SAMPLE DUPLICATE: 2822427

Parameter	Units	92467338001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	25000	21800	14	25	

SAMPLE DUPLICATE: 2822428

Parameter	Units	92467307002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	343	311	10	25	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

QC Batch:	528598	Analysis Method:	SM 2540D-2011
QC Batch Method:	SM 2540D-2011	Analysis Description:	2540D Total Suspended Solids
Associated Lab Samples:	92467724005		

METHOD BLANK: 2823459 Matrix: Water

Associated Lab Samples: 92467724005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	2.5	2.5	03/05/20 11:44	

LABORATORY CONTROL SAMPLE: 2823460

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Suspended Solids	mg/L	251	242	97	90-110	

SAMPLE DUPLICATE: 2823461

Parameter	Units	92467813001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	4230	4170	1	25	

SAMPLE DUPLICATE: 2823462

Parameter	Units	92467764001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	203	200	2	25	

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QUALIFIERS

Project: FORMER BRAMLETTE MGP J20030082
Pace Project No.: 92467724

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-A Pace Analytical Services - Asheville
PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.
IH This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
IK The recalculated concentration of the calibration standard(s) did not meet method acceptance criteria; this result should be considered an estimated value.
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.
v1 The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORMER BRAMLETTE MGP J20030082

Pace Project No.: 92467724

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92467724001	SW-13_WS_20200301	EPA 3510C	528828	EPA 8270E	529069
92467724002	SW-14_WS_20200301	EPA 3510C	528828	EPA 8270E	529069
92467724003	SW-15_WS_20200301	EPA 3510C	528828	EPA 8270E	529069
92467724004	SW-16_WS_20200301	EPA 3510C	528828	EPA 8270E	529069
92467724005	FD-01_WG_20200301	EPA 3510C	528828	EPA 8270E	529069
92467724007	EB-01_WQ_20200301	EPA 3510C	528828	EPA 8270E	529069
92467724001	SW-13_WS_20200301	EPA 8260D	528517		
92467724002	SW-14_WS_20200301	EPA 8260D	528517		
92467724003	SW-15_WS_20200301	EPA 8260D	529066		
92467724004	SW-16_WS_20200301	EPA 8260D	529066		
92467724005	FD-01_WG_20200301	EPA 8260D	529066		
92467724006	TB-01_WQ_20200301	EPA 8260D	528517		
92467724007	EB-01_WQ_20200301	EPA 8260D	529066		
92467724001	SW-13_WS_20200301	SM 2540D-2011	528422		
92467724002	SW-14_WS_20200301	SM 2540D-2011	528422		
92467724003	SW-15_WS_20200301	SM 2540D-2011	528422		
92467724004	SW-16_WS_20200301	SM 2540D-2011	528422		
92467724005	FD-01_WG_20200301	SM 2540D-2011	528598		

REPORT OF LABORATORY ANALYSIS

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	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	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: Client Name: Synterra Project #: **WO#: 92467724**
 Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☒ Pace ☐ Other: _____
 Barcode: 

Custody Seal Present? ☐ Yes ☒ No Seals Intact? ☐ Yes ☒ No
 Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____
 Thermometer: ☒ IR Gun ID: 03T061 Type of Ice: ☒ Wet ☐ Blue ☐ None
 Cooler Temp (°C): 4.4/1.6/1.7 Correction Factor: Add/Subtract (°C) 0.0
 Cooler Temp Corrected (°C): 4.4/1.6/1.7
 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?	☒ Yes ☐ No ☐ N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>			
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: _____

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	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 #

W0# : 92467724

PM: KLH1

Due Date: 03/10/20

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				1						2						3													
2				1						2						3													
3				1						2						3													
4				1						2						3													
5																													
6																2													
7										1						3													
8				1						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).



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

Section C

Invoice Information:

Attention:

Company Name:

Address:

Page One

Pace Project Manager:	kevin.bemico@pacelabs.com
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Page Profile #: 7754

Page : 1 Of 1

Regulatory Agency

State/Location	
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	sc
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92467724	001
	002
	003
	004
	006
	007
	005

SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: <i>Brian Spillane</i> SIGNATURE of SAMPLER: <i>[Signature]</i>		DATE Signed: <i>3-3-20</i>	TEMP in C	Received on Date (Y/N) Custody Sealed (Y/N) Cooled (Y/N) Samples intact (Y/N)
--	--	----------------------------	-----------	---

March 18, 2020

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

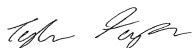
RE: Project: FORMER BRAMLETTE MGP J20030083
Pace Project No.: 92467731

Dear Program Manager:

Enclosed are the analytical results for sample(s) received by the laboratory on March 03, 2020. 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,



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

Enclosures

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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Pace Analytical Services Charlotte

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

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92467731001	SW-13_SE_20200301 (0-0.5)	Solid	03/02/20 12:15	03/03/20 14:00
92467731002	SW-13_SE_20200301 (0.5-1.0)	Solid	03/02/20 12:15	03/03/20 14:00
92467731003	SW-13_SE_20200301 (1.0-2.0)	Solid	03/02/20 12:15	03/03/20 14:00
92467731004	SW-14_SE_20200301 (0-0.5)	Solid	03/02/20 11:50	03/03/20 14:00
92467731005	SW-14_SE_20200301 (0.5-1.0)	Solid	03/02/20 11:50	03/03/20 14:00
92467731006	SW-14_SE_20200301 (1.0-2.0)	Solid	03/02/20 11:50	03/03/20 14:00
92467731007	SW-15_SE_20200301 (0-0.5)	Solid	03/01/20 16:40	03/03/20 14:00
92467731008	SW-15_SE_20200301 (0.5-1.0)	Solid	03/01/20 16:40	03/03/20 14:00
92467731009	SW-16_SE_20200301 (0.5-1.0)	Solid	03/01/20 15:00	03/03/20 14:00
92467731010	SW-16_SE_20200301 (1.0-2.0)	Solid	03/01/20 15:00	03/03/20 14:00
92467731011	SW-16_SE_20200301 (2.0-3.0)	Solid	03/01/20 15:00	03/03/20 14:00
92467731012	FD-01_SE_20200302	Solid	03/02/20 17:00	03/03/20 14:00
92467731013	SW-13A_SE_20200301 (0-0.5)	Solid	03/02/20 09:15	03/03/20 14:00
92467731014	SW-14A_SE_20200301 (0-0.5)	Solid	03/02/20 11:50	03/03/20 14:00
92467731015	SW-16_SE_20200301 (0-0.5)	Solid	03/01/20 15:00	03/03/20 14:00
92467731016	SW-13A_SE_20200301 (0.5-1.0)	Solid	03/02/20 09:15	03/03/20 14:00
92467731017	SW-14_SE_20200301 (2.0-3.0)	Solid	03/02/20 11:50	03/03/20 14:00
92467731018	EB-01_WQ_20200302	Water	03/02/20 17:00	03/03/20 14:00
92467731019	EB-02_WQ_20200301	Water	03/01/20 17:00	03/03/20 14:00
92467731020	TB-01_WQ_20200302	Water	03/02/20 00:00	03/03/20 14:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92467731001	SW-13_SE_20200301 (0-0.5)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731002	SW-13_SE_20200301 (0.5-1.0)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731003	SW-13_SE_20200301 (1.0-2.0)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731004	SW-14_SE_20200301 (0-0.5)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731005	SW-14_SE_20200301 (0.5-1.0)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731006	SW-14_SE_20200301 (1.0-2.0)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731007	SW-15_SE_20200301 (0-0.5)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731008	SW-15_SE_20200301 (0.5-1.0)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731009	SW-16_SE_20200301 (0.5-1.0)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731010	SW-16_SE_20200301 (1.0-2.0)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731011	SW-16_SE_20200301 (2.0-3.0)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731012	FD-01_SE_20200302	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731013	SW-13A_SE_20200301 (0-0.5)	EPA 8270E	BPJ	75	PASI-C

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92467731014	SW-14A_SE_20200301 (0-0.5)	EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
		EPA 9060A	MJP	5	PASI-A
		EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
92467731015	SW-16_SE_20200301 (0-0.5)	ASTM D2974-87	KDF	1	PASI-C
		EPA 9060A	MJP	5	PASI-A
		EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731016	SW-13A_SE_20200301 (0.5-1.0)	EPA 9060A	MJP	5	PASI-A
		EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
		EPA 8270E	BPJ	75	PASI-C
92467731017	SW-14_SE_20200301 (2.0-3.0)	ASTM D2974-87	KDF	1	PASI-C
		EPA 8270E	BPJ	75	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92467731018	EB-01_WQ_20200302	EPA 8270E	PKS	74	PASI-C
		EPA 8260D	SAS	62	PASI-C
92467731019	EB-02_WQ_20200301	EPA 8270E	PKS	74	PASI-C
		EPA 8260D	SAS	62	PASI-C
92467731020	TB-01_WQ_20200302	EPA 8260D	SAS	62	PASI-C

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92467731001	SW-13_SE_20200301 (0-0.5)					
EPA 8270E	Acenaphthylene	287J	ug/kg	470	03/06/20 18:37	
EPA 8270E	Anthracene	490	ug/kg	470	03/06/20 18:37	
EPA 8270E	Benzo(a)anthracene	1720	ug/kg	470	03/06/20 18:37	
EPA 8270E	Benzo(a)pyrene	1680	ug/kg	470	03/06/20 18:37	
EPA 8270E	Benzo(b)fluoranthene	1870	ug/kg	470	03/06/20 18:37	
EPA 8270E	Benzo(g,h,i)perylene	1030	ug/kg	470	03/06/20 18:37	
EPA 8270E	Benzo(k)fluoranthene	748	ug/kg	470	03/06/20 18:37	
EPA 8270E	Chrysene	1530	ug/kg	470	03/06/20 18:37	
EPA 8270E	Fluoranthene	3010	ug/kg	470	03/06/20 18:37	
EPA 8270E	Indeno(1,2,3-cd)pyrene	876	ug/kg	470	03/06/20 18:37	
EPA 8270E	Naphthalene	192J	ug/kg	470	03/06/20 18:37	
EPA 8270E	Phenanthrene	1280	ug/kg	470	03/06/20 18:37	
EPA 8270E	Pyrene	2860	ug/kg	470	03/06/20 18:37	
EPA 8260D	Acetone	68.3J	ug/kg	242	03/06/20 12:16	
ASTM D2974-87	Percent Moisture	30.5	%	0.10	03/04/20 12:47	
92467731002	SW-13_SE_20200301 (0.5-1.0)					
EPA 8270E	Acenaphthylene	142J	ug/kg	482	03/06/20 11:50	
EPA 8270E	Benzo(a)anthracene	597	ug/kg	482	03/06/20 11:50	
EPA 8270E	Benzo(a)pyrene	615	ug/kg	482	03/06/20 11:50	
EPA 8270E	Benzo(b)fluoranthene	683	ug/kg	482	03/06/20 11:50	
EPA 8270E	Benzo(g,h,i)perylene	391J	ug/kg	482	03/06/20 11:50	
EPA 8270E	Benzo(k)fluoranthene	279J	ug/kg	482	03/06/20 11:50	
EPA 8270E	Chrysene	529	ug/kg	482	03/06/20 11:50	
EPA 8270E	Fluoranthene	942	ug/kg	482	03/06/20 11:50	
EPA 8270E	Indeno(1,2,3-cd)pyrene	326J	ug/kg	482	03/06/20 11:50	
EPA 8270E	Phenanthrene	201J	ug/kg	482	03/06/20 11:50	
EPA 8270E	Pyrene	819	ug/kg	482	03/06/20 11:50	
ASTM D2974-87	Percent Moisture	30.3	%	0.10	03/04/20 12:47	
92467731003	SW-13_SE_20200301 (1.0-2.0)					
EPA 8270E	Benzo(a)anthracene	172J	ug/kg	510	03/06/20 13:19	
EPA 8270E	Chrysene	163J	ug/kg	510	03/06/20 13:19	
EPA 8270E	Fluoranthene	301J	ug/kg	510	03/06/20 13:19	
EPA 8270E	Pyrene	269J	ug/kg	510	03/06/20 13:19	
ASTM D2974-87	Percent Moisture	34.6	%	0.10	03/04/20 12:47	
92467731004	SW-14_SE_20200301 (0-0.5)					
EPA 8270E	Fluoranthene	182J	ug/kg	514	03/06/20 13:50	
EPA 8270E	Pyrene	192J	ug/kg	514	03/06/20 13:50	
ASTM D2974-87	Percent Moisture	34.9	%	0.10	03/04/20 12:47	
92467731005	SW-14_SE_20200301 (0.5-1.0)					
EPA 8260D	Acetone	81.2J	ug/kg	155	03/06/20 13:52	
ASTM D2974-87	Percent Moisture	34.1	%	0.10	03/04/20 12:47	
92467731006	SW-14_SE_20200301 (1.0-2.0)					
EPA 8260D	Acetone	252	ug/kg	181	03/06/20 14:17	
ASTM D2974-87	Percent Moisture	24.4	%	0.10	03/04/20 12:48	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92467731007	SW-15_SE_20200301 (0-0.5)					
EPA 8270E	Benzo(a)anthracene	593J	ug/kg	789	03/06/20 12:17	
EPA 8270E	Benzo(a)pyrene	573J	ug/kg	789	03/06/20 12:17	
EPA 8270E	Benzo(b)fluoranthene	613J	ug/kg	789	03/06/20 12:17	
EPA 8270E	Chrysene	515J	ug/kg	789	03/06/20 12:17	
EPA 8270E	Fluoranthene	968	ug/kg	789	03/06/20 12:17	
EPA 8270E	Phenanthrene	296J	ug/kg	789	03/06/20 12:17	
EPA 8270E	Pyrene	879	ug/kg	789	03/06/20 12:17	
EPA 8260D	Acetone	48.8J	ug/kg	275	03/05/20 13:25	
ASTM D2974-87	Percent Moisture	57.8	%	0.10	03/04/20 12:48	
92467731008	SW-15_SE_20200301 (0.5-1.0)					
EPA 8270E	Acenaphthylene	1540J	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Anthracene	3580	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Benzo(a)anthracene	8320	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Benzo(a)pyrene	8060	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Benzo(b)fluoranthene	8970	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Benzo(g,h,i)perylene	4600	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Benzo(k)fluoranthene	3390	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Chrysene	7280	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Fluoranthene	16300	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Fluorene	1420J	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Indeno(1,2,3-cd)pyrene	4040	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Phenanthrene	10400	ug/kg	3230	03/06/20 19:31	
EPA 8270E	Pyrene	16100	ug/kg	3230	03/06/20 19:31	
EPA 8260D	Acetone	39.0J	ug/kg	201	03/05/20 13:50	
ASTM D2974-87	Percent Moisture	49.4	%	0.10	03/04/20 12:48	
92467731009	SW-16_SE_20200301 (0.5-1.0)					
EPA 8270E	Benzo(a)anthracene	824	ug/kg	553	03/06/20 12:44	
EPA 8270E	Benzo(a)pyrene	739	ug/kg	553	03/06/20 12:44	
EPA 8270E	Benzo(b)fluoranthene	827	ug/kg	553	03/06/20 12:44	
EPA 8270E	Benzo(g,h,i)perylene	337J	ug/kg	553	03/06/20 12:44	
EPA 8270E	Benzo(k)fluoranthene	358J	ug/kg	553	03/06/20 12:44	
EPA 8270E	Chrysene	720	ug/kg	553	03/06/20 12:44	
EPA 8270E	Fluoranthene	1080	ug/kg	553	03/06/20 12:44	
EPA 8270E	Indeno(1,2,3-cd)pyrene	338J	ug/kg	553	03/06/20 12:44	
EPA 8270E	Phenanthrene	143J	ug/kg	553	03/06/20 12:44	
EPA 8270E	Pyrene	962	ug/kg	553	03/06/20 12:44	
EPA 8260D	Acetone	104J	ug/kg	412	03/05/20 14:15	
EPA 8260D	p-Isopropyltoluene	23.3	ug/kg	20.6	03/05/20 14:15	
ASTM D2974-87	Percent Moisture	39.3	%	0.10	03/04/20 12:48	
92467731010	SW-16_SE_20200301 (1.0-2.0)					
ASTM D2974-87	Percent Moisture	31.4	%	0.10	03/04/20 12:48	
92467731011	SW-16_SE_20200301 (2.0-3.0)					
EPA 8270E	bis(2-Ethylhexyl)phthalate	246J	ug/kg	467	03/06/20 16:21	
EPA 8260D	Acetone	21.7J	ug/kg	149	03/05/20 15:05	
ASTM D2974-87	Percent Moisture	28.8	%	0.10	03/04/20 12:48	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92467731012	FD-01_SE_20200302					
EPA 8270E	Acenaphthylene	342J	ug/kg	1170	03/06/20 13:11	
EPA 8270E	Anthracene	520J	ug/kg	1170	03/06/20 13:11	
EPA 8270E	Benzo(a)anthracene	1020J	ug/kg	1170	03/06/20 13:11	
EPA 8270E	Benzo(a)pyrene	978J	ug/kg	1170	03/06/20 13:11	
EPA 8270E	Benzo(b)fluoranthene	976J	ug/kg	1170	03/06/20 13:11	
EPA 8270E	Benzo(g,h,i)perylene	545J	ug/kg	1170	03/06/20 13:11	
EPA 8270E	Chrysene	935J	ug/kg	1170	03/06/20 13:11	
EPA 8270E	Fluoranthene	2340	ug/kg	1170	03/06/20 13:11	
EPA 8270E	Phenanthrene	1060J	ug/kg	1170	03/06/20 13:11	
EPA 8270E	Pyrene	1860	ug/kg	1170	03/06/20 13:11	
ASTM D2974-87	Percent Moisture	71.8	%	0.10	03/04/20 12:48	
92467731013	SW-13A_SE_20200301 (0-0.5)					
EPA 8270E	Acenaphthylene	516J	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Anthracene	1100J	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Benzo(a)anthracene	1990	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Benzo(a)pyrene	1860	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Benzo(b)fluoranthene	2160	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Benzo(g,h,i)perylene	1040J	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Benzo(k)fluoranthene	902J	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Chrysene	1810	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Fluoranthene	4530	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Fluorene	449J	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Indeno(1,2,3-cd)pyrene	898J	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Naphthalene	379J	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Phenanthrene	2380	ug/kg	1300	03/06/20 13:38	
EPA 8270E	Pyrene	4060	ug/kg	1300	03/06/20 13:38	
EPA 8260D	Acetone	65.5J	ug/kg	437	03/06/20 15:05	
ASTM D2974-87	Percent Moisture	74.4	%	0.10	03/04/20 12:48	
EPA 9060A	Total Organic Carbon	108000	mg/kg	2340	03/18/20 11:53	
EPA 9060A	Total Organic Carbon	114000	mg/kg	2340	03/18/20 11:53	
EPA 9060A	Total Organic Carbon	116000	mg/kg	2340	03/18/20 11:53	
EPA 9060A	Total Organic Carbon	113000	mg/kg	2340	03/18/20 11:53	
EPA 9060A	Mean Total Organic Carbon	113000	mg/kg	2340	03/18/20 11:53	
92467731014	SW-14A_SE_20200301 (0-0.5)					
EPA 8270E	Acenaphthylene	3360J	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Anthracene	10500	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Benzo(a)anthracene	22800	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Benzo(a)pyrene	20800	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Benzo(b)fluoranthene	23200	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Benzo(g,h,i)perylene	11400	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Benzo(k)fluoranthene	8810	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Chrysene	19700	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Fluoranthene	44500	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Fluorene	3230J	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Indeno(1,2,3-cd)pyrene	10400	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Naphthalene	2180J	ug/kg	6640	03/06/20 19:58	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92467731014	SW-14A_SE_20200301 (0-0.5)					
EPA 8270E	Phenanthrene	28600	ug/kg	6640	03/06/20 19:58	
EPA 8270E	Pyrene	43400	ug/kg	6640	03/06/20 19:58	
ASTM D2974-87	Percent Moisture	75.4	%	0.10	03/04/20 12:50	
EPA 9060A	Total Organic Carbon	198000	mg/kg	2440	03/18/20 12:17	
EPA 9060A	Total Organic Carbon	207000	mg/kg	2440	03/18/20 12:17	
EPA 9060A	Total Organic Carbon	171000	mg/kg	2440	03/18/20 12:17	
EPA 9060A	Total Organic Carbon	178000	mg/kg	2440	03/18/20 12:17	
EPA 9060A	Mean Total Organic Carbon	189000	mg/kg	2440	03/18/20 12:17	
92467731015	SW-16_SE_20200301 (0-0.5)					
EPA 8270E	Acenaphthylene	566J	ug/kg	657	03/06/20 14:05	
EPA 8270E	Anthracene	1910	ug/kg	657	03/06/20 14:05	
EPA 8270E	Benzo(a)anthracene	4710	ug/kg	657	03/06/20 14:05	
EPA 8270E	Benzo(a)pyrene	3970	ug/kg	657	03/06/20 14:05	
EPA 8270E	Benzo(b)fluoranthene	4540	ug/kg	657	03/06/20 14:05	
EPA 8270E	Benzo(g,h,i)perylene	2210	ug/kg	657	03/06/20 14:05	
EPA 8270E	Benzo(k)fluoranthene	2070	ug/kg	657	03/06/20 14:05	
EPA 8270E	Chrysene	4040	ug/kg	657	03/06/20 14:05	
EPA 8270E	Dibenzofuran	242J	ug/kg	657	03/06/20 14:05	
EPA 8270E	Fluoranthene	11400	ug/kg	1310	03/09/20 11:39	
EPA 8270E	Fluorene	412J	ug/kg	657	03/06/20 14:05	
EPA 8270E	Indeno(1,2,3-cd)pyrene	2000	ug/kg	657	03/06/20 14:05	
EPA 8270E	Naphthalene	240J	ug/kg	657	03/06/20 14:05	
EPA 8270E	Phenanthrene	6630	ug/kg	657	03/06/20 14:05	
EPA 8270E	Pyrene	8250	ug/kg	1310	03/09/20 11:39	
EPA 8260D	Acetone	184J	ug/kg	393	03/05/20 15:30	
ASTM D2974-87	Percent Moisture	50.3	%	0.10	03/04/20 12:50	
EPA 9060A	Total Organic Carbon	73000	mg/kg	1210	03/18/20 12:28	
EPA 9060A	Total Organic Carbon	164000	mg/kg	1210	03/18/20 12:28	
EPA 9060A	Total Organic Carbon	78100	mg/kg	1210	03/18/20 12:28	
EPA 9060A	Total Organic Carbon	76300	mg/kg	1210	03/18/20 12:28	
EPA 9060A	Mean Total Organic Carbon	97900	mg/kg	1210	03/18/20 12:28	
92467731016	SW-13A_SE_20200301 (0.5-1.0)					
EPA 8270E	Benzo(a)anthracene	432J	ug/kg	933	03/06/20 14:32	
EPA 8270E	Benzo(a)pyrene	421J	ug/kg	933	03/06/20 14:32	
EPA 8270E	Benzo(b)fluoranthene	469J	ug/kg	933	03/06/20 14:32	
EPA 8270E	Chrysene	396J	ug/kg	933	03/06/20 14:32	
EPA 8270E	Fluoranthene	875J	ug/kg	933	03/06/20 14:32	R1
EPA 8270E	Phenanthrene	389J	ug/kg	933	03/06/20 14:32	
EPA 8270E	Pyrene	901J	ug/kg	933	03/06/20 14:32	R1
EPA 8260D	Acetone	59.5J	ug/kg	402	03/06/20 15:53	
ASTM D2974-87	Percent Moisture	64.0	%	0.10	03/04/20 12:50	
92467731017	SW-14_SE_20200301 (2.0-3.0)					
ASTM D2974-87	Percent Moisture	32.0	%	0.10	03/04/20 12:50	

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Method: EPA 8270E

Description: 8270E RVE

Client: Duke Energy

Date: March 18, 2020

General Information:

2 samples were analyzed for EPA 8270E. 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.

QC Batch: 528828

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- BLANK (Lab ID: 2824599)
 - Di-n-octylphthalate
- EB-01_WQ_20200302 (Lab ID: 92467731018)
 - Di-n-octylphthalate
- EB-02_WQ_20200301 (Lab ID: 92467731019)
 - Di-n-octylphthalate
- LCS (Lab ID: 2824600)
 - Di-n-octylphthalate
- MS (Lab ID: 2824601)
 - Di-n-octylphthalate
- MSD (Lab ID: 2824602)
 - Di-n-octylphthalate

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.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Method: EPA 8270E

Description: 8270E RVE

Client: Duke Energy

Date: March 18, 2020

QC Batch: 528828

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: 2824600)
- Di-n-octylphthalate

Matrix Spikes:

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

QC Batch: 528828

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92467724001

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

- MSD (Lab ID: 2824602)
- Di-n-octylphthalate

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Method: EPA 8270E

Description: 8270E MSSV Microwave

Client: Duke Energy

Date: March 18, 2020

General Information:

17 samples were analyzed for EPA 8270E. 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.

QC Batch: 528709

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- FD-01_SE_20200302 (Lab ID: 92467731012)
 - Di-n-octylphthalate
- MS (Lab ID: 2823795)
 - Di-n-octylphthalate
- MSD (Lab ID: 2823796)
 - Di-n-octylphthalate
- SW-13A_SE_20200301 (0-0.5) (Lab ID: 92467731013)
 - Di-n-octylphthalate
- SW-13A_SE_20200301 (0.5-1.0) (Lab ID: 92467731016)
 - Di-n-octylphthalate
- SW-13_SE_20200301 (0-0.5) (Lab ID: 92467731001)
 - Di-n-octylphthalate
- SW-13_SE_20200301 (0.5-1.0) (Lab ID: 92467731002)
 - Di-n-octylphthalate
- SW-14A_SE_20200301 (0-0.5) (Lab ID: 92467731014)
 - Di-n-octylphthalate
- SW-15_SE_20200301 (0-0.5) (Lab ID: 92467731007)
 - Di-n-octylphthalate
- SW-15_SE_20200301 (0.5-1.0) (Lab ID: 92467731008)
 - Di-n-octylphthalate
- SW-16_SE_20200301 (0-0.5) (Lab ID: 92467731015)
 - Di-n-octylphthalate
- SW-16_SE_20200301 (0.5-1.0) (Lab ID: 92467731009)
 - Di-n-octylphthalate
- SW-16_SE_20200301 (1.0-2.0) (Lab ID: 92467731010)
 - Di-n-octylphthalate

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Method: EPA 8270E

Description: 8270E MSSV Microwave

Client: Duke Energy

Date: March 18, 2020

QC Batch: 528709

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- SW-16_SE_20200301 (2.0-3.0) (Lab ID: 92467731011)
 - Di-n-octylphthalate

v2: The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

- FD-01_SE_20200302 (Lab ID: 92467731012)
 - Hexachloro-1,3-butadiene
- SW-13A_SE_20200301 (0-0.5) (Lab ID: 92467731013)
 - Hexachloro-1,3-butadiene
- SW-13A_SE_20200301 (0.5-1.0) (Lab ID: 92467731016)
 - Hexachloro-1,3-butadiene
- SW-13_SE_20200301 (0-0.5) (Lab ID: 92467731001)
 - Hexachloro-1,3-butadiene
- SW-13_SE_20200301 (0.5-1.0) (Lab ID: 92467731002)
 - Hexachloro-1,3-butadiene
- SW-14A_SE_20200301 (0-0.5) (Lab ID: 92467731014)
 - Hexachloro-1,3-butadiene
- SW-15_SE_20200301 (0-0.5) (Lab ID: 92467731007)
 - Hexachloro-1,3-butadiene
- SW-15_SE_20200301 (0.5-1.0) (Lab ID: 92467731008)
 - Hexachloro-1,3-butadiene
- SW-16_SE_20200301 (0-0.5) (Lab ID: 92467731015)
 - Hexachloro-1,3-butadiene
- SW-16_SE_20200301 (0.5-1.0) (Lab ID: 92467731009)
 - Hexachloro-1,3-butadiene
- SW-16_SE_20200301 (1.0-2.0) (Lab ID: 92467731010)
 - Hexachloro-1,3-butadiene
- SW-16_SE_20200301 (2.0-3.0) (Lab ID: 92467731011)
 - Hexachloro-1,3-butadiene

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.

- MS (Lab ID: 2823795)
 - Hexachloro-1,3-butadiene
- MSD (Lab ID: 2823796)
 - Hexachloro-1,3-butadiene

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.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Method: EPA 8270E

Description: 8270E MSSV Microwave

Client: Duke Energy

Date: March 18, 2020

QC Batch: 528709

S0: Surrogate recovery outside laboratory control limits.

- SW-13A_SE_20200301 (0-0.5) (Lab ID: 92467731013)
 - Terphenyl-d14 (S)
- SW-15_SE_20200301 (0-0.5) (Lab ID: 92467731007)
 - 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.

QC Batch: 528709

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92467731016

R1: RPD value was outside control limits.

- MSD (Lab ID: 2823796)
 - Fluoranthene
 - Pyrene

Additional Comments:

Analyte Comments:

QC Batch: 528709

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SW-14A_SE_20200301 (0-0.5) (Lab ID: 92467731014)
 - Nitrobenzene-d5 (S)
- SW-15_SE_20200301 (0.5-1.0) (Lab ID: 92467731008)
 - Nitrobenzene-d5 (S)

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Method: EPA 8260D

Description: 8260 MSV Low Level SC

Client: Duke Energy

Date: March 18, 2020

General Information:

3 samples were analyzed for EPA 8260D. 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.

QC Batch: 528517

IK: The recalculated concentration of the calibration standard(s) did not meet method acceptance criteria; this result should be considered an estimated value.

- BLANK (Lab ID: 2822905)
 - Bromomethane
- EB-01_WQ_20200302 (Lab ID: 92467731018)
 - Bromomethane
- EB-02_WQ_20200301 (Lab ID: 92467731019)
 - Bromomethane
- LCS (Lab ID: 2822906)
 - Bromomethane
- MS (Lab ID: 2823618)
 - Bromomethane
- MSD (Lab ID: 2823619)
 - Bromomethane
- TB-01_WQ_20200302 (Lab ID: 92467731020)
 - Bromomethane

Continuing Calibration:

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

QC Batch: 528517

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- BLANK (Lab ID: 2822905)
 - Bromomethane
- EB-01_WQ_20200302 (Lab ID: 92467731018)
 - Bromomethane
- EB-02_WQ_20200301 (Lab ID: 92467731019)
 - Bromomethane
- LCS (Lab ID: 2822906)
 - Bromomethane
- TB-01_WQ_20200302 (Lab ID: 92467731020)
 - Bromomethane

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Method: EPA 8260D

Description: 8260 MSV Low Level SC

Client: Duke Energy

Date: March 18, 2020

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: 528517

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: 2822906)
- Bromomethane

Matrix Spikes:

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

QC Batch: 528517

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92467161002

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

- MS (Lab ID: 2823618)
 - cis-1,2-Dichloroethene
- MSD (Lab ID: 2823619)
 - cis-1,2-Dichloroethene

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Method: EPA 8260D

Description: 8260/5035A SC Volatile Org

Client: Duke Energy

Date: March 18, 2020

General Information:

16 samples were analyzed for EPA 8260D. 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.

Matrix Spikes:

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

QC Batch: 528968

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92467731016

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

- MS (Lab ID: 2825125)
 - 1,1,1,2-Tetrachloroethane
 - 1,2,4-Trimethylbenzene
 - 1,3,5-Trimethylbenzene
 - 1,3-Dichlorobenzene
 - 1,4-Dichlorobenzene
 - 4-Chlorotoluene
 - Bromoform
 - Carbon tetrachloride
 - tert-Butylbenzene

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Method: EPA 8260D

Description: 8260/5035A SC Volatile Org

Client: Duke Energy

Date: March 18, 2020

QC Batch: 528968

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92467731016

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

- MSD (Lab ID: 2825126)
 - 1,2,4-Trimethylbenzene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2825126)
 - 1,1,1,2-Tetrachloroethane
 - 1,1,1-Trichloroethane
 - 1,1,2,2-Tetrachloroethane
 - 1,1-Dichloroethene
 - 1,1-Dichloropropene
 - 1,2,3-Trichloropropane
 - 1,2,4-Trimethylbenzene
 - 1,2-Dibromo-3-chloropropane
 - 1,2-Dichlorobenzene
 - 1,2-Dichloropropane
 - 1,3,5-Trimethylbenzene
 - 1,3-Dichlorobenzene
 - 1,3-Dichloropropane
 - 1,4-Dichlorobenzene
 - 2,2-Dichloropropane
 - 4-Chlorotoluene
 - Benzene
 - Bromobenzene
 - Bromochloromethane
 - Bromodichloromethane
 - Bromoform
 - Carbon tetrachloride
 - Chlorobenzene
 - Chloroform
 - Dibromochloromethane
 - Isopropylbenzene (Cumene)
 - Naphthalene
 - Styrene
 - Tetrachloroethene
 - Trichloroethene
 - Trichlorofluoromethane
 - cis-1,2-Dichloroethene
 - cis-1,3-Dichloropropene
 - p-Isopropyltoluene
 - sec-Butylbenzene
 - tert-Butylbenzene
 - trans-1,2-Dichloroethene
 - trans-1,3-Dichloropropene

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Method: EPA 8260D

Description: 8260/5035A SC Volatile Org

Client: Duke Energy

Date: March 18, 2020

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Method: EPA 9060A

Description: Total Organic Carbon

Client: Duke Energy

Date: March 18, 2020

General Information:

3 samples were analyzed for EPA 9060A. 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.

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:

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

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13_SE_20200301 (0-0.5) **Lab ID:** 92467731001 **Collected:** 03/02/20 12:15 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	470	121	1	03/05/20 11:38	03/06/20 18:37	83-32-9	
Acenaphthylene	287J	ug/kg	470	111	1	03/05/20 11:38	03/06/20 18:37	208-96-8	
Aniline	ND	ug/kg	470	106	1	03/05/20 11:38	03/06/20 18:37	62-53-3	
Anthracene	490	ug/kg	470	122	1	03/05/20 11:38	03/06/20 18:37	120-12-7	
Benzo(a)anthracene	1720	ug/kg	470	150	1	03/05/20 11:38	03/06/20 18:37	56-55-3	
Benzo(a)pyrene	1680	ug/kg	470	204	1	03/05/20 11:38	03/06/20 18:37	50-32-8	
Benzo(b)fluoranthene	1870	ug/kg	470	189	1	03/05/20 11:38	03/06/20 18:37	205-99-2	
Benzo(g,h,i)perylene	1030	ug/kg	470	184	1	03/05/20 11:38	03/06/20 18:37	191-24-2	
Benzo(k)fluoranthene	748	ug/kg	470	198	1	03/05/20 11:38	03/06/20 18:37	207-08-9	
Benzoic Acid	ND	ug/kg	2350	507	1	03/05/20 11:38	03/06/20 18:37	65-85-0	
Benzyl alcohol	ND	ug/kg	940	249	1	03/05/20 11:38	03/06/20 18:37	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	470	123	1	03/05/20 11:38	03/06/20 18:37	101-55-3	
Butylbenzylphthalate	ND	ug/kg	470	125	1	03/05/20 11:38	03/06/20 18:37	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	940	286	1	03/05/20 11:38	03/06/20 18:37	59-50-7	
4-Chloroaniline	ND	ug/kg	940	288	1	03/05/20 11:38	03/06/20 18:37	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	470	125	1	03/05/20 11:38	03/06/20 18:37	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	470	99.8	1	03/05/20 11:38	03/06/20 18:37	111-44-4	
2-Chloronaphthalene	ND	ug/kg	470	105	1	03/05/20 11:38	03/06/20 18:37	91-58-7	
2-Chlorophenol	ND	ug/kg	470	109	1	03/05/20 11:38	03/06/20 18:37	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	470	122	1	03/05/20 11:38	03/06/20 18:37	7005-72-3	
Chrysene	1530	ug/kg	470	136	1	03/05/20 11:38	03/06/20 18:37	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	470	188	1	03/05/20 11:38	03/06/20 18:37	53-70-3	
Dibenzofuran	ND	ug/kg	470	117	1	03/05/20 11:38	03/06/20 18:37	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	470	102	1	03/05/20 11:38	03/06/20 18:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	470	106	1	03/05/20 11:38	03/06/20 18:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	470	103	1	03/05/20 11:38	03/06/20 18:37	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	940	327	1	03/05/20 11:38	03/06/20 18:37	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	470	155	1	03/05/20 11:38	03/06/20 18:37	120-83-2	
Diethylphthalate	ND	ug/kg	470	102	1	03/05/20 11:38	03/06/20 18:37	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	470	117	1	03/05/20 11:38	03/06/20 18:37	105-67-9	
Dimethylphthalate	ND	ug/kg	470	106	1	03/05/20 11:38	03/06/20 18:37	131-11-3	
Di-n-butylphthalate	ND	ug/kg	470	116	1	03/05/20 11:38	03/06/20 18:37	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	940	758	1	03/05/20 11:38	03/06/20 18:37	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2350	1500	1	03/05/20 11:38	03/06/20 18:37	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	470	124	1	03/05/20 11:38	03/06/20 18:37	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	470	123	1	03/05/20 11:38	03/06/20 18:37	606-20-2	
Di-n-octylphthalate	ND	ug/kg	470	268	1	03/05/20 11:38	03/06/20 18:37	117-84-0	v1
bis(2-Ethylhexyl)phthalate	ND	ug/kg	470	154	1	03/05/20 11:38	03/06/20 18:37	117-81-7	
Fluoranthene	3010	ug/kg	470	142	1	03/05/20 11:38	03/06/20 18:37	206-44-0	
Fluorene	ND	ug/kg	470	126	1	03/05/20 11:38	03/06/20 18:37	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	470	114	1	03/05/20 11:38	03/06/20 18:37	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	470	119	1	03/05/20 11:38	03/06/20 18:37	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	470	188	1	03/05/20 11:38	03/06/20 18:37	77-47-4	
Hexachloroethane	ND	ug/kg	470	107	1	03/05/20 11:38	03/06/20 18:37	67-72-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13_SE_20200301 (0-0.5) **Lab ID:** 92467731001 **Collected:** 03/02/20 12:15 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	876	ug/kg	470	215	1	03/05/20 11:38	03/06/20 18:37	193-39-5	
Isophorone	ND	ug/kg	470	102	1	03/05/20 11:38	03/06/20 18:37	78-59-1	
1-Methylnaphthalene	ND	ug/kg	470	125	1	03/05/20 11:38	03/06/20 18:37	90-12-0	
2-Methylnaphthalene	ND	ug/kg	470	120	1	03/05/20 11:38	03/06/20 18:37	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	470	104	1	03/05/20 11:38	03/06/20 18:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	470	118	1	03/05/20 11:38	03/06/20 18:37	15831-10-4	
Naphthalene	192J	ug/kg	470	112	1	03/05/20 11:38	03/06/20 18:37	91-20-3	
2-Nitroaniline	ND	ug/kg	2350	236	1	03/05/20 11:38	03/06/20 18:37	88-74-4	
3-Nitroaniline	ND	ug/kg	2350	249	1	03/05/20 11:38	03/06/20 18:37	99-09-2	
4-Nitroaniline	ND	ug/kg	940	232	1	03/05/20 11:38	03/06/20 18:37	100-01-6	
Nitrobenzene	ND	ug/kg	470	112	1	03/05/20 11:38	03/06/20 18:37	98-95-3	
2-Nitrophenol	ND	ug/kg	470	145	1	03/05/20 11:38	03/06/20 18:37	88-75-5	
4-Nitrophenol	ND	ug/kg	2350	749	1	03/05/20 11:38	03/06/20 18:37	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	470	132	1	03/05/20 11:38	03/06/20 18:37	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	470	132	1	03/05/20 11:38	03/06/20 18:37	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	470	120	1	03/05/20 11:38	03/06/20 18:37	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	470	131	1	03/05/20 11:38	03/06/20 18:37	108-60-1	
Pentachlorophenol	ND	ug/kg	940	215	1	03/05/20 11:38	03/06/20 18:37	87-86-5	
Phenanthrene	1280	ug/kg	470	118	1	03/05/20 11:38	03/06/20 18:37	85-01-8	
Phenol	ND	ug/kg	470	112	1	03/05/20 11:38	03/06/20 18:37	108-95-2	
Pyrene	2860	ug/kg	470	129	1	03/05/20 11:38	03/06/20 18:37	129-00-0	
Pyridine	ND	ug/kg	470	119	1	03/05/20 11:38	03/06/20 18:37	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	470	108	1	03/05/20 11:38	03/06/20 18:37	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	470	122	1	03/05/20 11:38	03/06/20 18:37	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	470	118	1	03/05/20 11:38	03/06/20 18:37	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	68	%	23-110		1	03/05/20 11:38	03/06/20 18:37	4165-60-0	
2-Fluorobiphenyl (S)	49	%	30-110		1	03/05/20 11:38	03/06/20 18:37	321-60-8	
Terphenyl-d14 (S)	34	%	28-110		1	03/05/20 11:38	03/06/20 18:37	1718-51-0	
Phenol-d6 (S)	54	%	22-110		1	03/05/20 11:38	03/06/20 18:37	13127-88-3	
2-Fluorophenol (S)	59	%	13-110		1	03/05/20 11:38	03/06/20 18:37	367-12-4	
2,4,6-Tribromophenol (S)	73	%	27-110		1	03/05/20 11:38	03/06/20 18:37	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	68.3J	ug/kg	242	22.9	1	03/06/20 09:59	03/06/20 12:16	67-64-1	
Benzene	ND	ug/kg	12.1	2.2	1	03/06/20 09:59	03/06/20 12:16	71-43-2	
Bromobenzene	ND	ug/kg	12.1	3.3	1	03/06/20 09:59	03/06/20 12:16	108-86-1	
Bromochloromethane	ND	ug/kg	12.1	3.0	1	03/06/20 09:59	03/06/20 12:16	74-97-5	
Bromodichloromethane	ND	ug/kg	12.1	2.4	1	03/06/20 09:59	03/06/20 12:16	75-27-4	
Bromoform	ND	ug/kg	12.1	5.9	1	03/06/20 09:59	03/06/20 12:16	75-25-2	
Bromomethane	ND	ug/kg	24.2	5.7	1	03/06/20 09:59	03/06/20 12:16	74-83-9	IH
2-Butanone (MEK)	ND	ug/kg	242	28.8	1	03/06/20 09:59	03/06/20 12:16	78-93-3	
n-Butylbenzene	ND	ug/kg	12.1	6.8	1	03/06/20 09:59	03/06/20 12:16	104-51-8	
sec-Butylbenzene	ND	ug/kg	12.1	5.1	1	03/06/20 09:59	03/06/20 12:16	135-98-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13_SE_20200301 (0-0.5) **Lab ID:** 92467731001 **Collected:** 03/02/20 12:15 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	12.1	4.1	1	03/06/20 09:59	03/06/20 12:16	98-06-6	
Carbon tetrachloride	ND	ug/kg	12.1	2.3	1	03/06/20 09:59	03/06/20 12:16	56-23-5	
Chlorobenzene	ND	ug/kg	12.1	2.3	1	03/06/20 09:59	03/06/20 12:16	108-90-7	
Chloroethane	ND	ug/kg	24.2	5.1	1	03/06/20 09:59	03/06/20 12:16	75-00-3	
Chloroform	ND	ug/kg	12.1	2.6	1	03/06/20 09:59	03/06/20 12:16	67-66-3	
Chloromethane	ND	ug/kg	24.2	7.9	1	03/06/20 09:59	03/06/20 12:16	74-87-3	
2-Chlorotoluene	ND	ug/kg	12.1	3.7	1	03/06/20 09:59	03/06/20 12:16	95-49-8	
4-Chlorotoluene	ND	ug/kg	12.1	3.6	1	03/06/20 09:59	03/06/20 12:16	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	12.1	6.1	1	03/06/20 09:59	03/06/20 12:16	96-12-8	
Dibromochloromethane	ND	ug/kg	12.1	6.1	1	03/06/20 09:59	03/06/20 12:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	12.1	2.7	1	03/06/20 09:59	03/06/20 12:16	106-93-4	
Dibromomethane	ND	ug/kg	12.1	3.6	1	03/06/20 09:59	03/06/20 12:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	12.1	4.3	1	03/06/20 09:59	03/06/20 12:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	12.1	4.3	1	03/06/20 09:59	03/06/20 12:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	12.1	4.2	1	03/06/20 09:59	03/06/20 12:16	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	24.2	10	1	03/06/20 09:59	03/06/20 12:16	75-71-8	
1,1-Dichloroethane	ND	ug/kg	12.1	1.8	1	03/06/20 09:59	03/06/20 12:16	75-34-3	
1,2-Dichloroethane	ND	ug/kg	12.1	2.4	1	03/06/20 09:59	03/06/20 12:16	107-06-2	
1,1-Dichloroethene	ND	ug/kg	12.1	2.8	1	03/06/20 09:59	03/06/20 12:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	12.1	2.1	1	03/06/20 09:59	03/06/20 12:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	12.1	2.4	1	03/06/20 09:59	03/06/20 12:16	156-60-5	
1,2-Dichloropropane	ND	ug/kg	12.1	4.6	1	03/06/20 09:59	03/06/20 12:16	78-87-5	
1,3-Dichloropropane	ND	ug/kg	12.1	4.6	1	03/06/20 09:59	03/06/20 12:16	142-28-9	
2,2-Dichloropropane	ND	ug/kg	12.1	1.2	1	03/06/20 09:59	03/06/20 12:16	594-20-7	
1,1-Dichloropropene	ND	ug/kg	12.1	5.1	1	03/06/20 09:59	03/06/20 12:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	12.1	5.5	1	03/06/20 09:59	03/06/20 12:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	12.1	2.1	1	03/06/20 09:59	03/06/20 12:16	10061-02-6	
Diisopropyl ether	ND	ug/kg	12.1	6.9	1	03/06/20 09:59	03/06/20 12:16	108-20-3	
Ethylbenzene	ND	ug/kg	12.1	2.6	1	03/06/20 09:59	03/06/20 12:16	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	12.1	6.0	1	03/06/20 09:59	03/06/20 12:16	87-68-3	
2-Hexanone	ND	ug/kg	121	12.5	1	03/06/20 09:59	03/06/20 12:16	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	12.1	3.5	1	03/06/20 09:59	03/06/20 12:16	98-82-8	
p-Isopropyltoluene	ND	ug/kg	12.1	5.8	1	03/06/20 09:59	03/06/20 12:16	99-87-6	
Methylene Chloride	ND	ug/kg	48.4	14.3	1	03/06/20 09:59	03/06/20 12:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	121	9.0	1	03/06/20 09:59	03/06/20 12:16	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	12.1	6.9	1	03/06/20 09:59	03/06/20 12:16	1634-04-4	
Naphthalene	ND	ug/kg	12.1	10.3	1	03/06/20 09:59	03/06/20 12:16	91-20-3	
n-Propylbenzene	ND	ug/kg	12.1	4.0	1	03/06/20 09:59	03/06/20 12:16	103-65-1	
Styrene	ND	ug/kg	12.1	3.6	1	03/06/20 09:59	03/06/20 12:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	12.1	3.0	1	03/06/20 09:59	03/06/20 12:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	12.1	4.2	1	03/06/20 09:59	03/06/20 12:16	79-34-5	
Tetrachloroethene	ND	ug/kg	12.1	3.8	1	03/06/20 09:59	03/06/20 12:16	127-18-4	
Toluene	ND	ug/kg	12.1	3.9	1	03/06/20 09:59	03/06/20 12:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	12.1	8.6	1	03/06/20 09:59	03/06/20 12:16	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: **SW-13_SE_20200301 (0-0.5)** Lab ID: **92467731001** Collected: 03/02/20 12:15 Received: 03/03/20 14:00 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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	12.1	6.4	1	03/06/20 09:59	03/06/20 12:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	12.1	2.1	1	03/06/20 09:59	03/06/20 12:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	12.1	2.7	1	03/06/20 09:59	03/06/20 12:16	79-00-5	
Trichloroethene	ND	ug/kg	12.1	3.1	1	03/06/20 09:59	03/06/20 12:16	79-01-6	
Trichlorofluoromethane	ND	ug/kg	12.1	2.9	1	03/06/20 09:59	03/06/20 12:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	12.1	4.1	1	03/06/20 09:59	03/06/20 12:16	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	12.1	4.7	1	03/06/20 09:59	03/06/20 12:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	12.1	4.0	1	03/06/20 09:59	03/06/20 12:16	108-67-8	
Vinyl acetate	ND	ug/kg	121	39.5	1	03/06/20 09:59	03/06/20 12:16	108-05-4	
Vinyl chloride	ND	ug/kg	24.2	4.6	1	03/06/20 09:59	03/06/20 12:16	75-01-4	
Xylene (Total)	ND	ug/kg	24.2	8.5	1	03/06/20 09:59	03/06/20 12:16	1330-20-7	
m&p-Xylene	ND	ug/kg	24.2	5.7	1	03/06/20 09:59	03/06/20 12:16	179601-23-1	
o-Xylene	ND	ug/kg	12.1	2.8	1	03/06/20 09:59	03/06/20 12:16	95-47-6	
Surrogates									
Toluene-d8 (S)	102	%	70-130		1	03/06/20 09:59	03/06/20 12:16	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		1	03/06/20 09:59	03/06/20 12:16	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-132		1	03/06/20 09:59	03/06/20 12:16	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	30.5	%	0.10	0.10	1		03/04/20 12:47		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13_SE_20200301 (0.5-1.0) **Lab ID:** 92467731002 **Collected:** 03/02/20 12:15 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	482	124	1	03/05/20 11:38	03/06/20 11:50	83-32-9	
Acenaphthylene	142J	ug/kg	482	114	1	03/05/20 11:38	03/06/20 11:50	208-96-8	
Aniline	ND	ug/kg	482	108	1	03/05/20 11:38	03/06/20 11:50	62-53-3	
Anthracene	ND	ug/kg	482	125	1	03/05/20 11:38	03/06/20 11:50	120-12-7	
Benzo(a)anthracene	597	ug/kg	482	153	1	03/05/20 11:38	03/06/20 11:50	56-55-3	
Benzo(a)pyrene	615	ug/kg	482	209	1	03/05/20 11:38	03/06/20 11:50	50-32-8	
Benzo(b)fluoranthene	683	ug/kg	482	194	1	03/05/20 11:38	03/06/20 11:50	205-99-2	
Benzo(g,h,i)perylene	391J	ug/kg	482	188	1	03/05/20 11:38	03/06/20 11:50	191-24-2	
Benzo(k)fluoranthene	279J	ug/kg	482	203	1	03/05/20 11:38	03/06/20 11:50	207-08-9	
Benzoic Acid	ND	ug/kg	2410	519	1	03/05/20 11:38	03/06/20 11:50	65-85-0	
Benzyl alcohol	ND	ug/kg	963	255	1	03/05/20 11:38	03/06/20 11:50	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	482	126	1	03/05/20 11:38	03/06/20 11:50	101-55-3	
Butylbenzylphthalate	ND	ug/kg	482	128	1	03/05/20 11:38	03/06/20 11:50	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	963	293	1	03/05/20 11:38	03/06/20 11:50	59-50-7	
4-Chloroaniline	ND	ug/kg	963	295	1	03/05/20 11:38	03/06/20 11:50	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	482	129	1	03/05/20 11:38	03/06/20 11:50	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	482	102	1	03/05/20 11:38	03/06/20 11:50	111-44-4	
2-Chloronaphthalene	ND	ug/kg	482	107	1	03/05/20 11:38	03/06/20 11:50	91-58-7	
2-Chlorophenol	ND	ug/kg	482	112	1	03/05/20 11:38	03/06/20 11:50	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	482	125	1	03/05/20 11:38	03/06/20 11:50	7005-72-3	
Chrysene	529	ug/kg	482	140	1	03/05/20 11:38	03/06/20 11:50	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	482	193	1	03/05/20 11:38	03/06/20 11:50	53-70-3	
Dibenzofuran	ND	ug/kg	482	120	1	03/05/20 11:38	03/06/20 11:50	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	482	104	1	03/05/20 11:38	03/06/20 11:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	482	108	1	03/05/20 11:38	03/06/20 11:50	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	482	106	1	03/05/20 11:38	03/06/20 11:50	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	963	336	1	03/05/20 11:38	03/06/20 11:50	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	482	159	1	03/05/20 11:38	03/06/20 11:50	120-83-2	
Diethylphthalate	ND	ug/kg	482	104	1	03/05/20 11:38	03/06/20 11:50	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	482	120	1	03/05/20 11:38	03/06/20 11:50	105-67-9	
Dimethylphthalate	ND	ug/kg	482	109	1	03/05/20 11:38	03/06/20 11:50	131-11-3	
Di-n-butylphthalate	ND	ug/kg	482	119	1	03/05/20 11:38	03/06/20 11:50	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	963	776	1	03/05/20 11:38	03/06/20 11:50	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2410	1540	1	03/05/20 11:38	03/06/20 11:50	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	482	128	1	03/05/20 11:38	03/06/20 11:50	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	482	126	1	03/05/20 11:38	03/06/20 11:50	606-20-2	
Di-n-octylphthalate	ND	ug/kg	482	274	1	03/05/20 11:38	03/06/20 11:50	117-84-0	v1
bis(2-Ethylhexyl)phthalate	ND	ug/kg	482	158	1	03/05/20 11:38	03/06/20 11:50	117-81-7	
Fluoranthene	942	ug/kg	482	145	1	03/05/20 11:38	03/06/20 11:50	206-44-0	
Fluorene	ND	ug/kg	482	129	1	03/05/20 11:38	03/06/20 11:50	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	482	117	1	03/05/20 11:38	03/06/20 11:50	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	482	122	1	03/05/20 11:38	03/06/20 11:50	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	482	193	1	03/05/20 11:38	03/06/20 11:50	77-47-4	
Hexachloroethane	ND	ug/kg	482	110	1	03/05/20 11:38	03/06/20 11:50	67-72-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13_SE_20200301 (0.5-1.0) **Lab ID:** 92467731002 **Collected:** 03/02/20 12:15 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	326J	ug/kg	482	220	1	03/05/20 11:38	03/06/20 11:50	193-39-5	
Isophorone	ND	ug/kg	482	105	1	03/05/20 11:38	03/06/20 11:50	78-59-1	
1-Methylnaphthalene	ND	ug/kg	482	128	1	03/05/20 11:38	03/06/20 11:50	90-12-0	
2-Methylnaphthalene	ND	ug/kg	482	123	1	03/05/20 11:38	03/06/20 11:50	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	482	107	1	03/05/20 11:38	03/06/20 11:50	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	482	121	1	03/05/20 11:38	03/06/20 11:50	15831-10-4	
Naphthalene	ND	ug/kg	482	115	1	03/05/20 11:38	03/06/20 11:50	91-20-3	
2-Nitroaniline	ND	ug/kg	2410	242	1	03/05/20 11:38	03/06/20 11:50	88-74-4	
3-Nitroaniline	ND	ug/kg	2410	255	1	03/05/20 11:38	03/06/20 11:50	99-09-2	
4-Nitroaniline	ND	ug/kg	963	238	1	03/05/20 11:38	03/06/20 11:50	100-01-6	
Nitrobenzene	ND	ug/kg	482	115	1	03/05/20 11:38	03/06/20 11:50	98-95-3	
2-Nitrophenol	ND	ug/kg	482	149	1	03/05/20 11:38	03/06/20 11:50	88-75-5	
4-Nitrophenol	ND	ug/kg	2410	768	1	03/05/20 11:38	03/06/20 11:50	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	482	135	1	03/05/20 11:38	03/06/20 11:50	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	482	135	1	03/05/20 11:38	03/06/20 11:50	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	482	123	1	03/05/20 11:38	03/06/20 11:50	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	482	134	1	03/05/20 11:38	03/06/20 11:50	108-60-1	
Pentachlorophenol	ND	ug/kg	963	220	1	03/05/20 11:38	03/06/20 11:50	87-86-5	
Phenanthrene	201J	ug/kg	482	121	1	03/05/20 11:38	03/06/20 11:50	85-01-8	
Phenol	ND	ug/kg	482	115	1	03/05/20 11:38	03/06/20 11:50	108-95-2	
Pyrene	819	ug/kg	482	132	1	03/05/20 11:38	03/06/20 11:50	129-00-0	
Pyridine	ND	ug/kg	482	122	1	03/05/20 11:38	03/06/20 11:50	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	482	110	1	03/05/20 11:38	03/06/20 11:50	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	482	125	1	03/05/20 11:38	03/06/20 11:50	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	482	121	1	03/05/20 11:38	03/06/20 11:50	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	71	%	23-110		1	03/05/20 11:38	03/06/20 11:50	4165-60-0	
2-Fluorobiphenyl (S)	51	%	30-110		1	03/05/20 11:38	03/06/20 11:50	321-60-8	
Terphenyl-d14 (S)	49	%	28-110		1	03/05/20 11:38	03/06/20 11:50	1718-51-0	
Phenol-d6 (S)	51	%	22-110		1	03/05/20 11:38	03/06/20 11:50	13127-88-3	
2-Fluorophenol (S)	51	%	13-110		1	03/05/20 11:38	03/06/20 11:50	367-12-4	
2,4,6-Tribromophenol (S)	60	%	27-110		1	03/05/20 11:38	03/06/20 11:50	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	ND	ug/kg	170	16.1	1	03/06/20 09:59	03/06/20 12:40	67-64-1	
Benzene	ND	ug/kg	8.5	1.5	1	03/06/20 09:59	03/06/20 12:40	71-43-2	
Bromobenzene	ND	ug/kg	8.5	2.3	1	03/06/20 09:59	03/06/20 12:40	108-86-1	
Bromochloromethane	ND	ug/kg	8.5	2.1	1	03/06/20 09:59	03/06/20 12:40	74-97-5	
Bromodichloromethane	ND	ug/kg	8.5	1.7	1	03/06/20 09:59	03/06/20 12:40	75-27-4	
Bromoform	ND	ug/kg	8.5	4.2	1	03/06/20 09:59	03/06/20 12:40	75-25-2	
Bromomethane	ND	ug/kg	17.0	4.0	1	03/06/20 09:59	03/06/20 12:40	74-83-9	IH
2-Butanone (MEK)	ND	ug/kg	170	20.3	1	03/06/20 09:59	03/06/20 12:40	78-93-3	
n-Butylbenzene	ND	ug/kg	8.5	4.8	1	03/06/20 09:59	03/06/20 12:40	104-51-8	
sec-Butylbenzene	ND	ug/kg	8.5	3.6	1	03/06/20 09:59	03/06/20 12:40	135-98-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13_SE_20200301 (0.5-1.0) **Lab ID:** 92467731002 **Collected:** 03/02/20 12:15 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	8.5	2.9	1	03/06/20 09:59	03/06/20 12:40	98-06-6	
Carbon tetrachloride	ND	ug/kg	8.5	1.6	1	03/06/20 09:59	03/06/20 12:40	56-23-5	
Chlorobenzene	ND	ug/kg	8.5	1.6	1	03/06/20 09:59	03/06/20 12:40	108-90-7	
Chloroethane	ND	ug/kg	17.0	3.6	1	03/06/20 09:59	03/06/20 12:40	75-00-3	
Chloroform	ND	ug/kg	8.5	1.8	1	03/06/20 09:59	03/06/20 12:40	67-66-3	
Chloromethane	ND	ug/kg	17.0	5.6	1	03/06/20 09:59	03/06/20 12:40	74-87-3	
2-Chlorotoluene	ND	ug/kg	8.5	2.6	1	03/06/20 09:59	03/06/20 12:40	95-49-8	
4-Chlorotoluene	ND	ug/kg	8.5	2.6	1	03/06/20 09:59	03/06/20 12:40	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	8.5	4.3	1	03/06/20 09:59	03/06/20 12:40	96-12-8	
Dibromochloromethane	ND	ug/kg	8.5	4.3	1	03/06/20 09:59	03/06/20 12:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	8.5	1.9	1	03/06/20 09:59	03/06/20 12:40	106-93-4	
Dibromomethane	ND	ug/kg	8.5	2.5	1	03/06/20 09:59	03/06/20 12:40	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	8.5	3.0	1	03/06/20 09:59	03/06/20 12:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	8.5	3.0	1	03/06/20 09:59	03/06/20 12:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	8.5	2.9	1	03/06/20 09:59	03/06/20 12:40	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	17.0	7.0	1	03/06/20 09:59	03/06/20 12:40	75-71-8	
1,1-Dichloroethane	ND	ug/kg	8.5	1.3	1	03/06/20 09:59	03/06/20 12:40	75-34-3	
1,2-Dichloroethane	ND	ug/kg	8.5	1.7	1	03/06/20 09:59	03/06/20 12:40	107-06-2	
1,1-Dichloroethene	ND	ug/kg	8.5	2.0	1	03/06/20 09:59	03/06/20 12:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	8.5	1.5	1	03/06/20 09:59	03/06/20 12:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	8.5	1.7	1	03/06/20 09:59	03/06/20 12:40	156-60-5	
1,2-Dichloropropane	ND	ug/kg	8.5	3.2	1	03/06/20 09:59	03/06/20 12:40	78-87-5	
1,3-Dichloropropane	ND	ug/kg	8.5	3.2	1	03/06/20 09:59	03/06/20 12:40	142-28-9	
2,2-Dichloropropane	ND	ug/kg	8.5	0.84	1	03/06/20 09:59	03/06/20 12:40	594-20-7	
1,1-Dichloropropene	ND	ug/kg	8.5	3.6	1	03/06/20 09:59	03/06/20 12:40	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	8.5	3.9	1	03/06/20 09:59	03/06/20 12:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	8.5	1.5	1	03/06/20 09:59	03/06/20 12:40	10061-02-6	
Diisopropyl ether	ND	ug/kg	8.5	4.9	1	03/06/20 09:59	03/06/20 12:40	108-20-3	
Ethylbenzene	ND	ug/kg	8.5	1.8	1	03/06/20 09:59	03/06/20 12:40	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	8.5	4.2	1	03/06/20 09:59	03/06/20 12:40	87-68-3	
2-Hexanone	ND	ug/kg	85.2	8.8	1	03/06/20 09:59	03/06/20 12:40	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	8.5	2.5	1	03/06/20 09:59	03/06/20 12:40	98-82-8	
p-Isopropyltoluene	ND	ug/kg	8.5	4.1	1	03/06/20 09:59	03/06/20 12:40	99-87-6	
Methylene Chloride	ND	ug/kg	34.1	10.1	1	03/06/20 09:59	03/06/20 12:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	85.2	6.4	1	03/06/20 09:59	03/06/20 12:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	8.5	4.9	1	03/06/20 09:59	03/06/20 12:40	1634-04-4	
Naphthalene	ND	ug/kg	8.5	7.2	1	03/06/20 09:59	03/06/20 12:40	91-20-3	
n-Propylbenzene	ND	ug/kg	8.5	2.8	1	03/06/20 09:59	03/06/20 12:40	103-65-1	
Styrene	ND	ug/kg	8.5	2.5	1	03/06/20 09:59	03/06/20 12:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	8.5	2.1	1	03/06/20 09:59	03/06/20 12:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	8.5	2.9	1	03/06/20 09:59	03/06/20 12:40	79-34-5	
Tetrachloroethene	ND	ug/kg	8.5	2.7	1	03/06/20 09:59	03/06/20 12:40	127-18-4	
Toluene	ND	ug/kg	8.5	2.8	1	03/06/20 09:59	03/06/20 12:40	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	8.5	6.1	1	03/06/20 09:59	03/06/20 12:40	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13_SE_20200301 (0.5-1.0) **Lab ID:** 92467731002 **Collected:** 03/02/20 12:15 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	8.5	4.5	1	03/06/20 09:59	03/06/20 12:40	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	8.5	1.5	1	03/06/20 09:59	03/06/20 12:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	8.5	1.9	1	03/06/20 09:59	03/06/20 12:40	79-00-5	
Trichloroethene	ND	ug/kg	8.5	2.2	1	03/06/20 09:59	03/06/20 12:40	79-01-6	
Trichlorofluoromethane	ND	ug/kg	8.5	2.0	1	03/06/20 09:59	03/06/20 12:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	8.5	2.9	1	03/06/20 09:59	03/06/20 12:40	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	8.5	3.3	1	03/06/20 09:59	03/06/20 12:40	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	8.5	2.8	1	03/06/20 09:59	03/06/20 12:40	108-67-8	
Vinyl acetate	ND	ug/kg	85.2	27.8	1	03/06/20 09:59	03/06/20 12:40	108-05-4	
Vinyl chloride	ND	ug/kg	17.0	3.2	1	03/06/20 09:59	03/06/20 12:40	75-01-4	
Xylene (Total)	ND	ug/kg	17.0	6.0	1	03/06/20 09:59	03/06/20 12:40	1330-20-7	
m&p-Xylene	ND	ug/kg	17.0	4.0	1	03/06/20 09:59	03/06/20 12:40	179601-23-1	
o-Xylene	ND	ug/kg	8.5	2.0	1	03/06/20 09:59	03/06/20 12:40	95-47-6	
Surrogates									
Toluene-d8 (S)	102	%	70-130		1	03/06/20 09:59	03/06/20 12:40	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1	03/06/20 09:59	03/06/20 12:40	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-132		1	03/06/20 09:59	03/06/20 12:40	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	30.3	%	0.10	0.10	1		03/04/20 12:47		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13_SE_20200301 (1.0-2.0) **Lab ID:** 92467731003 **Collected:** 03/02/20 12:15 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	510	131	1	03/05/20 11:38	03/06/20 13:19	83-32-9	
Acenaphthylene	ND	ug/kg	510	121	1	03/05/20 11:38	03/06/20 13:19	208-96-8	
Aniline	ND	ug/kg	510	114	1	03/05/20 11:38	03/06/20 13:19	62-53-3	
Anthracene	ND	ug/kg	510	132	1	03/05/20 11:38	03/06/20 13:19	120-12-7	
Benzo(a)anthracene	172J	ug/kg	510	162	1	03/05/20 11:38	03/06/20 13:19	56-55-3	
Benzo(a)pyrene	ND	ug/kg	510	221	1	03/05/20 11:38	03/06/20 13:19	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	510	205	1	03/05/20 11:38	03/06/20 13:19	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	510	199	1	03/05/20 11:38	03/06/20 13:19	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	510	215	1	03/05/20 11:38	03/06/20 13:19	207-08-9	
Benzoic Acid	ND	ug/kg	2550	550	1	03/05/20 11:38	03/06/20 13:19	65-85-0	
Benzyl alcohol	ND	ug/kg	1020	270	1	03/05/20 11:38	03/06/20 13:19	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	510	134	1	03/05/20 11:38	03/06/20 13:19	101-55-3	
Butylbenzylphthalate	ND	ug/kg	510	136	1	03/05/20 11:38	03/06/20 13:19	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	1020	311	1	03/05/20 11:38	03/06/20 13:19	59-50-7	
4-Chloroaniline	ND	ug/kg	1020	312	1	03/05/20 11:38	03/06/20 13:19	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	510	136	1	03/05/20 11:38	03/06/20 13:19	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	510	108	1	03/05/20 11:38	03/06/20 13:19	111-44-4	
2-Chloronaphthalene	ND	ug/kg	510	114	1	03/05/20 11:38	03/06/20 13:19	91-58-7	
2-Chlorophenol	ND	ug/kg	510	119	1	03/05/20 11:38	03/06/20 13:19	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	510	132	1	03/05/20 11:38	03/06/20 13:19	7005-72-3	
Chrysene	163J	ug/kg	510	148	1	03/05/20 11:38	03/06/20 13:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	510	204	1	03/05/20 11:38	03/06/20 13:19	53-70-3	
Dibenzofuran	ND	ug/kg	510	127	1	03/05/20 11:38	03/06/20 13:19	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	510	110	1	03/05/20 11:38	03/06/20 13:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	510	115	1	03/05/20 11:38	03/06/20 13:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	510	112	1	03/05/20 11:38	03/06/20 13:19	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1020	355	1	03/05/20 11:38	03/06/20 13:19	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	510	168	1	03/05/20 11:38	03/06/20 13:19	120-83-2	
Diethylphthalate	ND	ug/kg	510	111	1	03/05/20 11:38	03/06/20 13:19	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	510	127	1	03/05/20 11:38	03/06/20 13:19	105-67-9	
Dimethylphthalate	ND	ug/kg	510	115	1	03/05/20 11:38	03/06/20 13:19	131-11-3	
Di-n-butylphthalate	ND	ug/kg	510	126	1	03/05/20 11:38	03/06/20 13:19	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1020	822	1	03/05/20 11:38	03/06/20 13:19	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2550	1630	1	03/05/20 11:38	03/06/20 13:19	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	510	135	1	03/05/20 11:38	03/06/20 13:19	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	510	133	1	03/05/20 11:38	03/06/20 13:19	606-20-2	
Di-n-octylphthalate	ND	ug/kg	510	290	1	03/05/20 11:38	03/06/20 13:19	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	510	167	1	03/05/20 11:38	03/06/20 13:19	117-81-7	
Fluoranthene	301J	ug/kg	510	154	1	03/05/20 11:38	03/06/20 13:19	206-44-0	
Fluorene	ND	ug/kg	510	136	1	03/05/20 11:38	03/06/20 13:19	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	510	124	1	03/05/20 11:38	03/06/20 13:19	87-68-3	
Hexachlorobenzene	ND	ug/kg	510	129	1	03/05/20 11:38	03/06/20 13:19	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	510	204	1	03/05/20 11:38	03/06/20 13:19	77-47-4	
Hexachloroethane	ND	ug/kg	510	116	1	03/05/20 11:38	03/06/20 13:19	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13_SE_20200301 (1.0-2.0) **Lab ID:** 92467731003 **Collected:** 03/02/20 12:15 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	ND	ug/kg	510	233	1	03/05/20 11:38	03/06/20 13:19	193-39-5	
Isophorone	ND	ug/kg	510	111	1	03/05/20 11:38	03/06/20 13:19	78-59-1	
1-Methylnaphthalene	ND	ug/kg	510	136	1	03/05/20 11:38	03/06/20 13:19	90-12-0	
2-Methylnaphthalene	ND	ug/kg	510	130	1	03/05/20 11:38	03/06/20 13:19	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	510	113	1	03/05/20 11:38	03/06/20 13:19	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	510	128	1	03/05/20 11:38	03/06/20 13:19	15831-10-4	
Naphthalene	ND	ug/kg	510	122	1	03/05/20 11:38	03/06/20 13:19	91-20-3	
2-Nitroaniline	ND	ug/kg	2550	256	1	03/05/20 11:38	03/06/20 13:19	88-74-4	
3-Nitroaniline	ND	ug/kg	2550	270	1	03/05/20 11:38	03/06/20 13:19	99-09-2	
4-Nitroaniline	ND	ug/kg	1020	252	1	03/05/20 11:38	03/06/20 13:19	100-01-6	
Nitrobenzene	ND	ug/kg	510	122	1	03/05/20 11:38	03/06/20 13:19	98-95-3	
2-Nitrophenol	ND	ug/kg	510	158	1	03/05/20 11:38	03/06/20 13:19	88-75-5	
4-Nitrophenol	ND	ug/kg	2550	813	1	03/05/20 11:38	03/06/20 13:19	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	510	143	1	03/05/20 11:38	03/06/20 13:19	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	510	143	1	03/05/20 11:38	03/06/20 13:19	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	510	130	1	03/05/20 11:38	03/06/20 13:19	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	510	142	1	03/05/20 11:38	03/06/20 13:19	108-60-1	
Pentachlorophenol	ND	ug/kg	1020	233	1	03/05/20 11:38	03/06/20 13:19	87-86-5	
Phenanthrene	ND	ug/kg	510	128	1	03/05/20 11:38	03/06/20 13:19	85-01-8	
Phenol	ND	ug/kg	510	122	1	03/05/20 11:38	03/06/20 13:19	108-95-2	
Pyrene	269J	ug/kg	510	140	1	03/05/20 11:38	03/06/20 13:19	129-00-0	
Pyridine	ND	ug/kg	510	129	1	03/05/20 11:38	03/06/20 13:19	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	510	117	1	03/05/20 11:38	03/06/20 13:19	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	510	132	1	03/05/20 11:38	03/06/20 13:19	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	510	128	1	03/05/20 11:38	03/06/20 13:19	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	65	%	23-110		1	03/05/20 11:38	03/06/20 13:19	4165-60-0	
2-Fluorobiphenyl (S)	55	%	30-110		1	03/05/20 11:38	03/06/20 13:19	321-60-8	
Terphenyl-d14 (S)	51	%	28-110		1	03/05/20 11:38	03/06/20 13:19	1718-51-0	
Phenol-d6 (S)	54	%	22-110		1	03/05/20 11:38	03/06/20 13:19	13127-88-3	
2-Fluorophenol (S)	61	%	13-110		1	03/05/20 11:38	03/06/20 13:19	367-12-4	
2,4,6-Tribromophenol (S)	72	%	27-110		1	03/05/20 11:38	03/06/20 13:19	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	ND	ug/kg	163	15.4	1	03/06/20 09:59	03/06/20 13:04	67-64-1	
Benzene	ND	ug/kg	8.2	1.5	1	03/06/20 09:59	03/06/20 13:04	71-43-2	
Bromobenzene	ND	ug/kg	8.2	2.2	1	03/06/20 09:59	03/06/20 13:04	108-86-1	
Bromochloromethane	ND	ug/kg	8.2	2.0	1	03/06/20 09:59	03/06/20 13:04	74-97-5	
Bromodichloromethane	ND	ug/kg	8.2	1.6	1	03/06/20 09:59	03/06/20 13:04	75-27-4	
Bromoform	ND	ug/kg	8.2	4.0	1	03/06/20 09:59	03/06/20 13:04	75-25-2	
Bromomethane	ND	ug/kg	16.3	3.9	1	03/06/20 09:59	03/06/20 13:04	74-83-9	IH
2-Butanone (MEK)	ND	ug/kg	163	19.4	1	03/06/20 09:59	03/06/20 13:04	78-93-3	
n-Butylbenzene	ND	ug/kg	8.2	4.6	1	03/06/20 09:59	03/06/20 13:04	104-51-8	
sec-Butylbenzene	ND	ug/kg	8.2	3.5	1	03/06/20 09:59	03/06/20 13:04	135-98-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: **SW-13_SE_20200301 (1.0-2.0)** Lab ID: **92467731003** Collected: 03/02/20 12:15 Received: 03/03/20 14:00 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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	8.2	2.8	1	03/06/20 09:59	03/06/20 13:04	98-06-6	
Carbon tetrachloride	ND	ug/kg	8.2	1.6	1	03/06/20 09:59	03/06/20 13:04	56-23-5	
Chlorobenzene	ND	ug/kg	8.2	1.6	1	03/06/20 09:59	03/06/20 13:04	108-90-7	
Chloroethane	ND	ug/kg	16.3	3.4	1	03/06/20 09:59	03/06/20 13:04	75-00-3	
Chloroform	ND	ug/kg	8.2	1.7	1	03/06/20 09:59	03/06/20 13:04	67-66-3	
Chloromethane	ND	ug/kg	16.3	5.4	1	03/06/20 09:59	03/06/20 13:04	74-87-3	
2-Chlorotoluene	ND	ug/kg	8.2	2.5	1	03/06/20 09:59	03/06/20 13:04	95-49-8	
4-Chlorotoluene	ND	ug/kg	8.2	2.5	1	03/06/20 09:59	03/06/20 13:04	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	8.2	4.2	1	03/06/20 09:59	03/06/20 13:04	96-12-8	
Dibromochloromethane	ND	ug/kg	8.2	4.1	1	03/06/20 09:59	03/06/20 13:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	8.2	1.8	1	03/06/20 09:59	03/06/20 13:04	106-93-4	
Dibromomethane	ND	ug/kg	8.2	2.4	1	03/06/20 09:59	03/06/20 13:04	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	8.2	2.9	1	03/06/20 09:59	03/06/20 13:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	8.2	2.9	1	03/06/20 09:59	03/06/20 13:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	8.2	2.8	1	03/06/20 09:59	03/06/20 13:04	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	16.3	6.7	1	03/06/20 09:59	03/06/20 13:04	75-71-8	
1,1-Dichloroethane	ND	ug/kg	8.2	1.2	1	03/06/20 09:59	03/06/20 13:04	75-34-3	
1,2-Dichloroethane	ND	ug/kg	8.2	1.6	1	03/06/20 09:59	03/06/20 13:04	107-06-2	
1,1-Dichloroethene	ND	ug/kg	8.2	1.9	1	03/06/20 09:59	03/06/20 13:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	8.2	1.4	1	03/06/20 09:59	03/06/20 13:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	8.2	1.6	1	03/06/20 09:59	03/06/20 13:04	156-60-5	
1,2-Dichloropropane	ND	ug/kg	8.2	3.1	1	03/06/20 09:59	03/06/20 13:04	78-87-5	
1,3-Dichloropropane	ND	ug/kg	8.2	3.1	1	03/06/20 09:59	03/06/20 13:04	142-28-9	
2,2-Dichloropropane	ND	ug/kg	8.2	0.81	1	03/06/20 09:59	03/06/20 13:04	594-20-7	
1,1-Dichloropropene	ND	ug/kg	8.2	3.5	1	03/06/20 09:59	03/06/20 13:04	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	8.2	3.7	1	03/06/20 09:59	03/06/20 13:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	8.2	1.4	1	03/06/20 09:59	03/06/20 13:04	10061-02-6	
Diisopropyl ether	ND	ug/kg	8.2	4.7	1	03/06/20 09:59	03/06/20 13:04	108-20-3	
Ethylbenzene	ND	ug/kg	8.2	1.7	1	03/06/20 09:59	03/06/20 13:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	8.2	4.0	1	03/06/20 09:59	03/06/20 13:04	87-68-3	
2-Hexanone	ND	ug/kg	81.7	8.5	1	03/06/20 09:59	03/06/20 13:04	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	8.2	2.4	1	03/06/20 09:59	03/06/20 13:04	98-82-8	
p-Isopropyltoluene	ND	ug/kg	8.2	3.9	1	03/06/20 09:59	03/06/20 13:04	99-87-6	
Methylene Chloride	ND	ug/kg	32.7	9.7	1	03/06/20 09:59	03/06/20 13:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	81.7	6.1	1	03/06/20 09:59	03/06/20 13:04	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	8.2	4.7	1	03/06/20 09:59	03/06/20 13:04	1634-04-4	
Naphthalene	ND	ug/kg	8.2	6.9	1	03/06/20 09:59	03/06/20 13:04	91-20-3	
n-Propylbenzene	ND	ug/kg	8.2	2.7	1	03/06/20 09:59	03/06/20 13:04	103-65-1	
Styrene	ND	ug/kg	8.2	2.4	1	03/06/20 09:59	03/06/20 13:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	8.2	2.0	1	03/06/20 09:59	03/06/20 13:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	8.2	2.8	1	03/06/20 09:59	03/06/20 13:04	79-34-5	
Tetrachloroethene	ND	ug/kg	8.2	2.6	1	03/06/20 09:59	03/06/20 13:04	127-18-4	
Toluene	ND	ug/kg	8.2	2.6	1	03/06/20 09:59	03/06/20 13:04	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	8.2	5.8	1	03/06/20 09:59	03/06/20 13:04	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13_SE_20200301 (1.0-2.0) **Lab ID:** 92467731003 **Collected:** 03/02/20 12:15 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	8.2	4.3	1	03/06/20 09:59	03/06/20 13:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	8.2	1.4	1	03/06/20 09:59	03/06/20 13:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	8.2	1.8	1	03/06/20 09:59	03/06/20 13:04	79-00-5	
Trichloroethene	ND	ug/kg	8.2	2.1	1	03/06/20 09:59	03/06/20 13:04	79-01-6	
Trichlorofluoromethane	ND	ug/kg	8.2	1.9	1	03/06/20 09:59	03/06/20 13:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	8.2	2.8	1	03/06/20 09:59	03/06/20 13:04	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	8.2	3.2	1	03/06/20 09:59	03/06/20 13:04	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	8.2	2.7	1	03/06/20 09:59	03/06/20 13:04	108-67-8	
Vinyl acetate	ND	ug/kg	81.7	26.6	1	03/06/20 09:59	03/06/20 13:04	108-05-4	
Vinyl chloride	ND	ug/kg	16.3	3.1	1	03/06/20 09:59	03/06/20 13:04	75-01-4	
Xylene (Total)	ND	ug/kg	16.3	5.7	1	03/06/20 09:59	03/06/20 13:04	1330-20-7	
m&p-Xylene	ND	ug/kg	16.3	3.9	1	03/06/20 09:59	03/06/20 13:04	179601-23-1	
o-Xylene	ND	ug/kg	8.2	1.9	1	03/06/20 09:59	03/06/20 13:04	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	70-130		1	03/06/20 09:59	03/06/20 13:04	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		1	03/06/20 09:59	03/06/20 13:04	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-132		1	03/06/20 09:59	03/06/20 13:04	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	34.6	%	0.10	0.10	1		03/04/20 12:47		

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (0-0.5) **Lab ID:** 92467731004 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	514	132	1	03/05/20 11:38	03/06/20 13:50	83-32-9	
Acenaphthylene	ND	ug/kg	514	122	1	03/05/20 11:38	03/06/20 13:50	208-96-8	
Aniline	ND	ug/kg	514	115	1	03/05/20 11:38	03/06/20 13:50	62-53-3	
Anthracene	ND	ug/kg	514	133	1	03/05/20 11:38	03/06/20 13:50	120-12-7	
Benzo(a)anthracene	ND	ug/kg	514	163	1	03/05/20 11:38	03/06/20 13:50	56-55-3	
Benzo(a)pyrene	ND	ug/kg	514	223	1	03/05/20 11:38	03/06/20 13:50	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	514	207	1	03/05/20 11:38	03/06/20 13:50	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	514	201	1	03/05/20 11:38	03/06/20 13:50	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	514	216	1	03/05/20 11:38	03/06/20 13:50	207-08-9	
Benzoic Acid	ND	ug/kg	2570	554	1	03/05/20 11:38	03/06/20 13:50	65-85-0	
Benzyl alcohol	ND	ug/kg	1030	272	1	03/05/20 11:38	03/06/20 13:50	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	514	135	1	03/05/20 11:38	03/06/20 13:50	101-55-3	
Butylbenzylphthalate	ND	ug/kg	514	137	1	03/05/20 11:38	03/06/20 13:50	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	1030	313	1	03/05/20 11:38	03/06/20 13:50	59-50-7	
4-Chloroaniline	ND	ug/kg	1030	314	1	03/05/20 11:38	03/06/20 13:50	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	514	137	1	03/05/20 11:38	03/06/20 13:50	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	514	109	1	03/05/20 11:38	03/06/20 13:50	111-44-4	
2-Chloronaphthalene	ND	ug/kg	514	114	1	03/05/20 11:38	03/06/20 13:50	91-58-7	
2-Chlorophenol	ND	ug/kg	514	120	1	03/05/20 11:38	03/06/20 13:50	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	514	133	1	03/05/20 11:38	03/06/20 13:50	7005-72-3	
Chrysene	ND	ug/kg	514	149	1	03/05/20 11:38	03/06/20 13:50	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	514	205	1	03/05/20 11:38	03/06/20 13:50	53-70-3	
Dibenzofuran	ND	ug/kg	514	128	1	03/05/20 11:38	03/06/20 13:50	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	514	111	1	03/05/20 11:38	03/06/20 13:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	514	116	1	03/05/20 11:38	03/06/20 13:50	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	514	113	1	03/05/20 11:38	03/06/20 13:50	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1030	358	1	03/05/20 11:38	03/06/20 13:50	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	514	170	1	03/05/20 11:38	03/06/20 13:50	120-83-2	
Diethylphthalate	ND	ug/kg	514	111	1	03/05/20 11:38	03/06/20 13:50	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	514	128	1	03/05/20 11:38	03/06/20 13:50	105-67-9	
Dimethylphthalate	ND	ug/kg	514	116	1	03/05/20 11:38	03/06/20 13:50	131-11-3	
Di-n-butylphthalate	ND	ug/kg	514	127	1	03/05/20 11:38	03/06/20 13:50	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1030	828	1	03/05/20 11:38	03/06/20 13:50	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2570	1640	1	03/05/20 11:38	03/06/20 13:50	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	514	136	1	03/05/20 11:38	03/06/20 13:50	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	514	134	1	03/05/20 11:38	03/06/20 13:50	606-20-2	
Di-n-octylphthalate	ND	ug/kg	514	293	1	03/05/20 11:38	03/06/20 13:50	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	514	168	1	03/05/20 11:38	03/06/20 13:50	117-81-7	
Fluoranthene	182J	ug/kg	514	155	1	03/05/20 11:38	03/06/20 13:50	206-44-0	
Fluorene	ND	ug/kg	514	137	1	03/05/20 11:38	03/06/20 13:50	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	514	125	1	03/05/20 11:38	03/06/20 13:50	87-68-3	
Hexachlorobenzene	ND	ug/kg	514	130	1	03/05/20 11:38	03/06/20 13:50	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	514	205	1	03/05/20 11:38	03/06/20 13:50	77-47-4	
Hexachloroethane	ND	ug/kg	514	117	1	03/05/20 11:38	03/06/20 13:50	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (0-0.5) **Lab ID:** 92467731004 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	ND	ug/kg	514	235	1	03/05/20 11:38	03/06/20 13:50	193-39-5	
Isophorone	ND	ug/kg	514	112	1	03/05/20 11:38	03/06/20 13:50	78-59-1	
1-Methylnaphthalene	ND	ug/kg	514	137	1	03/05/20 11:38	03/06/20 13:50	90-12-0	
2-Methylnaphthalene	ND	ug/kg	514	131	1	03/05/20 11:38	03/06/20 13:50	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	514	114	1	03/05/20 11:38	03/06/20 13:50	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	514	129	1	03/05/20 11:38	03/06/20 13:50	15831-10-4	
Naphthalene	ND	ug/kg	514	123	1	03/05/20 11:38	03/06/20 13:50	91-20-3	
2-Nitroaniline	ND	ug/kg	2570	258	1	03/05/20 11:38	03/06/20 13:50	88-74-4	
3-Nitroaniline	ND	ug/kg	2570	272	1	03/05/20 11:38	03/06/20 13:50	99-09-2	
4-Nitroaniline	ND	ug/kg	1030	254	1	03/05/20 11:38	03/06/20 13:50	100-01-6	
Nitrobenzene	ND	ug/kg	514	123	1	03/05/20 11:38	03/06/20 13:50	98-95-3	
2-Nitrophenol	ND	ug/kg	514	159	1	03/05/20 11:38	03/06/20 13:50	88-75-5	
4-Nitrophenol	ND	ug/kg	2570	819	1	03/05/20 11:38	03/06/20 13:50	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	514	144	1	03/05/20 11:38	03/06/20 13:50	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	514	144	1	03/05/20 11:38	03/06/20 13:50	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	514	131	1	03/05/20 11:38	03/06/20 13:50	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	514	143	1	03/05/20 11:38	03/06/20 13:50	108-60-1	
Pentachlorophenol	ND	ug/kg	1030	235	1	03/05/20 11:38	03/06/20 13:50	87-86-5	
Phenanthrene	ND	ug/kg	514	129	1	03/05/20 11:38	03/06/20 13:50	85-01-8	
Phenol	ND	ug/kg	514	123	1	03/05/20 11:38	03/06/20 13:50	108-95-2	
Pyrene	192J	ug/kg	514	141	1	03/05/20 11:38	03/06/20 13:50	129-00-0	
Pyridine	ND	ug/kg	514	130	1	03/05/20 11:38	03/06/20 13:50	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	514	118	1	03/05/20 11:38	03/06/20 13:50	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	514	133	1	03/05/20 11:38	03/06/20 13:50	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	514	129	1	03/05/20 11:38	03/06/20 13:50	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	64	%	23-110		1	03/05/20 11:38	03/06/20 13:50	4165-60-0	
2-Fluorobiphenyl (S)	52	%	30-110		1	03/05/20 11:38	03/06/20 13:50	321-60-8	
Terphenyl-d14 (S)	38	%	28-110		1	03/05/20 11:38	03/06/20 13:50	1718-51-0	
Phenol-d6 (S)	50	%	22-110		1	03/05/20 11:38	03/06/20 13:50	13127-88-3	
2-Fluorophenol (S)	51	%	13-110		1	03/05/20 11:38	03/06/20 13:50	367-12-4	
2,4,6-Tribromophenol (S)	63	%	27-110		1	03/05/20 11:38	03/06/20 13:50	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	ND	ug/kg	197	18.6	1	03/06/20 09:59	03/06/20 13:28	67-64-1	
Benzene	ND	ug/kg	9.9	1.8	1	03/06/20 09:59	03/06/20 13:28	71-43-2	
Bromobenzene	ND	ug/kg	9.9	2.7	1	03/06/20 09:59	03/06/20 13:28	108-86-1	
Bromochloromethane	ND	ug/kg	9.9	2.4	1	03/06/20 09:59	03/06/20 13:28	74-97-5	
Bromodichloromethane	ND	ug/kg	9.9	1.9	1	03/06/20 09:59	03/06/20 13:28	75-27-4	
Bromoform	ND	ug/kg	9.9	4.8	1	03/06/20 09:59	03/06/20 13:28	75-25-2	
Bromomethane	ND	ug/kg	19.7	4.7	1	03/06/20 09:59	03/06/20 13:28	74-83-9	IH
2-Butanone (MEK)	ND	ug/kg	197	23.5	1	03/06/20 09:59	03/06/20 13:28	78-93-3	
n-Butylbenzene	ND	ug/kg	9.9	5.6	1	03/06/20 09:59	03/06/20 13:28	104-51-8	
sec-Butylbenzene	ND	ug/kg	9.9	4.2	1	03/06/20 09:59	03/06/20 13:28	135-98-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (0-0.5) Lab ID: 92467731004 Collected: 03/02/20 11:50 Received: 03/03/20 14:00 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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	9.9	3.3	1	03/06/20 09:59	03/06/20 13:28	98-06-6	
Carbon tetrachloride	ND	ug/kg	9.9	1.9	1	03/06/20 09:59	03/06/20 13:28	56-23-5	
Chlorobenzene	ND	ug/kg	9.9	1.9	1	03/06/20 09:59	03/06/20 13:28	108-90-7	
Chloroethane	ND	ug/kg	19.7	4.1	1	03/06/20 09:59	03/06/20 13:28	75-00-3	
Chloroform	ND	ug/kg	9.9	2.1	1	03/06/20 09:59	03/06/20 13:28	67-66-3	
Chloromethane	ND	ug/kg	19.7	6.5	1	03/06/20 09:59	03/06/20 13:28	74-87-3	
2-Chlorotoluene	ND	ug/kg	9.9	3.0	1	03/06/20 09:59	03/06/20 13:28	95-49-8	
4-Chlorotoluene	ND	ug/kg	9.9	3.0	1	03/06/20 09:59	03/06/20 13:28	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	9.9	5.0	1	03/06/20 09:59	03/06/20 13:28	96-12-8	
Dibromochloromethane	ND	ug/kg	9.9	4.9	1	03/06/20 09:59	03/06/20 13:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	9.9	2.2	1	03/06/20 09:59	03/06/20 13:28	106-93-4	
Dibromomethane	ND	ug/kg	9.9	2.9	1	03/06/20 09:59	03/06/20 13:28	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	9.9	3.5	1	03/06/20 09:59	03/06/20 13:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	9.9	3.5	1	03/06/20 09:59	03/06/20 13:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	9.9	3.4	1	03/06/20 09:59	03/06/20 13:28	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	19.7	8.1	1	03/06/20 09:59	03/06/20 13:28	75-71-8	
1,1-Dichloroethane	ND	ug/kg	9.9	1.5	1	03/06/20 09:59	03/06/20 13:28	75-34-3	
1,2-Dichloroethane	ND	ug/kg	9.9	2.0	1	03/06/20 09:59	03/06/20 13:28	107-06-2	
1,1-Dichloroethene	ND	ug/kg	9.9	2.3	1	03/06/20 09:59	03/06/20 13:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	9.9	1.7	1	03/06/20 09:59	03/06/20 13:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	9.9	1.9	1	03/06/20 09:59	03/06/20 13:28	156-60-5	
1,2-Dichloropropane	ND	ug/kg	9.9	3.7	1	03/06/20 09:59	03/06/20 13:28	78-87-5	
1,3-Dichloropropane	ND	ug/kg	9.9	3.7	1	03/06/20 09:59	03/06/20 13:28	142-28-9	
2,2-Dichloropropane	ND	ug/kg	9.9	0.98	1	03/06/20 09:59	03/06/20 13:28	594-20-7	
1,1-Dichloropropene	ND	ug/kg	9.9	4.2	1	03/06/20 09:59	03/06/20 13:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	9.9	4.5	1	03/06/20 09:59	03/06/20 13:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	9.9	1.7	1	03/06/20 09:59	03/06/20 13:28	10061-02-6	
Diisopropyl ether	ND	ug/kg	9.9	5.6	1	03/06/20 09:59	03/06/20 13:28	108-20-3	
Ethylbenzene	ND	ug/kg	9.9	2.1	1	03/06/20 09:59	03/06/20 13:28	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	9.9	4.9	1	03/06/20 09:59	03/06/20 13:28	87-68-3	
2-Hexanone	ND	ug/kg	98.7	10.2	1	03/06/20 09:59	03/06/20 13:28	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	9.9	2.9	1	03/06/20 09:59	03/06/20 13:28	98-82-8	
p-Isopropyltoluene	ND	ug/kg	9.9	4.8	1	03/06/20 09:59	03/06/20 13:28	99-87-6	
Methylene Chloride	ND	ug/kg	39.5	11.7	1	03/06/20 09:59	03/06/20 13:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	98.7	7.4	1	03/06/20 09:59	03/06/20 13:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	9.9	5.6	1	03/06/20 09:59	03/06/20 13:28	1634-04-4	
Naphthalene	ND	ug/kg	9.9	8.4	1	03/06/20 09:59	03/06/20 13:28	91-20-3	
n-Propylbenzene	ND	ug/kg	9.9	3.3	1	03/06/20 09:59	03/06/20 13:28	103-65-1	
Styrene	ND	ug/kg	9.9	2.9	1	03/06/20 09:59	03/06/20 13:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	9.9	2.4	1	03/06/20 09:59	03/06/20 13:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	9.9	3.4	1	03/06/20 09:59	03/06/20 13:28	79-34-5	
Tetrachloroethene	ND	ug/kg	9.9	3.1	1	03/06/20 09:59	03/06/20 13:28	127-18-4	
Toluene	ND	ug/kg	9.9	3.2	1	03/06/20 09:59	03/06/20 13:28	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	9.9	7.0	1	03/06/20 09:59	03/06/20 13:28	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (0-0.5) **Lab ID:** 92467731004 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	9.9	5.2	1	03/06/20 09:59	03/06/20 13:28	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	9.9	1.7	1	03/06/20 09:59	03/06/20 13:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	9.9	2.2	1	03/06/20 09:59	03/06/20 13:28	79-00-5	
Trichloroethene	ND	ug/kg	9.9	2.6	1	03/06/20 09:59	03/06/20 13:28	79-01-6	
Trichlorofluoromethane	ND	ug/kg	9.9	2.3	1	03/06/20 09:59	03/06/20 13:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	9.9	3.3	1	03/06/20 09:59	03/06/20 13:28	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	9.9	3.8	1	03/06/20 09:59	03/06/20 13:28	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	9.9	3.3	1	03/06/20 09:59	03/06/20 13:28	108-67-8	
Vinyl acetate	ND	ug/kg	98.7	32.2	1	03/06/20 09:59	03/06/20 13:28	108-05-4	
Vinyl chloride	ND	ug/kg	19.7	3.8	1	03/06/20 09:59	03/06/20 13:28	75-01-4	
Xylene (Total)	ND	ug/kg	19.7	6.9	1	03/06/20 09:59	03/06/20 13:28	1330-20-7	
m&p-Xylene	ND	ug/kg	19.7	4.7	1	03/06/20 09:59	03/06/20 13:28	179601-23-1	
o-Xylene	ND	ug/kg	9.9	2.3	1	03/06/20 09:59	03/06/20 13:28	95-47-6	
Surrogates									
Toluene-d8 (S)	122	%	70-130		1	03/06/20 09:59	03/06/20 13:28	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130		1	03/06/20 09:59	03/06/20 13:28	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	70-132		1	03/06/20 09:59	03/06/20 13:28	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	34.9	%	0.10	0.10	1		03/04/20 12:47		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (0.5-1.0) **Lab ID:** 92467731005 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	504	130	1	03/05/20 11:38	03/06/20 14:21	83-32-9	
Acenaphthylene	ND	ug/kg	504	119	1	03/05/20 11:38	03/06/20 14:21	208-96-8	
Aniline	ND	ug/kg	504	113	1	03/05/20 11:38	03/06/20 14:21	62-53-3	
Anthracene	ND	ug/kg	504	131	1	03/05/20 11:38	03/06/20 14:21	120-12-7	
Benzo(a)anthracene	ND	ug/kg	504	160	1	03/05/20 11:38	03/06/20 14:21	56-55-3	
Benzo(a)pyrene	ND	ug/kg	504	219	1	03/05/20 11:38	03/06/20 14:21	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	504	203	1	03/05/20 11:38	03/06/20 14:21	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	504	197	1	03/05/20 11:38	03/06/20 14:21	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	504	212	1	03/05/20 11:38	03/06/20 14:21	207-08-9	
Benzoic Acid	ND	ug/kg	2520	544	1	03/05/20 11:38	03/06/20 14:21	65-85-0	
Benzyl alcohol	ND	ug/kg	1010	267	1	03/05/20 11:38	03/06/20 14:21	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	504	132	1	03/05/20 11:38	03/06/20 14:21	101-55-3	
Butylbenzylphthalate	ND	ug/kg	504	134	1	03/05/20 11:38	03/06/20 14:21	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	1010	307	1	03/05/20 11:38	03/06/20 14:21	59-50-7	
4-Chloroaniline	ND	ug/kg	1010	309	1	03/05/20 11:38	03/06/20 14:21	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	504	135	1	03/05/20 11:38	03/06/20 14:21	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	504	107	1	03/05/20 11:38	03/06/20 14:21	111-44-4	
2-Chloronaphthalene	ND	ug/kg	504	112	1	03/05/20 11:38	03/06/20 14:21	91-58-7	
2-Chlorophenol	ND	ug/kg	504	117	1	03/05/20 11:38	03/06/20 14:21	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	504	131	1	03/05/20 11:38	03/06/20 14:21	7005-72-3	
Chrysene	ND	ug/kg	504	146	1	03/05/20 11:38	03/06/20 14:21	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	504	202	1	03/05/20 11:38	03/06/20 14:21	53-70-3	
Dibenzofuran	ND	ug/kg	504	126	1	03/05/20 11:38	03/06/20 14:21	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	504	109	1	03/05/20 11:38	03/06/20 14:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	504	114	1	03/05/20 11:38	03/06/20 14:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	504	111	1	03/05/20 11:38	03/06/20 14:21	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1010	352	1	03/05/20 11:38	03/06/20 14:21	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	504	167	1	03/05/20 11:38	03/06/20 14:21	120-83-2	
Diethylphthalate	ND	ug/kg	504	109	1	03/05/20 11:38	03/06/20 14:21	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	504	126	1	03/05/20 11:38	03/06/20 14:21	105-67-9	
Dimethylphthalate	ND	ug/kg	504	114	1	03/05/20 11:38	03/06/20 14:21	131-11-3	
Di-n-butylphthalate	ND	ug/kg	504	124	1	03/05/20 11:38	03/06/20 14:21	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1010	813	1	03/05/20 11:38	03/06/20 14:21	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2520	1610	1	03/05/20 11:38	03/06/20 14:21	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	504	134	1	03/05/20 11:38	03/06/20 14:21	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	504	132	1	03/05/20 11:38	03/06/20 14:21	606-20-2	
Di-n-octylphthalate	ND	ug/kg	504	287	1	03/05/20 11:38	03/06/20 14:21	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	504	165	1	03/05/20 11:38	03/06/20 14:21	117-81-7	
Fluoranthene	ND	ug/kg	504	152	1	03/05/20 11:38	03/06/20 14:21	206-44-0	
Fluorene	ND	ug/kg	504	135	1	03/05/20 11:38	03/06/20 14:21	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	504	123	1	03/05/20 11:38	03/06/20 14:21	87-68-3	
Hexachlorobenzene	ND	ug/kg	504	128	1	03/05/20 11:38	03/06/20 14:21	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	504	202	1	03/05/20 11:38	03/06/20 14:21	77-47-4	
Hexachloroethane	ND	ug/kg	504	115	1	03/05/20 11:38	03/06/20 14:21	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (0.5-1.0) **Lab ID:** 92467731005 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	ND	ug/kg	504	231	1	03/05/20 11:38	03/06/20 14:21	193-39-5	
Isophorone	ND	ug/kg	504	110	1	03/05/20 11:38	03/06/20 14:21	78-59-1	
1-Methylnaphthalene	ND	ug/kg	504	134	1	03/05/20 11:38	03/06/20 14:21	90-12-0	
2-Methylnaphthalene	ND	ug/kg	504	128	1	03/05/20 11:38	03/06/20 14:21	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	504	112	1	03/05/20 11:38	03/06/20 14:21	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	504	127	1	03/05/20 11:38	03/06/20 14:21	15831-10-4	
Naphthalene	ND	ug/kg	504	121	1	03/05/20 11:38	03/06/20 14:21	91-20-3	
2-Nitroaniline	ND	ug/kg	2520	254	1	03/05/20 11:38	03/06/20 14:21	88-74-4	
3-Nitroaniline	ND	ug/kg	2520	267	1	03/05/20 11:38	03/06/20 14:21	99-09-2	
4-Nitroaniline	ND	ug/kg	1010	249	1	03/05/20 11:38	03/06/20 14:21	100-01-6	
Nitrobenzene	ND	ug/kg	504	120	1	03/05/20 11:38	03/06/20 14:21	98-95-3	
2-Nitrophenol	ND	ug/kg	504	156	1	03/05/20 11:38	03/06/20 14:21	88-75-5	
4-Nitrophenol	ND	ug/kg	2520	804	1	03/05/20 11:38	03/06/20 14:21	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	504	142	1	03/05/20 11:38	03/06/20 14:21	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	504	141	1	03/05/20 11:38	03/06/20 14:21	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	504	129	1	03/05/20 11:38	03/06/20 14:21	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	504	140	1	03/05/20 11:38	03/06/20 14:21	108-60-1	
Pentachlorophenol	ND	ug/kg	1010	231	1	03/05/20 11:38	03/06/20 14:21	87-86-5	
Phenanthrene	ND	ug/kg	504	127	1	03/05/20 11:38	03/06/20 14:21	85-01-8	
Phenol	ND	ug/kg	504	120	1	03/05/20 11:38	03/06/20 14:21	108-95-2	
Pyrene	ND	ug/kg	504	139	1	03/05/20 11:38	03/06/20 14:21	129-00-0	
Pyridine	ND	ug/kg	504	128	1	03/05/20 11:38	03/06/20 14:21	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	504	116	1	03/05/20 11:38	03/06/20 14:21	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	504	131	1	03/05/20 11:38	03/06/20 14:21	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	504	127	1	03/05/20 11:38	03/06/20 14:21	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	60	%	23-110		1	03/05/20 11:38	03/06/20 14:21	4165-60-0	
2-Fluorobiphenyl (S)	51	%	30-110		1	03/05/20 11:38	03/06/20 14:21	321-60-8	
Terphenyl-d14 (S)	46	%	28-110		1	03/05/20 11:38	03/06/20 14:21	1718-51-0	
Phenol-d6 (S)	54	%	22-110		1	03/05/20 11:38	03/06/20 14:21	13127-88-3	
2-Fluorophenol (S)	58	%	13-110		1	03/05/20 11:38	03/06/20 14:21	367-12-4	
2,4,6-Tribromophenol (S)	68	%	27-110		1	03/05/20 11:38	03/06/20 14:21	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	81.2J	ug/kg	155	14.6	1	03/06/20 09:59	03/06/20 13:52	67-64-1	
Benzene	ND	ug/kg	7.7	1.4	1	03/06/20 09:59	03/06/20 13:52	71-43-2	
Bromobenzene	ND	ug/kg	7.7	2.1	1	03/06/20 09:59	03/06/20 13:52	108-86-1	
Bromochloromethane	ND	ug/kg	7.7	1.9	1	03/06/20 09:59	03/06/20 13:52	74-97-5	
Bromodichloromethane	ND	ug/kg	7.7	1.5	1	03/06/20 09:59	03/06/20 13:52	75-27-4	
Bromoform	ND	ug/kg	7.7	3.8	1	03/06/20 09:59	03/06/20 13:52	75-25-2	
Bromomethane	ND	ug/kg	15.5	3.6	1	03/06/20 09:59	03/06/20 13:52	74-83-9	IH
2-Butanone (MEK)	ND	ug/kg	155	18.4	1	03/06/20 09:59	03/06/20 13:52	78-93-3	
n-Butylbenzene	ND	ug/kg	7.7	4.4	1	03/06/20 09:59	03/06/20 13:52	104-51-8	
sec-Butylbenzene	ND	ug/kg	7.7	3.3	1	03/06/20 09:59	03/06/20 13:52	135-98-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (0.5-1.0) **Lab ID:** 92467731005 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	7.7	2.6	1	03/06/20 09:59	03/06/20 13:52	98-06-6	
Carbon tetrachloride	ND	ug/kg	7.7	1.5	1	03/06/20 09:59	03/06/20 13:52	56-23-5	
Chlorobenzene	ND	ug/kg	7.7	1.5	1	03/06/20 09:59	03/06/20 13:52	108-90-7	
Chloroethane	ND	ug/kg	15.5	3.2	1	03/06/20 09:59	03/06/20 13:52	75-00-3	
Chloroform	ND	ug/kg	7.7	1.6	1	03/06/20 09:59	03/06/20 13:52	67-66-3	
Chloromethane	ND	ug/kg	15.5	5.1	1	03/06/20 09:59	03/06/20 13:52	74-87-3	
2-Chlorotoluene	ND	ug/kg	7.7	2.4	1	03/06/20 09:59	03/06/20 13:52	95-49-8	
4-Chlorotoluene	ND	ug/kg	7.7	2.3	1	03/06/20 09:59	03/06/20 13:52	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	7.7	3.9	1	03/06/20 09:59	03/06/20 13:52	96-12-8	
Dibromochloromethane	ND	ug/kg	7.7	3.9	1	03/06/20 09:59	03/06/20 13:52	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	7.7	1.7	1	03/06/20 09:59	03/06/20 13:52	106-93-4	
Dibromomethane	ND	ug/kg	7.7	2.3	1	03/06/20 09:59	03/06/20 13:52	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	7.7	2.7	1	03/06/20 09:59	03/06/20 13:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	7.7	2.8	1	03/06/20 09:59	03/06/20 13:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	7.7	2.7	1	03/06/20 09:59	03/06/20 13:52	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	15.5	6.4	1	03/06/20 09:59	03/06/20 13:52	75-71-8	
1,1-Dichloroethane	ND	ug/kg	7.7	1.1	1	03/06/20 09:59	03/06/20 13:52	75-34-3	
1,2-Dichloroethane	ND	ug/kg	7.7	1.5	1	03/06/20 09:59	03/06/20 13:52	107-06-2	
1,1-Dichloroethene	ND	ug/kg	7.7	1.8	1	03/06/20 09:59	03/06/20 13:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	7.7	1.3	1	03/06/20 09:59	03/06/20 13:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	7.7	1.5	1	03/06/20 09:59	03/06/20 13:52	156-60-5	
1,2-Dichloropropane	ND	ug/kg	7.7	2.9	1	03/06/20 09:59	03/06/20 13:52	78-87-5	
1,3-Dichloropropane	ND	ug/kg	7.7	2.9	1	03/06/20 09:59	03/06/20 13:52	142-28-9	
2,2-Dichloropropane	ND	ug/kg	7.7	0.76	1	03/06/20 09:59	03/06/20 13:52	594-20-7	
1,1-Dichloropropene	ND	ug/kg	7.7	3.3	1	03/06/20 09:59	03/06/20 13:52	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	7.7	3.5	1	03/06/20 09:59	03/06/20 13:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	7.7	1.4	1	03/06/20 09:59	03/06/20 13:52	10061-02-6	
Diisopropyl ether	ND	ug/kg	7.7	4.4	1	03/06/20 09:59	03/06/20 13:52	108-20-3	
Ethylbenzene	ND	ug/kg	7.7	1.6	1	03/06/20 09:59	03/06/20 13:52	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	7.7	3.8	1	03/06/20 09:59	03/06/20 13:52	87-68-3	
2-Hexanone	ND	ug/kg	77.3	8.0	1	03/06/20 09:59	03/06/20 13:52	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	7.7	2.2	1	03/06/20 09:59	03/06/20 13:52	98-82-8	
p-Isopropyltoluene	ND	ug/kg	7.7	3.7	1	03/06/20 09:59	03/06/20 13:52	99-87-6	
Methylene Chloride	ND	ug/kg	30.9	9.1	1	03/06/20 09:59	03/06/20 13:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	77.3	5.8	1	03/06/20 09:59	03/06/20 13:52	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	7.7	4.4	1	03/06/20 09:59	03/06/20 13:52	1634-04-4	
Naphthalene	ND	ug/kg	7.7	6.6	1	03/06/20 09:59	03/06/20 13:52	91-20-3	
n-Propylbenzene	ND	ug/kg	7.7	2.6	1	03/06/20 09:59	03/06/20 13:52	103-65-1	
Styrene	ND	ug/kg	7.7	2.3	1	03/06/20 09:59	03/06/20 13:52	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	7.7	1.9	1	03/06/20 09:59	03/06/20 13:52	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	7.7	2.7	1	03/06/20 09:59	03/06/20 13:52	79-34-5	
Tetrachloroethene	ND	ug/kg	7.7	2.4	1	03/06/20 09:59	03/06/20 13:52	127-18-4	
Toluene	ND	ug/kg	7.7	2.5	1	03/06/20 09:59	03/06/20 13:52	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	7.7	5.5	1	03/06/20 09:59	03/06/20 13:52	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (0.5-1.0) **Lab ID:** 92467731005 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	7.7	4.1	1	03/06/20 09:59	03/06/20 13:52	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	7.7	1.3	1	03/06/20 09:59	03/06/20 13:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	7.7	1.7	1	03/06/20 09:59	03/06/20 13:52	79-00-5	
Trichloroethene	ND	ug/kg	7.7	2.0	1	03/06/20 09:59	03/06/20 13:52	79-01-6	
Trichlorofluoromethane	ND	ug/kg	7.7	1.8	1	03/06/20 09:59	03/06/20 13:52	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	7.7	2.6	1	03/06/20 09:59	03/06/20 13:52	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	7.7	3.0	1	03/06/20 09:59	03/06/20 13:52	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	7.7	2.6	1	03/06/20 09:59	03/06/20 13:52	108-67-8	
Vinyl acetate	ND	ug/kg	77.3	25.2	1	03/06/20 09:59	03/06/20 13:52	108-05-4	
Vinyl chloride	ND	ug/kg	15.5	2.9	1	03/06/20 09:59	03/06/20 13:52	75-01-4	
Xylene (Total)	ND	ug/kg	15.5	5.4	1	03/06/20 09:59	03/06/20 13:52	1330-20-7	
m&p-Xylene	ND	ug/kg	15.5	3.6	1	03/06/20 09:59	03/06/20 13:52	179601-23-1	
o-Xylene	ND	ug/kg	7.7	1.8	1	03/06/20 09:59	03/06/20 13:52	95-47-6	
Surrogates									
Toluene-d8 (S)	103	%	70-130		1	03/06/20 09:59	03/06/20 13:52	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1	03/06/20 09:59	03/06/20 13:52	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-132		1	03/06/20 09:59	03/06/20 13:52	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	34.1	%	0.10	0.10	1		03/04/20 12:47		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (1.0-2.0) Lab ID: 92467731006 Collected: 03/02/20 11:50 Received: 03/03/20 14:00 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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	429	110	1	03/05/20 11:38	03/06/20 14:52	83-32-9	
Acenaphthylene	ND	ug/kg	429	102	1	03/05/20 11:38	03/06/20 14:52	208-96-8	
Aniline	ND	ug/kg	429	96.4	1	03/05/20 11:38	03/06/20 14:52	62-53-3	
Anthracene	ND	ug/kg	429	111	1	03/05/20 11:38	03/06/20 14:52	120-12-7	
Benzo(a)anthracene	ND	ug/kg	429	137	1	03/05/20 11:38	03/06/20 14:52	56-55-3	
Benzo(a)pyrene	ND	ug/kg	429	186	1	03/05/20 11:38	03/06/20 14:52	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	429	173	1	03/05/20 11:38	03/06/20 14:52	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	429	168	1	03/05/20 11:38	03/06/20 14:52	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	429	181	1	03/05/20 11:38	03/06/20 14:52	207-08-9	
Benzoic Acid	ND	ug/kg	2150	463	1	03/05/20 11:38	03/06/20 14:52	65-85-0	
Benzyl alcohol	ND	ug/kg	859	228	1	03/05/20 11:38	03/06/20 14:52	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	429	113	1	03/05/20 11:38	03/06/20 14:52	101-55-3	
Butylbenzylphthalate	ND	ug/kg	429	114	1	03/05/20 11:38	03/06/20 14:52	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	859	262	1	03/05/20 11:38	03/06/20 14:52	59-50-7	
4-Chloroaniline	ND	ug/kg	859	263	1	03/05/20 11:38	03/06/20 14:52	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	429	115	1	03/05/20 11:38	03/06/20 14:52	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	429	91.2	1	03/05/20 11:38	03/06/20 14:52	111-44-4	
2-Chloronaphthalene	ND	ug/kg	429	95.6	1	03/05/20 11:38	03/06/20 14:52	91-58-7	
2-Chlorophenol	ND	ug/kg	429	99.9	1	03/05/20 11:38	03/06/20 14:52	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	429	112	1	03/05/20 11:38	03/06/20 14:52	7005-72-3	
Chrysene	ND	ug/kg	429	125	1	03/05/20 11:38	03/06/20 14:52	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	429	172	1	03/05/20 11:38	03/06/20 14:52	53-70-3	
Dibenzofuran	ND	ug/kg	429	107	1	03/05/20 11:38	03/06/20 14:52	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	429	92.9	1	03/05/20 11:38	03/06/20 14:52	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	429	96.7	1	03/05/20 11:38	03/06/20 14:52	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	429	94.5	1	03/05/20 11:38	03/06/20 14:52	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	859	299	1	03/05/20 11:38	03/06/20 14:52	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	429	142	1	03/05/20 11:38	03/06/20 14:52	120-83-2	
Diethylphthalate	ND	ug/kg	429	93.2	1	03/05/20 11:38	03/06/20 14:52	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	429	107	1	03/05/20 11:38	03/06/20 14:52	105-67-9	
Dimethylphthalate	ND	ug/kg	429	97.1	1	03/05/20 11:38	03/06/20 14:52	131-11-3	
Di-n-butylphthalate	ND	ug/kg	429	106	1	03/05/20 11:38	03/06/20 14:52	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	859	692	1	03/05/20 11:38	03/06/20 14:52	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2150	1370	1	03/05/20 11:38	03/06/20 14:52	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	429	114	1	03/05/20 11:38	03/06/20 14:52	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	429	112	1	03/05/20 11:38	03/06/20 14:52	606-20-2	
Di-n-octylphthalate	ND	ug/kg	429	245	1	03/05/20 11:38	03/06/20 14:52	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	429	141	1	03/05/20 11:38	03/06/20 14:52	117-81-7	
Fluoranthene	ND	ug/kg	429	130	1	03/05/20 11:38	03/06/20 14:52	206-44-0	
Fluorene	ND	ug/kg	429	115	1	03/05/20 11:38	03/06/20 14:52	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	429	104	1	03/05/20 11:38	03/06/20 14:52	87-68-3	
Hexachlorobenzene	ND	ug/kg	429	109	1	03/05/20 11:38	03/06/20 14:52	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	429	172	1	03/05/20 11:38	03/06/20 14:52	77-47-4	
Hexachloroethane	ND	ug/kg	429	97.9	1	03/05/20 11:38	03/06/20 14:52	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (1.0-2.0) **Lab ID:** 92467731006 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	ND	ug/kg	429	196	1	03/05/20 11:38	03/06/20 14:52	193-39-5	
Isophorone	ND	ug/kg	429	93.3	1	03/05/20 11:38	03/06/20 14:52	78-59-1	
1-Methylnaphthalene	ND	ug/kg	429	114	1	03/05/20 11:38	03/06/20 14:52	90-12-0	
2-Methylnaphthalene	ND	ug/kg	429	109	1	03/05/20 11:38	03/06/20 14:52	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	429	95.1	1	03/05/20 11:38	03/06/20 14:52	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	429	108	1	03/05/20 11:38	03/06/20 14:52	15831-10-4	
Naphthalene	ND	ug/kg	429	103	1	03/05/20 11:38	03/06/20 14:52	91-20-3	
2-Nitroaniline	ND	ug/kg	2150	216	1	03/05/20 11:38	03/06/20 14:52	88-74-4	
3-Nitroaniline	ND	ug/kg	2150	228	1	03/05/20 11:38	03/06/20 14:52	99-09-2	
4-Nitroaniline	ND	ug/kg	859	212	1	03/05/20 11:38	03/06/20 14:52	100-01-6	
Nitrobenzene	ND	ug/kg	429	103	1	03/05/20 11:38	03/06/20 14:52	98-95-3	
2-Nitrophenol	ND	ug/kg	429	133	1	03/05/20 11:38	03/06/20 14:52	88-75-5	
4-Nitrophenol	ND	ug/kg	2150	684	1	03/05/20 11:38	03/06/20 14:52	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	429	121	1	03/05/20 11:38	03/06/20 14:52	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	429	120	1	03/05/20 11:38	03/06/20 14:52	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	429	110	1	03/05/20 11:38	03/06/20 14:52	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	429	119	1	03/05/20 11:38	03/06/20 14:52	108-60-1	
Pentachlorophenol	ND	ug/kg	859	196	1	03/05/20 11:38	03/06/20 14:52	87-86-5	
Phenanthrene	ND	ug/kg	429	108	1	03/05/20 11:38	03/06/20 14:52	85-01-8	
Phenol	ND	ug/kg	429	103	1	03/05/20 11:38	03/06/20 14:52	108-95-2	
Pyrene	ND	ug/kg	429	118	1	03/05/20 11:38	03/06/20 14:52	129-00-0	
Pyridine	ND	ug/kg	429	109	1	03/05/20 11:38	03/06/20 14:52	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	429	98.4	1	03/05/20 11:38	03/06/20 14:52	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	429	112	1	03/05/20 11:38	03/06/20 14:52	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	429	108	1	03/05/20 11:38	03/06/20 14:52	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	67	%	23-110		1	03/05/20 11:38	03/06/20 14:52	4165-60-0	
2-Fluorobiphenyl (S)	64	%	30-110		1	03/05/20 11:38	03/06/20 14:52	321-60-8	
Terphenyl-d14 (S)	60	%	28-110		1	03/05/20 11:38	03/06/20 14:52	1718-51-0	
Phenol-d6 (S)	65	%	22-110		1	03/05/20 11:38	03/06/20 14:52	13127-88-3	
2-Fluorophenol (S)	72	%	13-110		1	03/05/20 11:38	03/06/20 14:52	367-12-4	
2,4,6-Tribromophenol (S)	71	%	27-110		1	03/05/20 11:38	03/06/20 14:52	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	252	ug/kg	181	17.1	1	03/06/20 09:59	03/06/20 14:17	67-64-1	
Benzene	ND	ug/kg	9.1	1.6	1	03/06/20 09:59	03/06/20 14:17	71-43-2	
Bromobenzene	ND	ug/kg	9.1	2.5	1	03/06/20 09:59	03/06/20 14:17	108-86-1	
Bromochloromethane	ND	ug/kg	9.1	2.2	1	03/06/20 09:59	03/06/20 14:17	74-97-5	
Bromodichloromethane	ND	ug/kg	9.1	1.8	1	03/06/20 09:59	03/06/20 14:17	75-27-4	
Bromoform	ND	ug/kg	9.1	4.4	1	03/06/20 09:59	03/06/20 14:17	75-25-2	
Bromomethane	ND	ug/kg	18.1	4.3	1	03/06/20 09:59	03/06/20 14:17	74-83-9	IH
2-Butanone (MEK)	ND	ug/kg	181	21.6	1	03/06/20 09:59	03/06/20 14:17	78-93-3	
n-Butylbenzene	ND	ug/kg	9.1	5.1	1	03/06/20 09:59	03/06/20 14:17	104-51-8	
sec-Butylbenzene	ND	ug/kg	9.1	3.8	1	03/06/20 09:59	03/06/20 14:17	135-98-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (1.0-2.0) Lab ID: 92467731006 Collected: 03/02/20 11:50 Received: 03/03/20 14:00 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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	9.1	3.1	1	03/06/20 09:59	03/06/20 14:17	98-06-6	
Carbon tetrachloride	ND	ug/kg	9.1	1.7	1	03/06/20 09:59	03/06/20 14:17	56-23-5	
Chlorobenzene	ND	ug/kg	9.1	1.8	1	03/06/20 09:59	03/06/20 14:17	108-90-7	
Chloroethane	ND	ug/kg	18.1	3.8	1	03/06/20 09:59	03/06/20 14:17	75-00-3	
Chloroform	ND	ug/kg	9.1	1.9	1	03/06/20 09:59	03/06/20 14:17	67-66-3	
Chloromethane	ND	ug/kg	18.1	5.9	1	03/06/20 09:59	03/06/20 14:17	74-87-3	
2-Chlorotoluene	ND	ug/kg	9.1	2.8	1	03/06/20 09:59	03/06/20 14:17	95-49-8	
4-Chlorotoluene	ND	ug/kg	9.1	2.7	1	03/06/20 09:59	03/06/20 14:17	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	9.1	4.6	1	03/06/20 09:59	03/06/20 14:17	96-12-8	
Dibromochloromethane	ND	ug/kg	9.1	4.5	1	03/06/20 09:59	03/06/20 14:17	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	9.1	2.0	1	03/06/20 09:59	03/06/20 14:17	106-93-4	
Dibromomethane	ND	ug/kg	9.1	2.7	1	03/06/20 09:59	03/06/20 14:17	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	9.1	3.2	1	03/06/20 09:59	03/06/20 14:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	9.1	3.2	1	03/06/20 09:59	03/06/20 14:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	9.1	3.1	1	03/06/20 09:59	03/06/20 14:17	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	18.1	7.4	1	03/06/20 09:59	03/06/20 14:17	75-71-8	
1,1-Dichloroethane	ND	ug/kg	9.1	1.3	1	03/06/20 09:59	03/06/20 14:17	75-34-3	
1,2-Dichloroethane	ND	ug/kg	9.1	1.8	1	03/06/20 09:59	03/06/20 14:17	107-06-2	
1,1-Dichloroethene	ND	ug/kg	9.1	2.1	1	03/06/20 09:59	03/06/20 14:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	9.1	1.6	1	03/06/20 09:59	03/06/20 14:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	9.1	1.8	1	03/06/20 09:59	03/06/20 14:17	156-60-5	
1,2-Dichloropropane	ND	ug/kg	9.1	3.4	1	03/06/20 09:59	03/06/20 14:17	78-87-5	
1,3-Dichloropropane	ND	ug/kg	9.1	3.4	1	03/06/20 09:59	03/06/20 14:17	142-28-9	
2,2-Dichloropropane	ND	ug/kg	9.1	0.90	1	03/06/20 09:59	03/06/20 14:17	594-20-7	
1,1-Dichloropropene	ND	ug/kg	9.1	3.8	1	03/06/20 09:59	03/06/20 14:17	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	9.1	4.1	1	03/06/20 09:59	03/06/20 14:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	9.1	1.6	1	03/06/20 09:59	03/06/20 14:17	10061-02-6	
Diisopropyl ether	ND	ug/kg	9.1	5.2	1	03/06/20 09:59	03/06/20 14:17	108-20-3	
Ethylbenzene	ND	ug/kg	9.1	1.9	1	03/06/20 09:59	03/06/20 14:17	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	9.1	4.5	1	03/06/20 09:59	03/06/20 14:17	87-68-3	
2-Hexanone	ND	ug/kg	90.6	9.4	1	03/06/20 09:59	03/06/20 14:17	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	9.1	2.6	1	03/06/20 09:59	03/06/20 14:17	98-82-8	
p-Isopropyltoluene	ND	ug/kg	9.1	4.4	1	03/06/20 09:59	03/06/20 14:17	99-87-6	
Methylene Chloride	ND	ug/kg	36.2	10.7	1	03/06/20 09:59	03/06/20 14:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	90.6	6.8	1	03/06/20 09:59	03/06/20 14:17	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	9.1	5.2	1	03/06/20 09:59	03/06/20 14:17	1634-04-4	
Naphthalene	ND	ug/kg	9.1	7.7	1	03/06/20 09:59	03/06/20 14:17	91-20-3	
n-Propylbenzene	ND	ug/kg	9.1	3.0	1	03/06/20 09:59	03/06/20 14:17	103-65-1	
Styrene	ND	ug/kg	9.1	2.7	1	03/06/20 09:59	03/06/20 14:17	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	9.1	2.2	1	03/06/20 09:59	03/06/20 14:17	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	9.1	3.1	1	03/06/20 09:59	03/06/20 14:17	79-34-5	
Tetrachloroethene	ND	ug/kg	9.1	2.9	1	03/06/20 09:59	03/06/20 14:17	127-18-4	
Toluene	ND	ug/kg	9.1	2.9	1	03/06/20 09:59	03/06/20 14:17	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	9.1	6.5	1	03/06/20 09:59	03/06/20 14:17	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (1.0-2.0) **Lab ID:** 92467731006 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	9.1	4.8	1	03/06/20 09:59	03/06/20 14:17	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	9.1	1.6	1	03/06/20 09:59	03/06/20 14:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	9.1	2.0	1	03/06/20 09:59	03/06/20 14:17	79-00-5	
Trichloroethene	ND	ug/kg	9.1	2.4	1	03/06/20 09:59	03/06/20 14:17	79-01-6	
Trichlorofluoromethane	ND	ug/kg	9.1	2.1	1	03/06/20 09:59	03/06/20 14:17	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	9.1	3.1	1	03/06/20 09:59	03/06/20 14:17	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	9.1	3.5	1	03/06/20 09:59	03/06/20 14:17	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	9.1	3.0	1	03/06/20 09:59	03/06/20 14:17	108-67-8	
Vinyl acetate	ND	ug/kg	90.6	29.5	1	03/06/20 09:59	03/06/20 14:17	108-05-4	
Vinyl chloride	ND	ug/kg	18.1	3.4	1	03/06/20 09:59	03/06/20 14:17	75-01-4	
Xylene (Total)	ND	ug/kg	18.1	6.3	1	03/06/20 09:59	03/06/20 14:17	1330-20-7	
m&p-Xylene	ND	ug/kg	18.1	4.3	1	03/06/20 09:59	03/06/20 14:17	179601-23-1	
o-Xylene	ND	ug/kg	9.1	2.1	1	03/06/20 09:59	03/06/20 14:17	95-47-6	
Surrogates									
Toluene-d8 (S)	104	%	70-130		1	03/06/20 09:59	03/06/20 14:17	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130		1	03/06/20 09:59	03/06/20 14:17	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	70-132		1	03/06/20 09:59	03/06/20 14:17	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	24.4	%	0.10	0.10	1		03/04/20 12:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-15_SE_20200301 (0-0.5) **Lab ID:** 92467731007 **Collected:** 03/01/20 16:40 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	789	203	1	03/05/20 11:38	03/06/20 12:17	83-32-9	
Acenaphthylene	ND	ug/kg	789	187	1	03/05/20 11:38	03/06/20 12:17	208-96-8	
Aniline	ND	ug/kg	789	177	1	03/05/20 11:38	03/06/20 12:17	62-53-3	
Anthracene	ND	ug/kg	789	205	1	03/05/20 11:38	03/06/20 12:17	120-12-7	
Benzo(a)anthracene	593J	ug/kg	789	251	1	03/05/20 11:38	03/06/20 12:17	56-55-3	
Benzo(a)pyrene	573J	ug/kg	789	342	1	03/05/20 11:38	03/06/20 12:17	50-32-8	
Benzo(b)fluoranthene	613J	ug/kg	789	318	1	03/05/20 11:38	03/06/20 12:17	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	789	309	1	03/05/20 11:38	03/06/20 12:17	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	789	332	1	03/05/20 11:38	03/06/20 12:17	207-08-9	
Benzoic Acid	ND	ug/kg	3950	851	1	03/05/20 11:38	03/06/20 12:17	65-85-0	
Benzyl alcohol	ND	ug/kg	1580	419	1	03/05/20 11:38	03/06/20 12:17	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	789	207	1	03/05/20 11:38	03/06/20 12:17	101-55-3	
Butylbenzylphthalate	ND	ug/kg	789	210	1	03/05/20 11:38	03/06/20 12:17	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	1580	481	1	03/05/20 11:38	03/06/20 12:17	59-50-7	
4-Chloroaniline	ND	ug/kg	1580	483	1	03/05/20 11:38	03/06/20 12:17	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	789	211	1	03/05/20 11:38	03/06/20 12:17	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	789	168	1	03/05/20 11:38	03/06/20 12:17	111-44-4	
2-Chloronaphthalene	ND	ug/kg	789	176	1	03/05/20 11:38	03/06/20 12:17	91-58-7	
2-Chlorophenol	ND	ug/kg	789	184	1	03/05/20 11:38	03/06/20 12:17	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	789	205	1	03/05/20 11:38	03/06/20 12:17	7005-72-3	
Chrysene	515J	ug/kg	789	229	1	03/05/20 11:38	03/06/20 12:17	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	789	316	1	03/05/20 11:38	03/06/20 12:17	53-70-3	
Dibenzofuran	ND	ug/kg	789	197	1	03/05/20 11:38	03/06/20 12:17	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	789	171	1	03/05/20 11:38	03/06/20 12:17	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	789	178	1	03/05/20 11:38	03/06/20 12:17	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	789	174	1	03/05/20 11:38	03/06/20 12:17	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1580	550	1	03/05/20 11:38	03/06/20 12:17	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	789	261	1	03/05/20 11:38	03/06/20 12:17	120-83-2	
Diethylphthalate	ND	ug/kg	789	171	1	03/05/20 11:38	03/06/20 12:17	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	789	197	1	03/05/20 11:38	03/06/20 12:17	105-67-9	
Dimethylphthalate	ND	ug/kg	789	178	1	03/05/20 11:38	03/06/20 12:17	131-11-3	
Di-n-butylphthalate	ND	ug/kg	789	195	1	03/05/20 11:38	03/06/20 12:17	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1580	1270	1	03/05/20 11:38	03/06/20 12:17	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	3950	2520	1	03/05/20 11:38	03/06/20 12:17	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	789	209	1	03/05/20 11:38	03/06/20 12:17	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	789	206	1	03/05/20 11:38	03/06/20 12:17	606-20-2	
Di-n-octylphthalate	ND	ug/kg	789	450	1	03/05/20 11:38	03/06/20 12:17	117-84-0	v1
bis(2-Ethylhexyl)phthalate	ND	ug/kg	789	258	1	03/05/20 11:38	03/06/20 12:17	117-81-7	
Fluoranthene	968	ug/kg	789	238	1	03/05/20 11:38	03/06/20 12:17	206-44-0	
Fluorene	ND	ug/kg	789	211	1	03/05/20 11:38	03/06/20 12:17	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	789	192	1	03/05/20 11:38	03/06/20 12:17	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	789	200	1	03/05/20 11:38	03/06/20 12:17	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	789	316	1	03/05/20 11:38	03/06/20 12:17	77-47-4	
Hexachloroethane	ND	ug/kg	789	180	1	03/05/20 11:38	03/06/20 12:17	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-15_SE_20200301 (0-0.5) Lab ID: 92467731007 Collected: 03/01/20 16:40 Received: 03/03/20 14:00 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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	ND	ug/kg	789	361	1	03/05/20 11:38	03/06/20 12:17	193-39-5	
Isophorone	ND	ug/kg	789	171	1	03/05/20 11:38	03/06/20 12:17	78-59-1	
1-Methylnaphthalene	ND	ug/kg	789	210	1	03/05/20 11:38	03/06/20 12:17	90-12-0	
2-Methylnaphthalene	ND	ug/kg	789	201	1	03/05/20 11:38	03/06/20 12:17	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	789	175	1	03/05/20 11:38	03/06/20 12:17	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	789	199	1	03/05/20 11:38	03/06/20 12:17	15831-10-4	
Naphthalene	ND	ug/kg	789	189	1	03/05/20 11:38	03/06/20 12:17	91-20-3	
2-Nitroaniline	ND	ug/kg	3950	397	1	03/05/20 11:38	03/06/20 12:17	88-74-4	
3-Nitroaniline	ND	ug/kg	3950	419	1	03/05/20 11:38	03/06/20 12:17	99-09-2	
4-Nitroaniline	ND	ug/kg	1580	390	1	03/05/20 11:38	03/06/20 12:17	100-01-6	
Nitrobenzene	ND	ug/kg	789	188	1	03/05/20 11:38	03/06/20 12:17	98-95-3	
2-Nitrophenol	ND	ug/kg	789	244	1	03/05/20 11:38	03/06/20 12:17	88-75-5	
4-Nitrophenol	ND	ug/kg	3950	1260	1	03/05/20 11:38	03/06/20 12:17	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	789	222	1	03/05/20 11:38	03/06/20 12:17	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	789	221	1	03/05/20 11:38	03/06/20 12:17	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	789	201	1	03/05/20 11:38	03/06/20 12:17	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	789	219	1	03/05/20 11:38	03/06/20 12:17	108-60-1	
Pentachlorophenol	ND	ug/kg	1580	361	1	03/05/20 11:38	03/06/20 12:17	87-86-5	
Phenanthrene	296J	ug/kg	789	199	1	03/05/20 11:38	03/06/20 12:17	85-01-8	
Phenol	ND	ug/kg	789	188	1	03/05/20 11:38	03/06/20 12:17	108-95-2	
Pyrene	879	ug/kg	789	217	1	03/05/20 11:38	03/06/20 12:17	129-00-0	
Pyridine	ND	ug/kg	789	200	1	03/05/20 11:38	03/06/20 12:17	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	789	181	1	03/05/20 11:38	03/06/20 12:17	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	789	205	1	03/05/20 11:38	03/06/20 12:17	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	789	198	1	03/05/20 11:38	03/06/20 12:17	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	75	%	23-110		1	03/05/20 11:38	03/06/20 12:17	4165-60-0	
2-Fluorobiphenyl (S)	55	%	30-110		1	03/05/20 11:38	03/06/20 12:17	321-60-8	
Terphenyl-d14 (S)	27	%	28-110		1	03/05/20 11:38	03/06/20 12:17	1718-51-0	S0
Phenol-d6 (S)	70	%	22-110		1	03/05/20 11:38	03/06/20 12:17	13127-88-3	
2-Fluorophenol (S)	73	%	13-110		1	03/05/20 11:38	03/06/20 12:17	367-12-4	
2,4,6-Tribromophenol (S)	71	%	27-110		1	03/05/20 11:38	03/06/20 12:17	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	48.8J	ug/kg	275	25.9	1	03/05/20 11:29	03/05/20 13:25	67-64-1	
Benzene	ND	ug/kg	13.7	2.5	1	03/05/20 11:29	03/05/20 13:25	71-43-2	
Bromobenzene	ND	ug/kg	13.7	3.7	1	03/05/20 11:29	03/05/20 13:25	108-86-1	
Bromochloromethane	ND	ug/kg	13.7	3.4	1	03/05/20 11:29	03/05/20 13:25	74-97-5	
Bromodichloromethane	ND	ug/kg	13.7	2.7	1	03/05/20 11:29	03/05/20 13:25	75-27-4	
Bromoform	ND	ug/kg	13.7	6.7	1	03/05/20 11:29	03/05/20 13:25	75-25-2	
Bromomethane	ND	ug/kg	27.5	6.5	1	03/05/20 11:29	03/05/20 13:25	74-83-9	
2-Butanone (MEK)	ND	ug/kg	275	32.7	1	03/05/20 11:29	03/05/20 13:25	78-93-3	
n-Butylbenzene	ND	ug/kg	13.7	7.7	1	03/05/20 11:29	03/05/20 13:25	104-51-8	
sec-Butylbenzene	ND	ug/kg	13.7	5.8	1	03/05/20 11:29	03/05/20 13:25	135-98-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-15_SE_20200301 (0-0.5) Lab ID: 92467731007 Collected: 03/01/20 16:40 Received: 03/03/20 14:00 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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	13.7	4.6	1	03/05/20 11:29	03/05/20 13:25	98-06-6	
Carbon tetrachloride	ND	ug/kg	13.7	2.6	1	03/05/20 11:29	03/05/20 13:25	56-23-5	
Chlorobenzene	ND	ug/kg	13.7	2.7	1	03/05/20 11:29	03/05/20 13:25	108-90-7	
Chloroethane	ND	ug/kg	27.5	5.7	1	03/05/20 11:29	03/05/20 13:25	75-00-3	
Chloroform	ND	ug/kg	13.7	2.9	1	03/05/20 11:29	03/05/20 13:25	67-66-3	
Chloromethane	ND	ug/kg	27.5	9.0	1	03/05/20 11:29	03/05/20 13:25	74-87-3	
2-Chlorotoluene	ND	ug/kg	13.7	4.2	1	03/05/20 11:29	03/05/20 13:25	95-49-8	
4-Chlorotoluene	ND	ug/kg	13.7	4.1	1	03/05/20 11:29	03/05/20 13:25	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	13.7	7.0	1	03/05/20 11:29	03/05/20 13:25	96-12-8	
Dibromochloromethane	ND	ug/kg	13.7	6.9	1	03/05/20 11:29	03/05/20 13:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	13.7	3.1	1	03/05/20 11:29	03/05/20 13:25	106-93-4	
Dibromomethane	ND	ug/kg	13.7	4.1	1	03/05/20 11:29	03/05/20 13:25	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	13.7	4.8	1	03/05/20 11:29	03/05/20 13:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	13.7	4.9	1	03/05/20 11:29	03/05/20 13:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	13.7	4.8	1	03/05/20 11:29	03/05/20 13:25	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	27.5	11.3	1	03/05/20 11:29	03/05/20 13:25	75-71-8	
1,1-Dichloroethane	ND	ug/kg	13.7	2.0	1	03/05/20 11:29	03/05/20 13:25	75-34-3	
1,2-Dichloroethane	ND	ug/kg	13.7	2.7	1	03/05/20 11:29	03/05/20 13:25	107-06-2	
1,1-Dichloroethene	ND	ug/kg	13.7	3.2	1	03/05/20 11:29	03/05/20 13:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	13.7	2.4	1	03/05/20 11:29	03/05/20 13:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	13.7	2.7	1	03/05/20 11:29	03/05/20 13:25	156-60-5	
1,2-Dichloropropane	ND	ug/kg	13.7	5.2	1	03/05/20 11:29	03/05/20 13:25	78-87-5	
1,3-Dichloropropane	ND	ug/kg	13.7	5.2	1	03/05/20 11:29	03/05/20 13:25	142-28-9	
2,2-Dichloropropane	ND	ug/kg	13.7	1.4	1	03/05/20 11:29	03/05/20 13:25	594-20-7	
1,1-Dichloropropene	ND	ug/kg	13.7	5.8	1	03/05/20 11:29	03/05/20 13:25	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	13.7	6.2	1	03/05/20 11:29	03/05/20 13:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	13.7	2.4	1	03/05/20 11:29	03/05/20 13:25	10061-02-6	
Diisopropyl ether	ND	ug/kg	13.7	7.9	1	03/05/20 11:29	03/05/20 13:25	108-20-3	
Ethylbenzene	ND	ug/kg	13.7	2.9	1	03/05/20 11:29	03/05/20 13:25	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	13.7	6.8	1	03/05/20 11:29	03/05/20 13:25	87-68-3	
2-Hexanone	ND	ug/kg	137	14.2	1	03/05/20 11:29	03/05/20 13:25	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	13.7	4.0	1	03/05/20 11:29	03/05/20 13:25	98-82-8	
p-Isopropyltoluene	ND	ug/kg	13.7	6.6	1	03/05/20 11:29	03/05/20 13:25	99-87-6	
Methylene Chloride	ND	ug/kg	54.9	16.2	1	03/05/20 11:29	03/05/20 13:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	137	10.2	1	03/05/20 11:29	03/05/20 13:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	13.7	7.9	1	03/05/20 11:29	03/05/20 13:25	1634-04-4	
Naphthalene	ND	ug/kg	13.7	11.7	1	03/05/20 11:29	03/05/20 13:25	91-20-3	
n-Propylbenzene	ND	ug/kg	13.7	4.6	1	03/05/20 11:29	03/05/20 13:25	103-65-1	
Styrene	ND	ug/kg	13.7	4.1	1	03/05/20 11:29	03/05/20 13:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	13.7	3.4	1	03/05/20 11:29	03/05/20 13:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	13.7	4.8	1	03/05/20 11:29	03/05/20 13:25	79-34-5	
Tetrachloroethene	ND	ug/kg	13.7	4.3	1	03/05/20 11:29	03/05/20 13:25	127-18-4	
Toluene	ND	ug/kg	13.7	4.4	1	03/05/20 11:29	03/05/20 13:25	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	13.7	9.8	1	03/05/20 11:29	03/05/20 13:25	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-15_SE_20200301 (0-0.5) **Lab ID:** 92467731007 **Collected:** 03/01/20 16:40 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	13.7	7.3	1	03/05/20 11:29	03/05/20 13:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	13.7	2.4	1	03/05/20 11:29	03/05/20 13:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	13.7	3.1	1	03/05/20 11:29	03/05/20 13:25	79-00-5	
Trichloroethene	ND	ug/kg	13.7	3.6	1	03/05/20 11:29	03/05/20 13:25	79-01-6	
Trichlorofluoromethane	ND	ug/kg	13.7	3.2	1	03/05/20 11:29	03/05/20 13:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	13.7	4.6	1	03/05/20 11:29	03/05/20 13:25	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	13.7	5.4	1	03/05/20 11:29	03/05/20 13:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	13.7	4.6	1	03/05/20 11:29	03/05/20 13:25	108-67-8	
Vinyl acetate	ND	ug/kg	137	44.8	1	03/05/20 11:29	03/05/20 13:25	108-05-4	
Vinyl chloride	ND	ug/kg	27.5	5.2	1	03/05/20 11:29	03/05/20 13:25	75-01-4	
Xylene (Total)	ND	ug/kg	27.5	9.6	1	03/05/20 11:29	03/05/20 13:25	1330-20-7	
m&p-Xylene	ND	ug/kg	27.5	6.5	1	03/05/20 11:29	03/05/20 13:25	179601-23-1	
o-Xylene	ND	ug/kg	13.7	3.2	1	03/05/20 11:29	03/05/20 13:25	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	70-130		1	03/05/20 11:29	03/05/20 13:25	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130		1	03/05/20 11:29	03/05/20 13:25	460-00-4	
1,2-Dichloroethane-d4 (S)	89	%	70-132		1	03/05/20 11:29	03/05/20 13:25	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	57.8	%	0.10	0.10	1		03/04/20 12:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-15_SE_20200301 (0.5-1.0) **Lab ID:** 92467731008 **Collected:** 03/01/20 16:40 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	3230	831	5	03/05/20 11:38	03/06/20 19:31	83-32-9	
Acenaphthylene	1540J	ug/kg	3230	765	5	03/05/20 11:38	03/06/20 19:31	208-96-8	
Aniline	ND	ug/kg	3230	725	5	03/05/20 11:38	03/06/20 19:31	62-53-3	
Anthracene	3580	ug/kg	3230	838	5	03/05/20 11:38	03/06/20 19:31	120-12-7	
Benzo(a)anthracene	8320	ug/kg	3230	1030	5	03/05/20 11:38	03/06/20 19:31	56-55-3	
Benzo(a)pyrene	8060	ug/kg	3230	1400	5	03/05/20 11:38	03/06/20 19:31	50-32-8	
Benzo(b)fluoranthene	8970	ug/kg	3230	1300	5	03/05/20 11:38	03/06/20 19:31	205-99-2	
Benzo(g,h,i)perylene	4600	ug/kg	3230	1260	5	03/05/20 11:38	03/06/20 19:31	191-24-2	
Benzo(k)fluoranthene	3390	ug/kg	3230	1360	5	03/05/20 11:38	03/06/20 19:31	207-08-9	
Benzoic Acid	ND	ug/kg	16200	3490	5	03/05/20 11:38	03/06/20 19:31	65-85-0	
Benzyl alcohol	ND	ug/kg	6460	1710	5	03/05/20 11:38	03/06/20 19:31	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	3230	848	5	03/05/20 11:38	03/06/20 19:31	101-55-3	
Butylbenzylphthalate	ND	ug/kg	3230	861	5	03/05/20 11:38	03/06/20 19:31	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	6460	1970	5	03/05/20 11:38	03/06/20 19:31	59-50-7	
4-Chloroaniline	ND	ug/kg	6460	1980	5	03/05/20 11:38	03/06/20 19:31	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	3230	862	5	03/05/20 11:38	03/06/20 19:31	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	3230	686	5	03/05/20 11:38	03/06/20 19:31	111-44-4	
2-Chloronaphthalene	ND	ug/kg	3230	720	5	03/05/20 11:38	03/06/20 19:31	91-58-7	
2-Chlorophenol	ND	ug/kg	3230	752	5	03/05/20 11:38	03/06/20 19:31	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	3230	839	5	03/05/20 11:38	03/06/20 19:31	7005-72-3	
Chrysene	7280	ug/kg	3230	938	5	03/05/20 11:38	03/06/20 19:31	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	3230	1290	5	03/05/20 11:38	03/06/20 19:31	53-70-3	
Dibenzofuran	ND	ug/kg	3230	808	5	03/05/20 11:38	03/06/20 19:31	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	3230	699	5	03/05/20 11:38	03/06/20 19:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3230	727	5	03/05/20 11:38	03/06/20 19:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3230	711	5	03/05/20 11:38	03/06/20 19:31	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	6460	2250	5	03/05/20 11:38	03/06/20 19:31	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	3230	1070	5	03/05/20 11:38	03/06/20 19:31	120-83-2	
Diethylphthalate	ND	ug/kg	3230	701	5	03/05/20 11:38	03/06/20 19:31	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	3230	805	5	03/05/20 11:38	03/06/20 19:31	105-67-9	
Dimethylphthalate	ND	ug/kg	3230	730	5	03/05/20 11:38	03/06/20 19:31	131-11-3	
Di-n-butylphthalate	ND	ug/kg	3230	797	5	03/05/20 11:38	03/06/20 19:31	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	6460	5210	5	03/05/20 11:38	03/06/20 19:31	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	16200	10300	5	03/05/20 11:38	03/06/20 19:31	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	3230	856	5	03/05/20 11:38	03/06/20 19:31	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	3230	845	5	03/05/20 11:38	03/06/20 19:31	606-20-2	
Di-n-octylphthalate	ND	ug/kg	3230	1840	5	03/05/20 11:38	03/06/20 19:31	117-84-0	v1
bis(2-Ethylhexyl)phthalate	ND	ug/kg	3230	1060	5	03/05/20 11:38	03/06/20 19:31	117-81-7	
Fluoranthene	16300	ug/kg	3230	976	5	03/05/20 11:38	03/06/20 19:31	206-44-0	
Fluorene	1420J	ug/kg	3230	864	5	03/05/20 11:38	03/06/20 19:31	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	3230	785	5	03/05/20 11:38	03/06/20 19:31	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	3230	820	5	03/05/20 11:38	03/06/20 19:31	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	3230	1290	5	03/05/20 11:38	03/06/20 19:31	77-47-4	
Hexachloroethane	ND	ug/kg	3230	736	5	03/05/20 11:38	03/06/20 19:31	67-72-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-15_SE_20200301 (0.5-1.0) **Lab ID:** 92467731008 **Collected:** 03/01/20 16:40 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	4040	ug/kg	3230	1480	5	03/05/20 11:38	03/06/20 19:31	193-39-5	
Isophorone	ND	ug/kg	3230	702	5	03/05/20 11:38	03/06/20 19:31	78-59-1	
1-Methylnaphthalene	ND	ug/kg	3230	861	5	03/05/20 11:38	03/06/20 19:31	90-12-0	
2-Methylnaphthalene	ND	ug/kg	3230	822	5	03/05/20 11:38	03/06/20 19:31	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	3230	716	5	03/05/20 11:38	03/06/20 19:31	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	3230	813	5	03/05/20 11:38	03/06/20 19:31	15831-10-4	
Naphthalene	ND	ug/kg	3230	773	5	03/05/20 11:38	03/06/20 19:31	91-20-3	
2-Nitroaniline	ND	ug/kg	16200	1630	5	03/05/20 11:38	03/06/20 19:31	88-74-4	
3-Nitroaniline	ND	ug/kg	16200	1710	5	03/05/20 11:38	03/06/20 19:31	99-09-2	
4-Nitroaniline	ND	ug/kg	6460	1600	5	03/05/20 11:38	03/06/20 19:31	100-01-6	
Nitrobenzene	ND	ug/kg	3230	771	5	03/05/20 11:38	03/06/20 19:31	98-95-3	
2-Nitrophenol	ND	ug/kg	3230	999	5	03/05/20 11:38	03/06/20 19:31	88-75-5	
4-Nitrophenol	ND	ug/kg	16200	5150	5	03/05/20 11:38	03/06/20 19:31	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	3230	908	5	03/05/20 11:38	03/06/20 19:31	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	3230	905	5	03/05/20 11:38	03/06/20 19:31	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	3230	824	5	03/05/20 11:38	03/06/20 19:31	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	3230	898	5	03/05/20 11:38	03/06/20 19:31	108-60-1	
Pentachlorophenol	ND	ug/kg	6460	1480	5	03/05/20 11:38	03/06/20 19:31	87-86-5	
Phenanthrene	10400	ug/kg	3230	814	5	03/05/20 11:38	03/06/20 19:31	85-01-8	
Phenol	ND	ug/kg	3230	771	5	03/05/20 11:38	03/06/20 19:31	108-95-2	
Pyrene	16100	ug/kg	3230	889	5	03/05/20 11:38	03/06/20 19:31	129-00-0	
Pyridine	ND	ug/kg	3230	817	5	03/05/20 11:38	03/06/20 19:31	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	3230	740	5	03/05/20 11:38	03/06/20 19:31	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	3230	839	5	03/05/20 11:38	03/06/20 19:31	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	3230	812	5	03/05/20 11:38	03/06/20 19:31	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	44	%	23-110		5	03/05/20 11:38	03/06/20 19:31	4165-60-0	D3
2-Fluorobiphenyl (S)	41	%	30-110		5	03/05/20 11:38	03/06/20 19:31	321-60-8	
Terphenyl-d14 (S)	30	%	28-110		5	03/05/20 11:38	03/06/20 19:31	1718-51-0	
Phenol-d6 (S)	51	%	22-110		5	03/05/20 11:38	03/06/20 19:31	13127-88-3	
2-Fluorophenol (S)	49	%	13-110		5	03/05/20 11:38	03/06/20 19:31	367-12-4	
2,4,6-Tribromophenol (S)	54	%	27-110		5	03/05/20 11:38	03/06/20 19:31	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	39.0J	ug/kg	201	19.0	1	03/05/20 11:29	03/05/20 13:50	67-64-1	
Benzene	ND	ug/kg	10.1	1.8	1	03/05/20 11:29	03/05/20 13:50	71-43-2	
Bromobenzene	ND	ug/kg	10.1	2.7	1	03/05/20 11:29	03/05/20 13:50	108-86-1	
Bromochloromethane	ND	ug/kg	10.1	2.5	1	03/05/20 11:29	03/05/20 13:50	74-97-5	
Bromodichloromethane	ND	ug/kg	10.1	2.0	1	03/05/20 11:29	03/05/20 13:50	75-27-4	
Bromoform	ND	ug/kg	10.1	4.9	1	03/05/20 11:29	03/05/20 13:50	75-25-2	
Bromomethane	ND	ug/kg	20.1	4.8	1	03/05/20 11:29	03/05/20 13:50	74-83-9	
2-Butanone (MEK)	ND	ug/kg	201	24.0	1	03/05/20 11:29	03/05/20 13:50	78-93-3	
n-Butylbenzene	ND	ug/kg	10.1	5.7	1	03/05/20 11:29	03/05/20 13:50	104-51-8	
sec-Butylbenzene	ND	ug/kg	10.1	4.3	1	03/05/20 11:29	03/05/20 13:50	135-98-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-15_SE_20200301 (0.5-1.0) **Lab ID:** 92467731008 **Collected:** 03/01/20 16:40 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	10.1	3.4	1	03/05/20 11:29	03/05/20 13:50	98-06-6	
Carbon tetrachloride	ND	ug/kg	10.1	1.9	1	03/05/20 11:29	03/05/20 13:50	56-23-5	
Chlorobenzene	ND	ug/kg	10.1	1.9	1	03/05/20 11:29	03/05/20 13:50	108-90-7	
Chloroethane	ND	ug/kg	20.1	4.2	1	03/05/20 11:29	03/05/20 13:50	75-00-3	
Chloroform	ND	ug/kg	10.1	2.1	1	03/05/20 11:29	03/05/20 13:50	67-66-3	
Chloromethane	ND	ug/kg	20.1	6.6	1	03/05/20 11:29	03/05/20 13:50	74-87-3	
2-Chlorotoluene	ND	ug/kg	10.1	3.1	1	03/05/20 11:29	03/05/20 13:50	95-49-8	
4-Chlorotoluene	ND	ug/kg	10.1	3.0	1	03/05/20 11:29	03/05/20 13:50	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	10.1	5.1	1	03/05/20 11:29	03/05/20 13:50	96-12-8	
Dibromochloromethane	ND	ug/kg	10.1	5.0	1	03/05/20 11:29	03/05/20 13:50	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	10.1	2.3	1	03/05/20 11:29	03/05/20 13:50	106-93-4	
Dibromomethane	ND	ug/kg	10.1	3.0	1	03/05/20 11:29	03/05/20 13:50	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	10.1	3.5	1	03/05/20 11:29	03/05/20 13:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	10.1	3.6	1	03/05/20 11:29	03/05/20 13:50	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	10.1	3.5	1	03/05/20 11:29	03/05/20 13:50	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	20.1	8.3	1	03/05/20 11:29	03/05/20 13:50	75-71-8	
1,1-Dichloroethane	ND	ug/kg	10.1	1.5	1	03/05/20 11:29	03/05/20 13:50	75-34-3	
1,2-Dichloroethane	ND	ug/kg	10.1	2.0	1	03/05/20 11:29	03/05/20 13:50	107-06-2	
1,1-Dichloroethene	ND	ug/kg	10.1	2.3	1	03/05/20 11:29	03/05/20 13:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	10.1	1.7	1	03/05/20 11:29	03/05/20 13:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	10.1	2.0	1	03/05/20 11:29	03/05/20 13:50	156-60-5	
1,2-Dichloropropane	ND	ug/kg	10.1	3.8	1	03/05/20 11:29	03/05/20 13:50	78-87-5	
1,3-Dichloropropane	ND	ug/kg	10.1	3.8	1	03/05/20 11:29	03/05/20 13:50	142-28-9	
2,2-Dichloropropane	ND	ug/kg	10.1	0.99	1	03/05/20 11:29	03/05/20 13:50	594-20-7	
1,1-Dichloropropene	ND	ug/kg	10.1	4.3	1	03/05/20 11:29	03/05/20 13:50	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	10.1	4.6	1	03/05/20 11:29	03/05/20 13:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	10.1	1.8	1	03/05/20 11:29	03/05/20 13:50	10061-02-6	
Diisopropyl ether	ND	ug/kg	10.1	5.8	1	03/05/20 11:29	03/05/20 13:50	108-20-3	
Ethylbenzene	ND	ug/kg	10.1	2.1	1	03/05/20 11:29	03/05/20 13:50	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	10.1	5.0	1	03/05/20 11:29	03/05/20 13:50	87-68-3	
2-Hexanone	ND	ug/kg	101	10.4	1	03/05/20 11:29	03/05/20 13:50	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	10.1	2.9	1	03/05/20 11:29	03/05/20 13:50	98-82-8	
p-Isopropyltoluene	ND	ug/kg	10.1	4.9	1	03/05/20 11:29	03/05/20 13:50	99-87-6	
Methylene Chloride	ND	ug/kg	40.3	11.9	1	03/05/20 11:29	03/05/20 13:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	101	7.5	1	03/05/20 11:29	03/05/20 13:50	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	10.1	5.8	1	03/05/20 11:29	03/05/20 13:50	1634-04-4	
Naphthalene	ND	ug/kg	10.1	8.6	1	03/05/20 11:29	03/05/20 13:50	91-20-3	
n-Propylbenzene	ND	ug/kg	10.1	3.4	1	03/05/20 11:29	03/05/20 13:50	103-65-1	
Styrene	ND	ug/kg	10.1	3.0	1	03/05/20 11:29	03/05/20 13:50	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	10.1	2.5	1	03/05/20 11:29	03/05/20 13:50	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	10.1	3.5	1	03/05/20 11:29	03/05/20 13:50	79-34-5	
Tetrachloroethene	ND	ug/kg	10.1	3.2	1	03/05/20 11:29	03/05/20 13:50	127-18-4	
Toluene	ND	ug/kg	10.1	3.3	1	03/05/20 11:29	03/05/20 13:50	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	10.1	7.2	1	03/05/20 11:29	03/05/20 13:50	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-15_SE_20200301 (0.5-1.0) **Lab ID:** 92467731008 **Collected:** 03/01/20 16:40 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	10.1	5.3	1	03/05/20 11:29	03/05/20 13:50	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	10.1	1.8	1	03/05/20 11:29	03/05/20 13:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	10.1	2.3	1	03/05/20 11:29	03/05/20 13:50	79-00-5	
Trichloroethene	ND	ug/kg	10.1	2.6	1	03/05/20 11:29	03/05/20 13:50	79-01-6	
Trichlorofluoromethane	ND	ug/kg	10.1	2.4	1	03/05/20 11:29	03/05/20 13:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	10.1	3.4	1	03/05/20 11:29	03/05/20 13:50	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	10.1	3.9	1	03/05/20 11:29	03/05/20 13:50	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	10.1	3.4	1	03/05/20 11:29	03/05/20 13:50	108-67-8	
Vinyl acetate	ND	ug/kg	101	32.8	1	03/05/20 11:29	03/05/20 13:50	108-05-4	
Vinyl chloride	ND	ug/kg	20.1	3.8	1	03/05/20 11:29	03/05/20 13:50	75-01-4	
Xylene (Total)	ND	ug/kg	20.1	7.0	1	03/05/20 11:29	03/05/20 13:50	1330-20-7	
m&p-Xylene	ND	ug/kg	20.1	4.8	1	03/05/20 11:29	03/05/20 13:50	179601-23-1	
o-Xylene	ND	ug/kg	10.1	2.4	1	03/05/20 11:29	03/05/20 13:50	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	70-130		1	03/05/20 11:29	03/05/20 13:50	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130		1	03/05/20 11:29	03/05/20 13:50	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-132		1	03/05/20 11:29	03/05/20 13:50	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	49.4	%	0.10	0.10	1		03/04/20 12:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (0.5-1.0) **Lab ID:** 92467731009 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	553	142	1	03/05/20 11:38	03/06/20 12:44	83-32-9	
Acenaphthylene	ND	ug/kg	553	131	1	03/05/20 11:38	03/06/20 12:44	208-96-8	
Aniline	ND	ug/kg	553	124	1	03/05/20 11:38	03/06/20 12:44	62-53-3	
Anthracene	ND	ug/kg	553	143	1	03/05/20 11:38	03/06/20 12:44	120-12-7	
Benzo(a)anthracene	824	ug/kg	553	176	1	03/05/20 11:38	03/06/20 12:44	56-55-3	
Benzo(a)pyrene	739	ug/kg	553	239	1	03/05/20 11:38	03/06/20 12:44	50-32-8	
Benzo(b)fluoranthene	827	ug/kg	553	223	1	03/05/20 11:38	03/06/20 12:44	205-99-2	
Benzo(g,h,i)perylene	337J	ug/kg	553	216	1	03/05/20 11:38	03/06/20 12:44	191-24-2	
Benzo(k)fluoranthene	358J	ug/kg	553	233	1	03/05/20 11:38	03/06/20 12:44	207-08-9	
Benzoic Acid	ND	ug/kg	2760	596	1	03/05/20 11:38	03/06/20 12:44	65-85-0	
Benzyl alcohol	ND	ug/kg	1110	293	1	03/05/20 11:38	03/06/20 12:44	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	553	145	1	03/05/20 11:38	03/06/20 12:44	101-55-3	
Butylbenzylphthalate	ND	ug/kg	553	147	1	03/05/20 11:38	03/06/20 12:44	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	1110	337	1	03/05/20 11:38	03/06/20 12:44	59-50-7	
4-Chloroaniline	ND	ug/kg	1110	338	1	03/05/20 11:38	03/06/20 12:44	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	553	148	1	03/05/20 11:38	03/06/20 12:44	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	553	117	1	03/05/20 11:38	03/06/20 12:44	111-44-4	
2-Chloronaphthalene	ND	ug/kg	553	123	1	03/05/20 11:38	03/06/20 12:44	91-58-7	
2-Chlorophenol	ND	ug/kg	553	129	1	03/05/20 11:38	03/06/20 12:44	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	553	144	1	03/05/20 11:38	03/06/20 12:44	7005-72-3	
Chrysene	720	ug/kg	553	160	1	03/05/20 11:38	03/06/20 12:44	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	553	221	1	03/05/20 11:38	03/06/20 12:44	53-70-3	
Dibenzofuran	ND	ug/kg	553	138	1	03/05/20 11:38	03/06/20 12:44	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	553	120	1	03/05/20 11:38	03/06/20 12:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	553	124	1	03/05/20 11:38	03/06/20 12:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	553	122	1	03/05/20 11:38	03/06/20 12:44	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1110	385	1	03/05/20 11:38	03/06/20 12:44	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	553	183	1	03/05/20 11:38	03/06/20 12:44	120-83-2	
Diethylphthalate	ND	ug/kg	553	120	1	03/05/20 11:38	03/06/20 12:44	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	553	138	1	03/05/20 11:38	03/06/20 12:44	105-67-9	
Dimethylphthalate	ND	ug/kg	553	125	1	03/05/20 11:38	03/06/20 12:44	131-11-3	
Di-n-butylphthalate	ND	ug/kg	553	136	1	03/05/20 11:38	03/06/20 12:44	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1110	891	1	03/05/20 11:38	03/06/20 12:44	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2760	1760	1	03/05/20 11:38	03/06/20 12:44	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	553	146	1	03/05/20 11:38	03/06/20 12:44	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	553	145	1	03/05/20 11:38	03/06/20 12:44	606-20-2	
Di-n-octylphthalate	ND	ug/kg	553	315	1	03/05/20 11:38	03/06/20 12:44	117-84-0	v1
bis(2-Ethylhexyl)phthalate	ND	ug/kg	553	181	1	03/05/20 11:38	03/06/20 12:44	117-81-7	
Fluoranthene	1080	ug/kg	553	167	1	03/05/20 11:38	03/06/20 12:44	206-44-0	
Fluorene	ND	ug/kg	553	148	1	03/05/20 11:38	03/06/20 12:44	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	553	134	1	03/05/20 11:38	03/06/20 12:44	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	553	140	1	03/05/20 11:38	03/06/20 12:44	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	553	221	1	03/05/20 11:38	03/06/20 12:44	77-47-4	
Hexachloroethane	ND	ug/kg	553	126	1	03/05/20 11:38	03/06/20 12:44	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (0.5-1.0) **Lab ID:** 92467731009 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	338J	ug/kg	553	253	1	03/05/20 11:38	03/06/20 12:44	193-39-5	
Isophorone	ND	ug/kg	553	120	1	03/05/20 11:38	03/06/20 12:44	78-59-1	
1-Methylnaphthalene	ND	ug/kg	553	147	1	03/05/20 11:38	03/06/20 12:44	90-12-0	
2-Methylnaphthalene	ND	ug/kg	553	141	1	03/05/20 11:38	03/06/20 12:44	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	553	122	1	03/05/20 11:38	03/06/20 12:44	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	553	139	1	03/05/20 11:38	03/06/20 12:44	15831-10-4	
Naphthalene	ND	ug/kg	553	132	1	03/05/20 11:38	03/06/20 12:44	91-20-3	
2-Nitroaniline	ND	ug/kg	2760	278	1	03/05/20 11:38	03/06/20 12:44	88-74-4	
3-Nitroaniline	ND	ug/kg	2760	293	1	03/05/20 11:38	03/06/20 12:44	99-09-2	
4-Nitroaniline	ND	ug/kg	1110	273	1	03/05/20 11:38	03/06/20 12:44	100-01-6	
Nitrobenzene	ND	ug/kg	553	132	1	03/05/20 11:38	03/06/20 12:44	98-95-3	
2-Nitrophenol	ND	ug/kg	553	171	1	03/05/20 11:38	03/06/20 12:44	88-75-5	
4-Nitrophenol	ND	ug/kg	2760	881	1	03/05/20 11:38	03/06/20 12:44	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	553	155	1	03/05/20 11:38	03/06/20 12:44	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	553	155	1	03/05/20 11:38	03/06/20 12:44	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	553	141	1	03/05/20 11:38	03/06/20 12:44	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	553	154	1	03/05/20 11:38	03/06/20 12:44	108-60-1	
Pentachlorophenol	ND	ug/kg	1110	253	1	03/05/20 11:38	03/06/20 12:44	87-86-5	
Phenanthrene	143J	ug/kg	553	139	1	03/05/20 11:38	03/06/20 12:44	85-01-8	
Phenol	ND	ug/kg	553	132	1	03/05/20 11:38	03/06/20 12:44	108-95-2	
Pyrene	962	ug/kg	553	152	1	03/05/20 11:38	03/06/20 12:44	129-00-0	
Pyridine	ND	ug/kg	553	140	1	03/05/20 11:38	03/06/20 12:44	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	553	127	1	03/05/20 11:38	03/06/20 12:44	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	553	144	1	03/05/20 11:38	03/06/20 12:44	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	553	139	1	03/05/20 11:38	03/06/20 12:44	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	76	%	23-110		1	03/05/20 11:38	03/06/20 12:44	4165-60-0	
2-Fluorobiphenyl (S)	62	%	30-110		1	03/05/20 11:38	03/06/20 12:44	321-60-8	
Terphenyl-d14 (S)	52	%	28-110		1	03/05/20 11:38	03/06/20 12:44	1718-51-0	
Phenol-d6 (S)	65	%	22-110		1	03/05/20 11:38	03/06/20 12:44	13127-88-3	
2-Fluorophenol (S)	68	%	13-110		1	03/05/20 11:38	03/06/20 12:44	367-12-4	
2,4,6-Tribromophenol (S)	73	%	27-110		1	03/05/20 11:38	03/06/20 12:44	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	104J	ug/kg	412	38.9	1	03/05/20 11:29	03/05/20 14:15	67-64-1	
Benzene	ND	ug/kg	20.6	3.7	1	03/05/20 11:29	03/05/20 14:15	71-43-2	
Bromobenzene	ND	ug/kg	20.6	5.6	1	03/05/20 11:29	03/05/20 14:15	108-86-1	
Bromochloromethane	ND	ug/kg	20.6	5.1	1	03/05/20 11:29	03/05/20 14:15	74-97-5	
Bromodichloromethane	ND	ug/kg	20.6	4.0	1	03/05/20 11:29	03/05/20 14:15	75-27-4	
Bromoform	ND	ug/kg	20.6	10.0	1	03/05/20 11:29	03/05/20 14:15	75-25-2	
Bromomethane	ND	ug/kg	41.2	9.7	1	03/05/20 11:29	03/05/20 14:15	74-83-9	
2-Butanone (MEK)	ND	ug/kg	412	49.0	1	03/05/20 11:29	03/05/20 14:15	78-93-3	
n-Butylbenzene	ND	ug/kg	20.6	11.6	1	03/05/20 11:29	03/05/20 14:15	104-51-8	
sec-Butylbenzene	ND	ug/kg	20.6	8.7	1	03/05/20 11:29	03/05/20 14:15	135-98-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (0.5-1.0) **Lab ID:** 92467731009 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	20.6	7.0	1	03/05/20 11:29	03/05/20 14:15	98-06-6	
Carbon tetrachloride	ND	ug/kg	20.6	3.9	1	03/05/20 11:29	03/05/20 14:15	56-23-5	
Chlorobenzene	ND	ug/kg	20.6	4.0	1	03/05/20 11:29	03/05/20 14:15	108-90-7	
Chloroethane	ND	ug/kg	41.2	8.6	1	03/05/20 11:29	03/05/20 14:15	75-00-3	
Chloroform	ND	ug/kg	20.6	4.4	1	03/05/20 11:29	03/05/20 14:15	67-66-3	
Chloromethane	ND	ug/kg	41.2	13.5	1	03/05/20 11:29	03/05/20 14:15	74-87-3	
2-Chlorotoluene	ND	ug/kg	20.6	6.3	1	03/05/20 11:29	03/05/20 14:15	95-49-8	
4-Chlorotoluene	ND	ug/kg	20.6	6.2	1	03/05/20 11:29	03/05/20 14:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	20.6	10.5	1	03/05/20 11:29	03/05/20 14:15	96-12-8	
Dibromochloromethane	ND	ug/kg	20.6	10.3	1	03/05/20 11:29	03/05/20 14:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	20.6	4.6	1	03/05/20 11:29	03/05/20 14:15	106-93-4	
Dibromomethane	ND	ug/kg	20.6	6.1	1	03/05/20 11:29	03/05/20 14:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	20.6	7.2	1	03/05/20 11:29	03/05/20 14:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	20.6	7.3	1	03/05/20 11:29	03/05/20 14:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	20.6	7.1	1	03/05/20 11:29	03/05/20 14:15	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	41.2	16.9	1	03/05/20 11:29	03/05/20 14:15	75-71-8	
1,1-Dichloroethane	ND	ug/kg	20.6	3.0	1	03/05/20 11:29	03/05/20 14:15	75-34-3	
1,2-Dichloroethane	ND	ug/kg	20.6	4.1	1	03/05/20 11:29	03/05/20 14:15	107-06-2	
1,1-Dichloroethene	ND	ug/kg	20.6	4.8	1	03/05/20 11:29	03/05/20 14:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	20.6	3.6	1	03/05/20 11:29	03/05/20 14:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	20.6	4.0	1	03/05/20 11:29	03/05/20 14:15	156-60-5	
1,2-Dichloropropane	ND	ug/kg	20.6	7.7	1	03/05/20 11:29	03/05/20 14:15	78-87-5	
1,3-Dichloropropane	ND	ug/kg	20.6	7.8	1	03/05/20 11:29	03/05/20 14:15	142-28-9	
2,2-Dichloropropane	ND	ug/kg	20.6	2.0	1	03/05/20 11:29	03/05/20 14:15	594-20-7	
1,1-Dichloropropene	ND	ug/kg	20.6	8.7	1	03/05/20 11:29	03/05/20 14:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	20.6	9.3	1	03/05/20 11:29	03/05/20 14:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	20.6	3.6	1	03/05/20 11:29	03/05/20 14:15	10061-02-6	
Diisopropyl ether	ND	ug/kg	20.6	11.8	1	03/05/20 11:29	03/05/20 14:15	108-20-3	
Ethylbenzene	ND	ug/kg	20.6	4.4	1	03/05/20 11:29	03/05/20 14:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	20.6	10.2	1	03/05/20 11:29	03/05/20 14:15	87-68-3	
2-Hexanone	ND	ug/kg	206	21.3	1	03/05/20 11:29	03/05/20 14:15	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	20.6	6.0	1	03/05/20 11:29	03/05/20 14:15	98-82-8	
p-Isopropyltoluene	23.3	ug/kg	20.6	9.9	1	03/05/20 11:29	03/05/20 14:15	99-87-6	
Methylene Chloride	ND	ug/kg	82.3	24.3	1	03/05/20 11:29	03/05/20 14:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	206	15.4	1	03/05/20 11:29	03/05/20 14:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	20.6	11.8	1	03/05/20 11:29	03/05/20 14:15	1634-04-4	
Naphthalene	ND	ug/kg	20.6	17.5	1	03/05/20 11:29	03/05/20 14:15	91-20-3	
n-Propylbenzene	ND	ug/kg	20.6	6.9	1	03/05/20 11:29	03/05/20 14:15	103-65-1	
Styrene	ND	ug/kg	20.6	6.1	1	03/05/20 11:29	03/05/20 14:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	20.6	5.1	1	03/05/20 11:29	03/05/20 14:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	20.6	7.1	1	03/05/20 11:29	03/05/20 14:15	79-34-5	
Tetrachloroethene	ND	ug/kg	20.6	6.5	1	03/05/20 11:29	03/05/20 14:15	127-18-4	
Toluene	ND	ug/kg	20.6	6.7	1	03/05/20 11:29	03/05/20 14:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	20.6	14.7	1	03/05/20 11:29	03/05/20 14:15	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (0.5-1.0) **Lab ID:** 92467731009 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	20.6	10.9	1	03/05/20 11:29	03/05/20 14:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	20.6	3.6	1	03/05/20 11:29	03/05/20 14:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	20.6	4.7	1	03/05/20 11:29	03/05/20 14:15	79-00-5	
Trichloroethene	ND	ug/kg	20.6	5.4	1	03/05/20 11:29	03/05/20 14:15	79-01-6	
Trichlorofluoromethane	ND	ug/kg	20.6	4.9	1	03/05/20 11:29	03/05/20 14:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	20.6	7.0	1	03/05/20 11:29	03/05/20 14:15	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	20.6	8.0	1	03/05/20 11:29	03/05/20 14:15	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	20.6	6.9	1	03/05/20 11:29	03/05/20 14:15	108-67-8	
Vinyl acetate	ND	ug/kg	206	67.1	1	03/05/20 11:29	03/05/20 14:15	108-05-4	
Vinyl chloride	ND	ug/kg	41.2	7.8	1	03/05/20 11:29	03/05/20 14:15	75-01-4	
Xylene (Total)	ND	ug/kg	41.2	14.4	1	03/05/20 11:29	03/05/20 14:15	1330-20-7	
m&p-Xylene	ND	ug/kg	41.2	9.7	1	03/05/20 11:29	03/05/20 14:15	179601-23-1	
o-Xylene	ND	ug/kg	20.6	4.8	1	03/05/20 11:29	03/05/20 14:15	95-47-6	
Surrogates									
Toluene-d8 (S)	102	%	70-130		1	03/05/20 11:29	03/05/20 14:15	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130		1	03/05/20 11:29	03/05/20 14:15	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	70-132		1	03/05/20 11:29	03/05/20 14:15	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	39.3	%	0.10	0.10	1		03/04/20 12:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (1.0-2.0) **Lab ID:** 92467731010 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	488	125	1	03/05/20 11:38	03/06/20 15:54	83-32-9	
Acenaphthylene	ND	ug/kg	488	115	1	03/05/20 11:38	03/06/20 15:54	208-96-8	
Aniline	ND	ug/kg	488	109	1	03/05/20 11:38	03/06/20 15:54	62-53-3	
Anthracene	ND	ug/kg	488	126	1	03/05/20 11:38	03/06/20 15:54	120-12-7	
Benzo(a)anthracene	ND	ug/kg	488	155	1	03/05/20 11:38	03/06/20 15:54	56-55-3	
Benzo(a)pyrene	ND	ug/kg	488	211	1	03/05/20 11:38	03/06/20 15:54	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	488	196	1	03/05/20 11:38	03/06/20 15:54	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	488	191	1	03/05/20 11:38	03/06/20 15:54	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	488	205	1	03/05/20 11:38	03/06/20 15:54	207-08-9	
Benzoic Acid	ND	ug/kg	2440	526	1	03/05/20 11:38	03/06/20 15:54	65-85-0	
Benzyl alcohol	ND	ug/kg	975	259	1	03/05/20 11:38	03/06/20 15:54	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	488	128	1	03/05/20 11:38	03/06/20 15:54	101-55-3	
Butylbenzylphthalate	ND	ug/kg	488	130	1	03/05/20 11:38	03/06/20 15:54	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	975	297	1	03/05/20 11:38	03/06/20 15:54	59-50-7	
4-Chloroaniline	ND	ug/kg	975	298	1	03/05/20 11:38	03/06/20 15:54	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	488	130	1	03/05/20 11:38	03/06/20 15:54	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	488	104	1	03/05/20 11:38	03/06/20 15:54	111-44-4	
2-Chloronaphthalene	ND	ug/kg	488	109	1	03/05/20 11:38	03/06/20 15:54	91-58-7	
2-Chlorophenol	ND	ug/kg	488	113	1	03/05/20 11:38	03/06/20 15:54	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	488	127	1	03/05/20 11:38	03/06/20 15:54	7005-72-3	
Chrysene	ND	ug/kg	488	142	1	03/05/20 11:38	03/06/20 15:54	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	488	195	1	03/05/20 11:38	03/06/20 15:54	53-70-3	
Dibenzofuran	ND	ug/kg	488	122	1	03/05/20 11:38	03/06/20 15:54	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	488	105	1	03/05/20 11:38	03/06/20 15:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	488	110	1	03/05/20 11:38	03/06/20 15:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	488	107	1	03/05/20 11:38	03/06/20 15:54	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	975	340	1	03/05/20 11:38	03/06/20 15:54	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	488	161	1	03/05/20 11:38	03/06/20 15:54	120-83-2	
Diethylphthalate	ND	ug/kg	488	106	1	03/05/20 11:38	03/06/20 15:54	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	488	121	1	03/05/20 11:38	03/06/20 15:54	105-67-9	
Dimethylphthalate	ND	ug/kg	488	110	1	03/05/20 11:38	03/06/20 15:54	131-11-3	
Di-n-butylphthalate	ND	ug/kg	488	120	1	03/05/20 11:38	03/06/20 15:54	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	975	786	1	03/05/20 11:38	03/06/20 15:54	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2440	1560	1	03/05/20 11:38	03/06/20 15:54	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	488	129	1	03/05/20 11:38	03/06/20 15:54	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	488	128	1	03/05/20 11:38	03/06/20 15:54	606-20-2	
Di-n-octylphthalate	ND	ug/kg	488	278	1	03/05/20 11:38	03/06/20 15:54	117-84-0	v1
bis(2-Ethylhexyl)phthalate	ND	ug/kg	488	160	1	03/05/20 11:38	03/06/20 15:54	117-81-7	
Fluoranthene	ND	ug/kg	488	147	1	03/05/20 11:38	03/06/20 15:54	206-44-0	
Fluorene	ND	ug/kg	488	130	1	03/05/20 11:38	03/06/20 15:54	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	488	118	1	03/05/20 11:38	03/06/20 15:54	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	488	124	1	03/05/20 11:38	03/06/20 15:54	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	488	195	1	03/05/20 11:38	03/06/20 15:54	77-47-4	
Hexachloroethane	ND	ug/kg	488	111	1	03/05/20 11:38	03/06/20 15:54	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (1.0-2.0) **Lab ID:** 92467731010 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	ND	ug/kg	488	223	1	03/05/20 11:38	03/06/20 15:54	193-39-5	
Isophorone	ND	ug/kg	488	106	1	03/05/20 11:38	03/06/20 15:54	78-59-1	
1-Methylnaphthalene	ND	ug/kg	488	130	1	03/05/20 11:38	03/06/20 15:54	90-12-0	
2-Methylnaphthalene	ND	ug/kg	488	124	1	03/05/20 11:38	03/06/20 15:54	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	488	108	1	03/05/20 11:38	03/06/20 15:54	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	488	123	1	03/05/20 11:38	03/06/20 15:54	15831-10-4	
Naphthalene	ND	ug/kg	488	117	1	03/05/20 11:38	03/06/20 15:54	91-20-3	
2-Nitroaniline	ND	ug/kg	2440	245	1	03/05/20 11:38	03/06/20 15:54	88-74-4	
3-Nitroaniline	ND	ug/kg	2440	259	1	03/05/20 11:38	03/06/20 15:54	99-09-2	
4-Nitroaniline	ND	ug/kg	975	241	1	03/05/20 11:38	03/06/20 15:54	100-01-6	
Nitrobenzene	ND	ug/kg	488	116	1	03/05/20 11:38	03/06/20 15:54	98-95-3	
2-Nitrophenol	ND	ug/kg	488	151	1	03/05/20 11:38	03/06/20 15:54	88-75-5	
4-Nitrophenol	ND	ug/kg	2440	777	1	03/05/20 11:38	03/06/20 15:54	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	488	137	1	03/05/20 11:38	03/06/20 15:54	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	488	137	1	03/05/20 11:38	03/06/20 15:54	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	488	124	1	03/05/20 11:38	03/06/20 15:54	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	488	135	1	03/05/20 11:38	03/06/20 15:54	108-60-1	
Pentachlorophenol	ND	ug/kg	975	223	1	03/05/20 11:38	03/06/20 15:54	87-86-5	
Phenanthrene	ND	ug/kg	488	123	1	03/05/20 11:38	03/06/20 15:54	85-01-8	
Phenol	ND	ug/kg	488	116	1	03/05/20 11:38	03/06/20 15:54	108-95-2	
Pyrene	ND	ug/kg	488	134	1	03/05/20 11:38	03/06/20 15:54	129-00-0	
Pyridine	ND	ug/kg	488	123	1	03/05/20 11:38	03/06/20 15:54	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	488	112	1	03/05/20 11:38	03/06/20 15:54	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	488	127	1	03/05/20 11:38	03/06/20 15:54	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	488	122	1	03/05/20 11:38	03/06/20 15:54	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	70	%	23-110		1	03/05/20 11:38	03/06/20 15:54	4165-60-0	
2-Fluorobiphenyl (S)	54	%	30-110		1	03/05/20 11:38	03/06/20 15:54	321-60-8	
Terphenyl-d14 (S)	58	%	28-110		1	03/05/20 11:38	03/06/20 15:54	1718-51-0	
Phenol-d6 (S)	58	%	22-110		1	03/05/20 11:38	03/06/20 15:54	13127-88-3	
2-Fluorophenol (S)	63	%	13-110		1	03/05/20 11:38	03/06/20 15:54	367-12-4	
2,4,6-Tribromophenol (S)	64	%	27-110		1	03/05/20 11:38	03/06/20 15:54	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	ND	ug/kg	124	11.7	1	03/05/20 11:29	03/05/20 14:40	67-64-1	
Benzene	ND	ug/kg	6.2	1.1	1	03/05/20 11:29	03/05/20 14:40	71-43-2	
Bromobenzene	ND	ug/kg	6.2	1.7	1	03/05/20 11:29	03/05/20 14:40	108-86-1	
Bromochloromethane	ND	ug/kg	6.2	1.5	1	03/05/20 11:29	03/05/20 14:40	74-97-5	
Bromodichloromethane	ND	ug/kg	6.2	1.2	1	03/05/20 11:29	03/05/20 14:40	75-27-4	
Bromoform	ND	ug/kg	6.2	3.0	1	03/05/20 11:29	03/05/20 14:40	75-25-2	
Bromomethane	ND	ug/kg	12.4	2.9	1	03/05/20 11:29	03/05/20 14:40	74-83-9	
2-Butanone (MEK)	ND	ug/kg	124	14.8	1	03/05/20 11:29	03/05/20 14:40	78-93-3	
n-Butylbenzene	ND	ug/kg	6.2	3.5	1	03/05/20 11:29	03/05/20 14:40	104-51-8	
sec-Butylbenzene	ND	ug/kg	6.2	2.6	1	03/05/20 11:29	03/05/20 14:40	135-98-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (1.0-2.0) **Lab ID:** 92467731010 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	6.2	2.1	1	03/05/20 11:29	03/05/20 14:40	98-06-6	
Carbon tetrachloride	ND	ug/kg	6.2	1.2	1	03/05/20 11:29	03/05/20 14:40	56-23-5	
Chlorobenzene	ND	ug/kg	6.2	1.2	1	03/05/20 11:29	03/05/20 14:40	108-90-7	
Chloroethane	ND	ug/kg	12.4	2.6	1	03/05/20 11:29	03/05/20 14:40	75-00-3	
Chloroform	ND	ug/kg	6.2	1.3	1	03/05/20 11:29	03/05/20 14:40	67-66-3	
Chloromethane	ND	ug/kg	12.4	4.1	1	03/05/20 11:29	03/05/20 14:40	74-87-3	
2-Chlorotoluene	ND	ug/kg	6.2	1.9	1	03/05/20 11:29	03/05/20 14:40	95-49-8	
4-Chlorotoluene	ND	ug/kg	6.2	1.9	1	03/05/20 11:29	03/05/20 14:40	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	6.2	3.1	1	03/05/20 11:29	03/05/20 14:40	96-12-8	
Dibromochloromethane	ND	ug/kg	6.2	3.1	1	03/05/20 11:29	03/05/20 14:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	6.2	1.4	1	03/05/20 11:29	03/05/20 14:40	106-93-4	
Dibromomethane	ND	ug/kg	6.2	1.8	1	03/05/20 11:29	03/05/20 14:40	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	6.2	2.2	1	03/05/20 11:29	03/05/20 14:40	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	6.2	2.2	1	03/05/20 11:29	03/05/20 14:40	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	6.2	2.1	1	03/05/20 11:29	03/05/20 14:40	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	12.4	5.1	1	03/05/20 11:29	03/05/20 14:40	75-71-8	
1,1-Dichloroethane	ND	ug/kg	6.2	0.91	1	03/05/20 11:29	03/05/20 14:40	75-34-3	
1,2-Dichloroethane	ND	ug/kg	6.2	1.2	1	03/05/20 11:29	03/05/20 14:40	107-06-2	
1,1-Dichloroethene	ND	ug/kg	6.2	1.4	1	03/05/20 11:29	03/05/20 14:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	6.2	1.1	1	03/05/20 11:29	03/05/20 14:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	6.2	1.2	1	03/05/20 11:29	03/05/20 14:40	156-60-5	
1,2-Dichloropropane	ND	ug/kg	6.2	2.3	1	03/05/20 11:29	03/05/20 14:40	78-87-5	
1,3-Dichloropropane	ND	ug/kg	6.2	2.3	1	03/05/20 11:29	03/05/20 14:40	142-28-9	
2,2-Dichloropropane	ND	ug/kg	6.2	0.61	1	03/05/20 11:29	03/05/20 14:40	594-20-7	
1,1-Dichloropropene	ND	ug/kg	6.2	2.6	1	03/05/20 11:29	03/05/20 14:40	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	6.2	2.8	1	03/05/20 11:29	03/05/20 14:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	6.2	1.1	1	03/05/20 11:29	03/05/20 14:40	10061-02-6	
Diisopropyl ether	ND	ug/kg	6.2	3.5	1	03/05/20 11:29	03/05/20 14:40	108-20-3	
Ethylbenzene	ND	ug/kg	6.2	1.3	1	03/05/20 11:29	03/05/20 14:40	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	6.2	3.1	1	03/05/20 11:29	03/05/20 14:40	87-68-3	
2-Hexanone	ND	ug/kg	62.0	6.4	1	03/05/20 11:29	03/05/20 14:40	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	6.2	1.8	1	03/05/20 11:29	03/05/20 14:40	98-82-8	
p-Isopropyltoluene	ND	ug/kg	6.2	3.0	1	03/05/20 11:29	03/05/20 14:40	99-87-6	
Methylene Chloride	ND	ug/kg	24.8	7.3	1	03/05/20 11:29	03/05/20 14:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	62.0	4.6	1	03/05/20 11:29	03/05/20 14:40	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	6.2	3.5	1	03/05/20 11:29	03/05/20 14:40	1634-04-4	
Naphthalene	ND	ug/kg	6.2	5.3	1	03/05/20 11:29	03/05/20 14:40	91-20-3	
n-Propylbenzene	ND	ug/kg	6.2	2.1	1	03/05/20 11:29	03/05/20 14:40	103-65-1	
Styrene	ND	ug/kg	6.2	1.8	1	03/05/20 11:29	03/05/20 14:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.2	1.5	1	03/05/20 11:29	03/05/20 14:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.2	2.1	1	03/05/20 11:29	03/05/20 14:40	79-34-5	
Tetrachloroethene	ND	ug/kg	6.2	2.0	1	03/05/20 11:29	03/05/20 14:40	127-18-4	
Toluene	ND	ug/kg	6.2	2.0	1	03/05/20 11:29	03/05/20 14:40	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	6.2	4.4	1	03/05/20 11:29	03/05/20 14:40	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (1.0-2.0) **Lab ID:** 92467731010 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	6.2	3.3	1	03/05/20 11:29	03/05/20 14:40	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	6.2	1.1	1	03/05/20 11:29	03/05/20 14:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	6.2	1.4	1	03/05/20 11:29	03/05/20 14:40	79-00-5	
Trichloroethene	ND	ug/kg	6.2	1.6	1	03/05/20 11:29	03/05/20 14:40	79-01-6	
Trichlorofluoromethane	ND	ug/kg	6.2	1.5	1	03/05/20 11:29	03/05/20 14:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	6.2	2.1	1	03/05/20 11:29	03/05/20 14:40	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	6.2	2.4	1	03/05/20 11:29	03/05/20 14:40	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	6.2	2.1	1	03/05/20 11:29	03/05/20 14:40	108-67-8	
Vinyl acetate	ND	ug/kg	62.0	20.2	1	03/05/20 11:29	03/05/20 14:40	108-05-4	
Vinyl chloride	ND	ug/kg	12.4	2.4	1	03/05/20 11:29	03/05/20 14:40	75-01-4	
Xylene (Total)	ND	ug/kg	12.4	4.3	1	03/05/20 11:29	03/05/20 14:40	1330-20-7	
m&p-Xylene	ND	ug/kg	12.4	2.9	1	03/05/20 11:29	03/05/20 14:40	179601-23-1	
o-Xylene	ND	ug/kg	6.2	1.5	1	03/05/20 11:29	03/05/20 14:40	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	70-130		1	03/05/20 11:29	03/05/20 14:40	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		1	03/05/20 11:29	03/05/20 14:40	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-132		1	03/05/20 11:29	03/05/20 14:40	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	31.4	%	0.10	0.10	1		03/04/20 12:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (2.0-3.0) **Lab ID:** 92467731011 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	467	120	1	03/05/20 11:38	03/06/20 16:21	83-32-9	
Acenaphthylene	ND	ug/kg	467	110	1	03/05/20 11:38	03/06/20 16:21	208-96-8	
Aniline	ND	ug/kg	467	105	1	03/05/20 11:38	03/06/20 16:21	62-53-3	
Anthracene	ND	ug/kg	467	121	1	03/05/20 11:38	03/06/20 16:21	120-12-7	
Benzo(a)anthracene	ND	ug/kg	467	148	1	03/05/20 11:38	03/06/20 16:21	56-55-3	
Benzo(a)pyrene	ND	ug/kg	467	202	1	03/05/20 11:38	03/06/20 16:21	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	467	188	1	03/05/20 11:38	03/06/20 16:21	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	467	182	1	03/05/20 11:38	03/06/20 16:21	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	467	197	1	03/05/20 11:38	03/06/20 16:21	207-08-9	
Benzoic Acid	ND	ug/kg	2330	503	1	03/05/20 11:38	03/06/20 16:21	65-85-0	
Benzyl alcohol	ND	ug/kg	933	247	1	03/05/20 11:38	03/06/20 16:21	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	467	122	1	03/05/20 11:38	03/06/20 16:21	101-55-3	
Butylbenzylphthalate	ND	ug/kg	467	124	1	03/05/20 11:38	03/06/20 16:21	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	933	284	1	03/05/20 11:38	03/06/20 16:21	59-50-7	
4-Chloroaniline	ND	ug/kg	933	286	1	03/05/20 11:38	03/06/20 16:21	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	467	125	1	03/05/20 11:38	03/06/20 16:21	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	467	99.1	1	03/05/20 11:38	03/06/20 16:21	111-44-4	
2-Chloronaphthalene	ND	ug/kg	467	104	1	03/05/20 11:38	03/06/20 16:21	91-58-7	
2-Chlorophenol	ND	ug/kg	467	109	1	03/05/20 11:38	03/06/20 16:21	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	467	121	1	03/05/20 11:38	03/06/20 16:21	7005-72-3	
Chrysene	ND	ug/kg	467	135	1	03/05/20 11:38	03/06/20 16:21	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	467	187	1	03/05/20 11:38	03/06/20 16:21	53-70-3	
Dibenzofuran	ND	ug/kg	467	117	1	03/05/20 11:38	03/06/20 16:21	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	467	101	1	03/05/20 11:38	03/06/20 16:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	467	105	1	03/05/20 11:38	03/06/20 16:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	467	103	1	03/05/20 11:38	03/06/20 16:21	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	933	325	1	03/05/20 11:38	03/06/20 16:21	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	467	154	1	03/05/20 11:38	03/06/20 16:21	120-83-2	
Diethylphthalate	ND	ug/kg	467	101	1	03/05/20 11:38	03/06/20 16:21	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	467	116	1	03/05/20 11:38	03/06/20 16:21	105-67-9	
Dimethylphthalate	ND	ug/kg	467	105	1	03/05/20 11:38	03/06/20 16:21	131-11-3	
Di-n-butylphthalate	ND	ug/kg	467	115	1	03/05/20 11:38	03/06/20 16:21	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	933	752	1	03/05/20 11:38	03/06/20 16:21	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2330	1490	1	03/05/20 11:38	03/06/20 16:21	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	467	124	1	03/05/20 11:38	03/06/20 16:21	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	467	122	1	03/05/20 11:38	03/06/20 16:21	606-20-2	
Di-n-octylphthalate	ND	ug/kg	467	266	1	03/05/20 11:38	03/06/20 16:21	117-84-0	v1
bis(2-Ethylhexyl)phthalate	246J	ug/kg	467	153	1	03/05/20 11:38	03/06/20 16:21	117-81-7	
Fluoranthene	ND	ug/kg	467	141	1	03/05/20 11:38	03/06/20 16:21	206-44-0	
Fluorene	ND	ug/kg	467	125	1	03/05/20 11:38	03/06/20 16:21	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	467	113	1	03/05/20 11:38	03/06/20 16:21	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	467	118	1	03/05/20 11:38	03/06/20 16:21	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	467	187	1	03/05/20 11:38	03/06/20 16:21	77-47-4	
Hexachloroethane	ND	ug/kg	467	106	1	03/05/20 11:38	03/06/20 16:21	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (2.0-3.0) **Lab ID:** 92467731011 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	ND	ug/kg	467	213	1	03/05/20 11:38	03/06/20 16:21	193-39-5	
Isophorone	ND	ug/kg	467	101	1	03/05/20 11:38	03/06/20 16:21	78-59-1	
1-Methylnaphthalene	ND	ug/kg	467	124	1	03/05/20 11:38	03/06/20 16:21	90-12-0	
2-Methylnaphthalene	ND	ug/kg	467	119	1	03/05/20 11:38	03/06/20 16:21	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	467	103	1	03/05/20 11:38	03/06/20 16:21	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	467	117	1	03/05/20 11:38	03/06/20 16:21	15831-10-4	
Naphthalene	ND	ug/kg	467	112	1	03/05/20 11:38	03/06/20 16:21	91-20-3	
2-Nitroaniline	ND	ug/kg	2330	235	1	03/05/20 11:38	03/06/20 16:21	88-74-4	
3-Nitroaniline	ND	ug/kg	2330	247	1	03/05/20 11:38	03/06/20 16:21	99-09-2	
4-Nitroaniline	ND	ug/kg	933	230	1	03/05/20 11:38	03/06/20 16:21	100-01-6	
Nitrobenzene	ND	ug/kg	467	111	1	03/05/20 11:38	03/06/20 16:21	98-95-3	
2-Nitrophenol	ND	ug/kg	467	144	1	03/05/20 11:38	03/06/20 16:21	88-75-5	
4-Nitrophenol	ND	ug/kg	2330	744	1	03/05/20 11:38	03/06/20 16:21	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	467	131	1	03/05/20 11:38	03/06/20 16:21	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	467	131	1	03/05/20 11:38	03/06/20 16:21	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	467	119	1	03/05/20 11:38	03/06/20 16:21	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	467	130	1	03/05/20 11:38	03/06/20 16:21	108-60-1	
Pentachlorophenol	ND	ug/kg	933	213	1	03/05/20 11:38	03/06/20 16:21	87-86-5	
Phenanthrene	ND	ug/kg	467	117	1	03/05/20 11:38	03/06/20 16:21	85-01-8	
Phenol	ND	ug/kg	467	111	1	03/05/20 11:38	03/06/20 16:21	108-95-2	
Pyrene	ND	ug/kg	467	128	1	03/05/20 11:38	03/06/20 16:21	129-00-0	
Pyridine	ND	ug/kg	467	118	1	03/05/20 11:38	03/06/20 16:21	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	467	107	1	03/05/20 11:38	03/06/20 16:21	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	467	121	1	03/05/20 11:38	03/06/20 16:21	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	467	117	1	03/05/20 11:38	03/06/20 16:21	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	75	%	23-110		1	03/05/20 11:38	03/06/20 16:21	4165-60-0	
2-Fluorobiphenyl (S)	62	%	30-110		1	03/05/20 11:38	03/06/20 16:21	321-60-8	
Terphenyl-d14 (S)	59	%	28-110		1	03/05/20 11:38	03/06/20 16:21	1718-51-0	
Phenol-d6 (S)	66	%	22-110		1	03/05/20 11:38	03/06/20 16:21	13127-88-3	
2-Fluorophenol (S)	72	%	13-110		1	03/05/20 11:38	03/06/20 16:21	367-12-4	
2,4,6-Tribromophenol (S)	74	%	27-110		1	03/05/20 11:38	03/06/20 16:21	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	21.7J	ug/kg	149	14.1	1	03/05/20 11:29	03/05/20 15:05	67-64-1	
Benzene	ND	ug/kg	7.5	1.3	1	03/05/20 11:29	03/05/20 15:05	71-43-2	
Bromobenzene	ND	ug/kg	7.5	2.0	1	03/05/20 11:29	03/05/20 15:05	108-86-1	
Bromochloromethane	ND	ug/kg	7.5	1.8	1	03/05/20 11:29	03/05/20 15:05	74-97-5	
Bromodichloromethane	ND	ug/kg	7.5	1.5	1	03/05/20 11:29	03/05/20 15:05	75-27-4	
Bromoform	ND	ug/kg	7.5	3.6	1	03/05/20 11:29	03/05/20 15:05	75-25-2	
Bromomethane	ND	ug/kg	14.9	3.5	1	03/05/20 11:29	03/05/20 15:05	74-83-9	
2-Butanone (MEK)	ND	ug/kg	149	17.7	1	03/05/20 11:29	03/05/20 15:05	78-93-3	
n-Butylbenzene	ND	ug/kg	7.5	4.2	1	03/05/20 11:29	03/05/20 15:05	104-51-8	
sec-Butylbenzene	ND	ug/kg	7.5	3.2	1	03/05/20 11:29	03/05/20 15:05	135-98-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: **SW-16_SE_20200301 (2.0-3.0)** Lab ID: **92467731011** Collected: 03/01/20 15:00 Received: 03/03/20 14:00 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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	7.5	2.5	1	03/05/20 11:29	03/05/20 15:05	98-06-6	
Carbon tetrachloride	ND	ug/kg	7.5	1.4	1	03/05/20 11:29	03/05/20 15:05	56-23-5	
Chlorobenzene	ND	ug/kg	7.5	1.4	1	03/05/20 11:29	03/05/20 15:05	108-90-7	
Chloroethane	ND	ug/kg	14.9	3.1	1	03/05/20 11:29	03/05/20 15:05	75-00-3	
Chloroform	ND	ug/kg	7.5	1.6	1	03/05/20 11:29	03/05/20 15:05	67-66-3	
Chloromethane	ND	ug/kg	14.9	4.9	1	03/05/20 11:29	03/05/20 15:05	74-87-3	
2-Chlorotoluene	ND	ug/kg	7.5	2.3	1	03/05/20 11:29	03/05/20 15:05	95-49-8	
4-Chlorotoluene	ND	ug/kg	7.5	2.2	1	03/05/20 11:29	03/05/20 15:05	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	7.5	3.8	1	03/05/20 11:29	03/05/20 15:05	96-12-8	
Dibromochloromethane	ND	ug/kg	7.5	3.7	1	03/05/20 11:29	03/05/20 15:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	7.5	1.7	1	03/05/20 11:29	03/05/20 15:05	106-93-4	
Dibromomethane	ND	ug/kg	7.5	2.2	1	03/05/20 11:29	03/05/20 15:05	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	7.5	2.6	1	03/05/20 11:29	03/05/20 15:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	7.5	2.7	1	03/05/20 11:29	03/05/20 15:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	7.5	2.6	1	03/05/20 11:29	03/05/20 15:05	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	14.9	6.1	1	03/05/20 11:29	03/05/20 15:05	75-71-8	
1,1-Dichloroethane	ND	ug/kg	7.5	1.1	1	03/05/20 11:29	03/05/20 15:05	75-34-3	
1,2-Dichloroethane	ND	ug/kg	7.5	1.5	1	03/05/20 11:29	03/05/20 15:05	107-06-2	
1,1-Dichloroethene	ND	ug/kg	7.5	1.7	1	03/05/20 11:29	03/05/20 15:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	7.5	1.3	1	03/05/20 11:29	03/05/20 15:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	7.5	1.5	1	03/05/20 11:29	03/05/20 15:05	156-60-5	
1,2-Dichloropropane	ND	ug/kg	7.5	2.8	1	03/05/20 11:29	03/05/20 15:05	78-87-5	
1,3-Dichloropropane	ND	ug/kg	7.5	2.8	1	03/05/20 11:29	03/05/20 15:05	142-28-9	
2,2-Dichloropropane	ND	ug/kg	7.5	0.74	1	03/05/20 11:29	03/05/20 15:05	594-20-7	
1,1-Dichloropropene	ND	ug/kg	7.5	3.2	1	03/05/20 11:29	03/05/20 15:05	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	7.5	3.4	1	03/05/20 11:29	03/05/20 15:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	7.5	1.3	1	03/05/20 11:29	03/05/20 15:05	10061-02-6	
Diisopropyl ether	ND	ug/kg	7.5	4.3	1	03/05/20 11:29	03/05/20 15:05	108-20-3	
Ethylbenzene	ND	ug/kg	7.5	1.6	1	03/05/20 11:29	03/05/20 15:05	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	7.5	3.7	1	03/05/20 11:29	03/05/20 15:05	87-68-3	
2-Hexanone	ND	ug/kg	74.5	7.7	1	03/05/20 11:29	03/05/20 15:05	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	7.5	2.2	1	03/05/20 11:29	03/05/20 15:05	98-82-8	
p-Isopropyltoluene	ND	ug/kg	7.5	3.6	1	03/05/20 11:29	03/05/20 15:05	99-87-6	
Methylene Chloride	ND	ug/kg	29.8	8.8	1	03/05/20 11:29	03/05/20 15:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	74.5	5.6	1	03/05/20 11:29	03/05/20 15:05	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	7.5	4.3	1	03/05/20 11:29	03/05/20 15:05	1634-04-4	
Naphthalene	ND	ug/kg	7.5	6.3	1	03/05/20 11:29	03/05/20 15:05	91-20-3	
n-Propylbenzene	ND	ug/kg	7.5	2.5	1	03/05/20 11:29	03/05/20 15:05	103-65-1	
Styrene	ND	ug/kg	7.5	2.2	1	03/05/20 11:29	03/05/20 15:05	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	7.5	1.8	1	03/05/20 11:29	03/05/20 15:05	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	7.5	2.6	1	03/05/20 11:29	03/05/20 15:05	79-34-5	
Tetrachloroethene	ND	ug/kg	7.5	2.4	1	03/05/20 11:29	03/05/20 15:05	127-18-4	
Toluene	ND	ug/kg	7.5	2.4	1	03/05/20 11:29	03/05/20 15:05	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	7.5	5.3	1	03/05/20 11:29	03/05/20 15:05	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (2.0-3.0) **Lab ID:** 92467731011 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	7.5	4.0	1	03/05/20 11:29	03/05/20 15:05	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	7.5	1.3	1	03/05/20 11:29	03/05/20 15:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	7.5	1.7	1	03/05/20 11:29	03/05/20 15:05	79-00-5	
Trichloroethene	ND	ug/kg	7.5	1.9	1	03/05/20 11:29	03/05/20 15:05	79-01-6	
Trichlorofluoromethane	ND	ug/kg	7.5	1.8	1	03/05/20 11:29	03/05/20 15:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	7.5	2.5	1	03/05/20 11:29	03/05/20 15:05	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	7.5	2.9	1	03/05/20 11:29	03/05/20 15:05	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	7.5	2.5	1	03/05/20 11:29	03/05/20 15:05	108-67-8	
Vinyl acetate	ND	ug/kg	74.5	24.3	1	03/05/20 11:29	03/05/20 15:05	108-05-4	
Vinyl chloride	ND	ug/kg	14.9	2.8	1	03/05/20 11:29	03/05/20 15:05	75-01-4	
Xylene (Total)	ND	ug/kg	14.9	5.2	1	03/05/20 11:29	03/05/20 15:05	1330-20-7	
m&p-Xylene	ND	ug/kg	14.9	3.5	1	03/05/20 11:29	03/05/20 15:05	179601-23-1	
o-Xylene	ND	ug/kg	7.5	1.7	1	03/05/20 11:29	03/05/20 15:05	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	70-130		1	03/05/20 11:29	03/05/20 15:05	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130		1	03/05/20 11:29	03/05/20 15:05	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-132		1	03/05/20 11:29	03/05/20 15:05	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	28.8	%	0.10	0.10	1		03/04/20 12:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: **FD-01_SE_20200302** Lab ID: **92467731012** Collected: 03/02/20 17:00 Received: 03/03/20 14:00 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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	1170	301	1	03/05/20 11:38	03/06/20 13:11	83-32-9	
Acenaphthylene	342J	ug/kg	1170	277	1	03/05/20 11:38	03/06/20 13:11	208-96-8	
Aniline	ND	ug/kg	1170	263	1	03/05/20 11:38	03/06/20 13:11	62-53-3	
Anthracene	520J	ug/kg	1170	303	1	03/05/20 11:38	03/06/20 13:11	120-12-7	
Benzo(a)anthracene	1020J	ug/kg	1170	372	1	03/05/20 11:38	03/06/20 13:11	56-55-3	
Benzo(a)pyrene	978J	ug/kg	1170	507	1	03/05/20 11:38	03/06/20 13:11	50-32-8	
Benzo(b)fluoranthene	976J	ug/kg	1170	471	1	03/05/20 11:38	03/06/20 13:11	205-99-2	
Benzo(g,h,i)perylene	545J	ug/kg	1170	457	1	03/05/20 11:38	03/06/20 13:11	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	1170	493	1	03/05/20 11:38	03/06/20 13:11	207-08-9	
Benzoic Acid	ND	ug/kg	5850	1260	1	03/05/20 11:38	03/06/20 13:11	65-85-0	
Benzyl alcohol	ND	ug/kg	2340	620	1	03/05/20 11:38	03/06/20 13:11	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	1170	307	1	03/05/20 11:38	03/06/20 13:11	101-55-3	
Butylbenzylphthalate	ND	ug/kg	1170	312	1	03/05/20 11:38	03/06/20 13:11	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	2340	713	1	03/05/20 11:38	03/06/20 13:11	59-50-7	
4-Chloroaniline	ND	ug/kg	2340	716	1	03/05/20 11:38	03/06/20 13:11	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	1170	312	1	03/05/20 11:38	03/06/20 13:11	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	1170	249	1	03/05/20 11:38	03/06/20 13:11	111-44-4	
2-Chloronaphthalene	ND	ug/kg	1170	261	1	03/05/20 11:38	03/06/20 13:11	91-58-7	
2-Chlorophenol	ND	ug/kg	1170	272	1	03/05/20 11:38	03/06/20 13:11	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	1170	304	1	03/05/20 11:38	03/06/20 13:11	7005-72-3	
Chrysene	935J	ug/kg	1170	340	1	03/05/20 11:38	03/06/20 13:11	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	1170	468	1	03/05/20 11:38	03/06/20 13:11	53-70-3	
Dibenzofuran	ND	ug/kg	1170	292	1	03/05/20 11:38	03/06/20 13:11	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	1170	253	1	03/05/20 11:38	03/06/20 13:11	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	1170	263	1	03/05/20 11:38	03/06/20 13:11	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	1170	257	1	03/05/20 11:38	03/06/20 13:11	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2340	815	1	03/05/20 11:38	03/06/20 13:11	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	1170	386	1	03/05/20 11:38	03/06/20 13:11	120-83-2	
Diethylphthalate	ND	ug/kg	1170	254	1	03/05/20 11:38	03/06/20 13:11	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	1170	291	1	03/05/20 11:38	03/06/20 13:11	105-67-9	
Dimethylphthalate	ND	ug/kg	1170	264	1	03/05/20 11:38	03/06/20 13:11	131-11-3	
Di-n-butylphthalate	ND	ug/kg	1170	289	1	03/05/20 11:38	03/06/20 13:11	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2340	1890	1	03/05/20 11:38	03/06/20 13:11	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	5850	3740	1	03/05/20 11:38	03/06/20 13:11	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	1170	310	1	03/05/20 11:38	03/06/20 13:11	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	1170	306	1	03/05/20 11:38	03/06/20 13:11	606-20-2	
Di-n-octylphthalate	ND	ug/kg	1170	666	1	03/05/20 11:38	03/06/20 13:11	117-84-0	v1
bis(2-Ethylhexyl)phthalate	ND	ug/kg	1170	383	1	03/05/20 11:38	03/06/20 13:11	117-81-7	
Fluoranthene	2340	ug/kg	1170	353	1	03/05/20 11:38	03/06/20 13:11	206-44-0	
Fluorene	ND	ug/kg	1170	313	1	03/05/20 11:38	03/06/20 13:11	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	1170	284	1	03/05/20 11:38	03/06/20 13:11	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	1170	297	1	03/05/20 11:38	03/06/20 13:11	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	1170	468	1	03/05/20 11:38	03/06/20 13:11	77-47-4	
Hexachloroethane	ND	ug/kg	1170	267	1	03/05/20 11:38	03/06/20 13:11	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	1170	535	1	03/05/20 11:38	03/06/20 13:11	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: **FD-01_SE_20200302** Lab ID: **92467731012** Collected: 03/02/20 17:00 Received: 03/03/20 14:00 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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Isophorone	ND	ug/kg	1170	254	1	03/05/20 11:38	03/06/20 13:11	78-59-1	
1-Methylnaphthalene	ND	ug/kg	1170	312	1	03/05/20 11:38	03/06/20 13:11	90-12-0	
2-Methylnaphthalene	ND	ug/kg	1170	298	1	03/05/20 11:38	03/06/20 13:11	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	1170	259	1	03/05/20 11:38	03/06/20 13:11	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	1170	294	1	03/05/20 11:38	03/06/20 13:11	15831-10-4	
Naphthalene	ND	ug/kg	1170	280	1	03/05/20 11:38	03/06/20 13:11	91-20-3	
2-Nitroaniline	ND	ug/kg	5850	588	1	03/05/20 11:38	03/06/20 13:11	88-74-4	
3-Nitroaniline	ND	ug/kg	5850	620	1	03/05/20 11:38	03/06/20 13:11	99-09-2	
4-Nitroaniline	ND	ug/kg	2340	578	1	03/05/20 11:38	03/06/20 13:11	100-01-6	
Nitrobenzene	ND	ug/kg	1170	279	1	03/05/20 11:38	03/06/20 13:11	98-95-3	
2-Nitrophenol	ND	ug/kg	1170	362	1	03/05/20 11:38	03/06/20 13:11	88-75-5	
4-Nitrophenol	ND	ug/kg	5850	1860	1	03/05/20 11:38	03/06/20 13:11	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	1170	329	1	03/05/20 11:38	03/06/20 13:11	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	1170	328	1	03/05/20 11:38	03/06/20 13:11	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	1170	298	1	03/05/20 11:38	03/06/20 13:11	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	1170	325	1	03/05/20 11:38	03/06/20 13:11	108-60-1	
Pentachlorophenol	ND	ug/kg	2340	535	1	03/05/20 11:38	03/06/20 13:11	87-86-5	
Phenanthrene	1060J	ug/kg	1170	295	1	03/05/20 11:38	03/06/20 13:11	85-01-8	
Phenol	ND	ug/kg	1170	279	1	03/05/20 11:38	03/06/20 13:11	108-95-2	
Pyrene	1860	ug/kg	1170	322	1	03/05/20 11:38	03/06/20 13:11	129-00-0	
Pyridine	ND	ug/kg	1170	296	1	03/05/20 11:38	03/06/20 13:11	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	1170	268	1	03/05/20 11:38	03/06/20 13:11	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	1170	304	1	03/05/20 11:38	03/06/20 13:11	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	1170	294	1	03/05/20 11:38	03/06/20 13:11	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	79	%	23-110		1	03/05/20 11:38	03/06/20 13:11	4165-60-0	
2-Fluorobiphenyl (S)	63	%	30-110		1	03/05/20 11:38	03/06/20 13:11	321-60-8	
Terphenyl-d14 (S)	50	%	28-110		1	03/05/20 11:38	03/06/20 13:11	1718-51-0	
Phenol-d6 (S)	74	%	22-110		1	03/05/20 11:38	03/06/20 13:11	13127-88-3	
2-Fluorophenol (S)	77	%	13-110		1	03/05/20 11:38	03/06/20 13:11	367-12-4	
2,4,6-Tribromophenol (S)	78	%	27-110		1	03/05/20 11:38	03/06/20 13:11	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	ND	ug/kg	442	41.7	1	03/06/20 09:59	03/06/20 14:41	67-64-1	
Benzene	ND	ug/kg	22.1	4.0	1	03/06/20 09:59	03/06/20 14:41	71-43-2	
Bromobenzene	ND	ug/kg	22.1	6.0	1	03/06/20 09:59	03/06/20 14:41	108-86-1	
Bromochloromethane	ND	ug/kg	22.1	5.4	1	03/06/20 09:59	03/06/20 14:41	74-97-5	
Bromodichloromethane	ND	ug/kg	22.1	4.3	1	03/06/20 09:59	03/06/20 14:41	75-27-4	
Bromoform	ND	ug/kg	22.1	10.8	1	03/06/20 09:59	03/06/20 14:41	75-25-2	
Bromomethane	ND	ug/kg	44.2	10.4	1	03/06/20 09:59	03/06/20 14:41	74-83-9	IH
2-Butanone (MEK)	ND	ug/kg	442	52.6	1	03/06/20 09:59	03/06/20 14:41	78-93-3	
n-Butylbenzene	ND	ug/kg	22.1	12.5	1	03/06/20 09:59	03/06/20 14:41	104-51-8	
sec-Butylbenzene	ND	ug/kg	22.1	9.4	1	03/06/20 09:59	03/06/20 14:41	135-98-8	
tert-Butylbenzene	ND	ug/kg	22.1	7.5	1	03/06/20 09:59	03/06/20 14:41	98-06-6	
Carbon tetrachloride	ND	ug/kg	22.1	4.2	1	03/06/20 09:59	03/06/20 14:41	56-23-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: FD-01_SE_20200302 **Lab ID:** 92467731012 **Collected:** 03/02/20 17:00 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
Chlorobenzene	ND	ug/kg	22.1	4.3	1	03/06/20 09:59	03/06/20 14:41	108-90-7	
Chloroethane	ND	ug/kg	44.2	9.2	1	03/06/20 09:59	03/06/20 14:41	75-00-3	
Chloroform	ND	ug/kg	22.1	4.7	1	03/06/20 09:59	03/06/20 14:41	67-66-3	
Chloromethane	ND	ug/kg	44.2	14.5	1	03/06/20 09:59	03/06/20 14:41	74-87-3	
2-Chlorotoluene	ND	ug/kg	22.1	6.7	1	03/06/20 09:59	03/06/20 14:41	95-49-8	
4-Chlorotoluene	ND	ug/kg	22.1	6.6	1	03/06/20 09:59	03/06/20 14:41	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	22.1	11.2	1	03/06/20 09:59	03/06/20 14:41	96-12-8	
Dibromochloromethane	ND	ug/kg	22.1	11.1	1	03/06/20 09:59	03/06/20 14:41	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	22.1	5.0	1	03/06/20 09:59	03/06/20 14:41	106-93-4	
Dibromomethane	ND	ug/kg	22.1	6.6	1	03/06/20 09:59	03/06/20 14:41	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	22.1	7.8	1	03/06/20 09:59	03/06/20 14:41	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	22.1	7.9	1	03/06/20 09:59	03/06/20 14:41	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	22.1	7.6	1	03/06/20 09:59	03/06/20 14:41	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	44.2	18.2	1	03/06/20 09:59	03/06/20 14:41	75-71-8	
1,1-Dichloroethane	ND	ug/kg	22.1	3.2	1	03/06/20 09:59	03/06/20 14:41	75-34-3	
1,2-Dichloroethane	ND	ug/kg	22.1	4.4	1	03/06/20 09:59	03/06/20 14:41	107-06-2	
1,1-Dichloroethene	ND	ug/kg	22.1	5.1	1	03/06/20 09:59	03/06/20 14:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	22.1	3.8	1	03/06/20 09:59	03/06/20 14:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	22.1	4.3	1	03/06/20 09:59	03/06/20 14:41	156-60-5	
1,2-Dichloropropane	ND	ug/kg	22.1	8.3	1	03/06/20 09:59	03/06/20 14:41	78-87-5	
1,3-Dichloropropane	ND	ug/kg	22.1	8.4	1	03/06/20 09:59	03/06/20 14:41	142-28-9	
2,2-Dichloropropane	ND	ug/kg	22.1	2.2	1	03/06/20 09:59	03/06/20 14:41	594-20-7	
1,1-Dichloropropene	ND	ug/kg	22.1	9.4	1	03/06/20 09:59	03/06/20 14:41	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	22.1	10.0	1	03/06/20 09:59	03/06/20 14:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	22.1	3.9	1	03/06/20 09:59	03/06/20 14:41	10061-02-6	
Diisopropyl ether	ND	ug/kg	22.1	12.6	1	03/06/20 09:59	03/06/20 14:41	108-20-3	
Ethylbenzene	ND	ug/kg	22.1	4.7	1	03/06/20 09:59	03/06/20 14:41	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	22.1	10.9	1	03/06/20 09:59	03/06/20 14:41	87-68-3	
2-Hexanone	ND	ug/kg	221	22.9	1	03/06/20 09:59	03/06/20 14:41	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	22.1	6.4	1	03/06/20 09:59	03/06/20 14:41	98-82-8	
p-Isopropyltoluene	ND	ug/kg	22.1	10.7	1	03/06/20 09:59	03/06/20 14:41	99-87-6	
Methylene Chloride	ND	ug/kg	88.4	26.1	1	03/06/20 09:59	03/06/20 14:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	221	16.5	1	03/06/20 09:59	03/06/20 14:41	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	22.1	12.6	1	03/06/20 09:59	03/06/20 14:41	1634-04-4	
Naphthalene	ND	ug/kg	22.1	18.8	1	03/06/20 09:59	03/06/20 14:41	91-20-3	
n-Propylbenzene	ND	ug/kg	22.1	7.4	1	03/06/20 09:59	03/06/20 14:41	103-65-1	
Styrene	ND	ug/kg	22.1	6.5	1	03/06/20 09:59	03/06/20 14:41	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	22.1	5.4	1	03/06/20 09:59	03/06/20 14:41	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	22.1	7.6	1	03/06/20 09:59	03/06/20 14:41	79-34-5	
Tetrachloroethene	ND	ug/kg	22.1	7.0	1	03/06/20 09:59	03/06/20 14:41	127-18-4	
Toluene	ND	ug/kg	22.1	7.2	1	03/06/20 09:59	03/06/20 14:41	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	22.1	15.8	1	03/06/20 09:59	03/06/20 14:41	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	22.1	11.7	1	03/06/20 09:59	03/06/20 14:41	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	22.1	3.8	1	03/06/20 09:59	03/06/20 14:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	22.1	5.0	1	03/06/20 09:59	03/06/20 14:41	79-00-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: FD-01_SE_20200302 **Lab ID:** 92467731012 Collected: 03/02/20 17:00 Received: 03/03/20 14:00 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 8260D Preparation Method: EPA 5035A									
Trichloroethene	ND	ug/kg	22.1	5.7	1	03/06/20 09:59	03/06/20 14:41	79-01-6	
Trichlorofluoromethane	ND	ug/kg	22.1	5.2	1	03/06/20 09:59	03/06/20 14:41	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	22.1	7.5	1	03/06/20 09:59	03/06/20 14:41	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	22.1	8.6	1	03/06/20 09:59	03/06/20 14:41	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	22.1	7.4	1	03/06/20 09:59	03/06/20 14:41	108-67-8	
Vinyl acetate	ND	ug/kg	221	72.1	1	03/06/20 09:59	03/06/20 14:41	108-05-4	
Vinyl chloride	ND	ug/kg	44.2	8.4	1	03/06/20 09:59	03/06/20 14:41	75-01-4	
Xylene (Total)	ND	ug/kg	44.2	15.5	1	03/06/20 09:59	03/06/20 14:41	1330-20-7	
m&p-Xylene	ND	ug/kg	44.2	10.4	1	03/06/20 09:59	03/06/20 14:41	179601-23-1	
o-Xylene	ND	ug/kg	22.1	5.2	1	03/06/20 09:59	03/06/20 14:41	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	70-130		1	03/06/20 09:59	03/06/20 14:41	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-130		1	03/06/20 09:59	03/06/20 14:41	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	70-132		1	03/06/20 09:59	03/06/20 14:41	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	71.8	%	0.10	0.10	1		03/04/20 12:48		
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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13A_SE_20200301 (0-0.5) Lab ID: 92467731013 Collected: 03/02/20 09:15 Received: 03/03/20 14:00 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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	1300	334	1	03/05/20 11:38	03/06/20 13:38	83-32-9	
Acenaphthylene	516J	ug/kg	1300	307	1	03/05/20 11:38	03/06/20 13:38	208-96-8	
Aniline	ND	ug/kg	1300	291	1	03/05/20 11:38	03/06/20 13:38	62-53-3	
Anthracene	1100J	ug/kg	1300	337	1	03/05/20 11:38	03/06/20 13:38	120-12-7	
Benzo(a)anthracene	1990	ug/kg	1300	413	1	03/05/20 11:38	03/06/20 13:38	56-55-3	
Benzo(a)pyrene	1860	ug/kg	1300	562	1	03/05/20 11:38	03/06/20 13:38	50-32-8	
Benzo(b)fluoranthene	2160	ug/kg	1300	523	1	03/05/20 11:38	03/06/20 13:38	205-99-2	
Benzo(g,h,i)perylene	1040J	ug/kg	1300	507	1	03/05/20 11:38	03/06/20 13:38	191-24-2	
Benzo(k)fluoranthene	902J	ug/kg	1300	546	1	03/05/20 11:38	03/06/20 13:38	207-08-9	
Benzoic Acid	ND	ug/kg	6490	1400	1	03/05/20 11:38	03/06/20 13:38	65-85-0	
Benzyl alcohol	ND	ug/kg	2590	688	1	03/05/20 11:38	03/06/20 13:38	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	1300	340	1	03/05/20 11:38	03/06/20 13:38	101-55-3	
Butylbenzylphthalate	ND	ug/kg	1300	346	1	03/05/20 11:38	03/06/20 13:38	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	2590	790	1	03/05/20 11:38	03/06/20 13:38	59-50-7	
4-Chloroaniline	ND	ug/kg	2590	794	1	03/05/20 11:38	03/06/20 13:38	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	1300	346	1	03/05/20 11:38	03/06/20 13:38	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	1300	276	1	03/05/20 11:38	03/06/20 13:38	111-44-4	
2-Chloronaphthalene	ND	ug/kg	1300	289	1	03/05/20 11:38	03/06/20 13:38	91-58-7	
2-Chlorophenol	ND	ug/kg	1300	302	1	03/05/20 11:38	03/06/20 13:38	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	1300	337	1	03/05/20 11:38	03/06/20 13:38	7005-72-3	
Chrysene	1810	ug/kg	1300	377	1	03/05/20 11:38	03/06/20 13:38	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	1300	519	1	03/05/20 11:38	03/06/20 13:38	53-70-3	
Dibenzofuran	ND	ug/kg	1300	324	1	03/05/20 11:38	03/06/20 13:38	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	1300	281	1	03/05/20 11:38	03/06/20 13:38	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	1300	292	1	03/05/20 11:38	03/06/20 13:38	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	1300	285	1	03/05/20 11:38	03/06/20 13:38	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	2590	904	1	03/05/20 11:38	03/06/20 13:38	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	1300	429	1	03/05/20 11:38	03/06/20 13:38	120-83-2	
Diethylphthalate	ND	ug/kg	1300	281	1	03/05/20 11:38	03/06/20 13:38	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	1300	323	1	03/05/20 11:38	03/06/20 13:38	105-67-9	
Dimethylphthalate	ND	ug/kg	1300	293	1	03/05/20 11:38	03/06/20 13:38	131-11-3	
Di-n-butylphthalate	ND	ug/kg	1300	320	1	03/05/20 11:38	03/06/20 13:38	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2590	2090	1	03/05/20 11:38	03/06/20 13:38	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	6490	4140	1	03/05/20 11:38	03/06/20 13:38	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	1300	344	1	03/05/20 11:38	03/06/20 13:38	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	1300	339	1	03/05/20 11:38	03/06/20 13:38	606-20-2	
Di-n-octylphthalate	ND	ug/kg	1300	739	1	03/05/20 11:38	03/06/20 13:38	117-84-0	v1
bis(2-Ethylhexyl)phthalate	ND	ug/kg	1300	425	1	03/05/20 11:38	03/06/20 13:38	117-81-7	
Fluoranthene	4530	ug/kg	1300	392	1	03/05/20 11:38	03/06/20 13:38	206-44-0	
Fluorene	449J	ug/kg	1300	347	1	03/05/20 11:38	03/06/20 13:38	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	1300	315	1	03/05/20 11:38	03/06/20 13:38	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	1300	329	1	03/05/20 11:38	03/06/20 13:38	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	1300	519	1	03/05/20 11:38	03/06/20 13:38	77-47-4	
Hexachloroethane	ND	ug/kg	1300	296	1	03/05/20 11:38	03/06/20 13:38	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13A_SE_20200301 (0-0.5) **Lab ID:** 92467731013 **Collected:** 03/02/20 09:15 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	898J	ug/kg	1300	594	1	03/05/20 11:38	03/06/20 13:38	193-39-5	
Isophorone	ND	ug/kg	1300	282	1	03/05/20 11:38	03/06/20 13:38	78-59-1	
1-Methylnaphthalene	ND	ug/kg	1300	346	1	03/05/20 11:38	03/06/20 13:38	90-12-0	
2-Methylnaphthalene	ND	ug/kg	1300	330	1	03/05/20 11:38	03/06/20 13:38	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	1300	287	1	03/05/20 11:38	03/06/20 13:38	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	1300	326	1	03/05/20 11:38	03/06/20 13:38	15831-10-4	
Naphthalene	379J	ug/kg	1300	311	1	03/05/20 11:38	03/06/20 13:38	91-20-3	
2-Nitroaniline	ND	ug/kg	6490	653	1	03/05/20 11:38	03/06/20 13:38	88-74-4	
3-Nitroaniline	ND	ug/kg	6490	688	1	03/05/20 11:38	03/06/20 13:38	99-09-2	
4-Nitroaniline	ND	ug/kg	2590	641	1	03/05/20 11:38	03/06/20 13:38	100-01-6	
Nitrobenzene	ND	ug/kg	1300	310	1	03/05/20 11:38	03/06/20 13:38	98-95-3	
2-Nitrophenol	ND	ug/kg	1300	401	1	03/05/20 11:38	03/06/20 13:38	88-75-5	
4-Nitrophenol	ND	ug/kg	6490	2070	1	03/05/20 11:38	03/06/20 13:38	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	1300	365	1	03/05/20 11:38	03/06/20 13:38	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	1300	363	1	03/05/20 11:38	03/06/20 13:38	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	1300	331	1	03/05/20 11:38	03/06/20 13:38	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	1300	360	1	03/05/20 11:38	03/06/20 13:38	108-60-1	
Pentachlorophenol	ND	ug/kg	2590	594	1	03/05/20 11:38	03/06/20 13:38	87-86-5	
Phenanthrene	2380	ug/kg	1300	327	1	03/05/20 11:38	03/06/20 13:38	85-01-8	
Phenol	ND	ug/kg	1300	310	1	03/05/20 11:38	03/06/20 13:38	108-95-2	
Pyrene	4060	ug/kg	1300	357	1	03/05/20 11:38	03/06/20 13:38	129-00-0	
Pyridine	ND	ug/kg	1300	328	1	03/05/20 11:38	03/06/20 13:38	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	1300	297	1	03/05/20 11:38	03/06/20 13:38	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	1300	337	1	03/05/20 11:38	03/06/20 13:38	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	1300	326	1	03/05/20 11:38	03/06/20 13:38	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	58	%	23-110		1	03/05/20 11:38	03/06/20 13:38	4165-60-0	
2-Fluorobiphenyl (S)	37	%	30-110		1	03/05/20 11:38	03/06/20 13:38	321-60-8	
Terphenyl-d14 (S)	21	%	28-110		1	03/05/20 11:38	03/06/20 13:38	1718-51-0	S0
Phenol-d6 (S)	49	%	22-110		1	03/05/20 11:38	03/06/20 13:38	13127-88-3	
2-Fluorophenol (S)	56	%	13-110		1	03/05/20 11:38	03/06/20 13:38	367-12-4	
2,4,6-Tribromophenol (S)	57	%	27-110		1	03/05/20 11:38	03/06/20 13:38	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	65.5J	ug/kg	437	41.2	1	03/06/20 09:59	03/06/20 15:05	67-64-1	
Benzene	ND	ug/kg	21.8	3.9	1	03/06/20 09:59	03/06/20 15:05	71-43-2	
Bromobenzene	ND	ug/kg	21.8	5.9	1	03/06/20 09:59	03/06/20 15:05	108-86-1	
Bromochloromethane	ND	ug/kg	21.8	5.4	1	03/06/20 09:59	03/06/20 15:05	74-97-5	
Bromodichloromethane	ND	ug/kg	21.8	4.3	1	03/06/20 09:59	03/06/20 15:05	75-27-4	
Bromoform	ND	ug/kg	21.8	10.7	1	03/06/20 09:59	03/06/20 15:05	75-25-2	
Bromomethane	ND	ug/kg	43.7	10.3	1	03/06/20 09:59	03/06/20 15:05	74-83-9	IH
2-Butanone (MEK)	ND	ug/kg	437	52.0	1	03/06/20 09:59	03/06/20 15:05	78-93-3	
n-Butylbenzene	ND	ug/kg	21.8	12.3	1	03/06/20 09:59	03/06/20 15:05	104-51-8	
sec-Butylbenzene	ND	ug/kg	21.8	9.3	1	03/06/20 09:59	03/06/20 15:05	135-98-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13A_SE_20200301 (0-0.5) **Lab ID:** 92467731013 **Collected:** 03/02/20 09:15 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	21.8	7.4	1	03/06/20 09:59	03/06/20 15:05	98-06-6	
Carbon tetrachloride	ND	ug/kg	21.8	4.2	1	03/06/20 09:59	03/06/20 15:05	56-23-5	
Chlorobenzene	ND	ug/kg	21.8	4.2	1	03/06/20 09:59	03/06/20 15:05	108-90-7	
Chloroethane	ND	ug/kg	43.7	9.1	1	03/06/20 09:59	03/06/20 15:05	75-00-3	
Chloroform	ND	ug/kg	21.8	4.6	1	03/06/20 09:59	03/06/20 15:05	67-66-3	
Chloromethane	ND	ug/kg	43.7	14.3	1	03/06/20 09:59	03/06/20 15:05	74-87-3	
2-Chlorotoluene	ND	ug/kg	21.8	6.6	1	03/06/20 09:59	03/06/20 15:05	95-49-8	
4-Chlorotoluene	ND	ug/kg	21.8	6.6	1	03/06/20 09:59	03/06/20 15:05	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	21.8	11.1	1	03/06/20 09:59	03/06/20 15:05	96-12-8	
Dibromochloromethane	ND	ug/kg	21.8	10.9	1	03/06/20 09:59	03/06/20 15:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	21.8	4.9	1	03/06/20 09:59	03/06/20 15:05	106-93-4	
Dibromomethane	ND	ug/kg	21.8	6.5	1	03/06/20 09:59	03/06/20 15:05	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	21.8	7.7	1	03/06/20 09:59	03/06/20 15:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	21.8	7.8	1	03/06/20 09:59	03/06/20 15:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	21.8	7.6	1	03/06/20 09:59	03/06/20 15:05	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	43.7	18.0	1	03/06/20 09:59	03/06/20 15:05	75-71-8	
1,1-Dichloroethane	ND	ug/kg	21.8	3.2	1	03/06/20 09:59	03/06/20 15:05	75-34-3	
1,2-Dichloroethane	ND	ug/kg	21.8	4.4	1	03/06/20 09:59	03/06/20 15:05	107-06-2	
1,1-Dichloroethene	ND	ug/kg	21.8	5.1	1	03/06/20 09:59	03/06/20 15:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	21.8	3.8	1	03/06/20 09:59	03/06/20 15:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	21.8	4.3	1	03/06/20 09:59	03/06/20 15:05	156-60-5	
1,2-Dichloropropane	ND	ug/kg	21.8	8.2	1	03/06/20 09:59	03/06/20 15:05	78-87-5	
1,3-Dichloropropane	ND	ug/kg	21.8	8.3	1	03/06/20 09:59	03/06/20 15:05	142-28-9	
2,2-Dichloropropane	ND	ug/kg	21.8	2.2	1	03/06/20 09:59	03/06/20 15:05	594-20-7	
1,1-Dichloropropene	ND	ug/kg	21.8	9.3	1	03/06/20 09:59	03/06/20 15:05	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	21.8	9.9	1	03/06/20 09:59	03/06/20 15:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	21.8	3.8	1	03/06/20 09:59	03/06/20 15:05	10061-02-6	
Diisopropyl ether	ND	ug/kg	21.8	12.5	1	03/06/20 09:59	03/06/20 15:05	108-20-3	
Ethylbenzene	ND	ug/kg	21.8	4.6	1	03/06/20 09:59	03/06/20 15:05	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	21.8	10.8	1	03/06/20 09:59	03/06/20 15:05	87-68-3	
2-Hexanone	ND	ug/kg	21.8	22.6	1	03/06/20 09:59	03/06/20 15:05	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	21.8	6.3	1	03/06/20 09:59	03/06/20 15:05	98-82-8	
p-Isopropyltoluene	ND	ug/kg	21.8	10.5	1	03/06/20 09:59	03/06/20 15:05	99-87-6	
Methylene Chloride	ND	ug/kg	87.4	25.8	1	03/06/20 09:59	03/06/20 15:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	21.8	16.3	1	03/06/20 09:59	03/06/20 15:05	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	21.8	12.5	1	03/06/20 09:59	03/06/20 15:05	1634-04-4	
Naphthalene	ND	ug/kg	21.8	18.6	1	03/06/20 09:59	03/06/20 15:05	91-20-3	
n-Propylbenzene	ND	ug/kg	21.8	7.3	1	03/06/20 09:59	03/06/20 15:05	103-65-1	
Styrene	ND	ug/kg	21.8	6.5	1	03/06/20 09:59	03/06/20 15:05	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	21.8	5.4	1	03/06/20 09:59	03/06/20 15:05	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	21.8	7.6	1	03/06/20 09:59	03/06/20 15:05	79-34-5	
Tetrachloroethene	ND	ug/kg	21.8	6.9	1	03/06/20 09:59	03/06/20 15:05	127-18-4	
Toluene	ND	ug/kg	21.8	7.1	1	03/06/20 09:59	03/06/20 15:05	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	21.8	15.6	1	03/06/20 09:59	03/06/20 15:05	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13A_SE_20200301 (0-0.5) Lab ID: 92467731013 Collected: 03/02/20 09:15 Received: 03/03/20 14:00 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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	21.8	11.6	1	03/06/20 09:59	03/06/20 15:05	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	21.8	3.8	1	03/06/20 09:59	03/06/20 15:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	21.8	4.9	1	03/06/20 09:59	03/06/20 15:05	79-00-5	
Trichloroethene	ND	ug/kg	21.8	5.7	1	03/06/20 09:59	03/06/20 15:05	79-01-6	
Trichlorofluoromethane	ND	ug/kg	21.8	5.2	1	03/06/20 09:59	03/06/20 15:05	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	21.8	7.4	1	03/06/20 09:59	03/06/20 15:05	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	21.8	8.5	1	03/06/20 09:59	03/06/20 15:05	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	21.8	7.3	1	03/06/20 09:59	03/06/20 15:05	108-67-8	
Vinyl acetate	ND	ug/kg	218	71.2	1	03/06/20 09:59	03/06/20 15:05	108-05-4	
Vinyl chloride	ND	ug/kg	43.7	8.3	1	03/06/20 09:59	03/06/20 15:05	75-01-4	
Xylene (Total)	ND	ug/kg	43.7	15.3	1	03/06/20 09:59	03/06/20 15:05	1330-20-7	
m&p-Xylene	ND	ug/kg	43.7	10.3	1	03/06/20 09:59	03/06/20 15:05	179601-23-1	
o-Xylene	ND	ug/kg	21.8	5.1	1	03/06/20 09:59	03/06/20 15:05	95-47-6	
Surrogates									
Toluene-d8 (S)	102	%	70-130		1	03/06/20 09:59	03/06/20 15:05	2037-26-5	
4-Bromofluorobenzene (S)	93	%	70-130		1	03/06/20 09:59	03/06/20 15:05	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	70-132		1	03/06/20 09:59	03/06/20 15:05	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	74.4	%	0.10	0.10	1		03/04/20 12:48		
Total Organic Carbon Analytical Method: EPA 9060A									
Total Organic Carbon	108000	mg/kg	2340	1680	1		03/18/20 11:53	7440-44-0	
Total Organic Carbon	114000	mg/kg	2340	1680	1		03/18/20 11:53	7440-44-0	
Total Organic Carbon	116000	mg/kg	2340	1680	1		03/18/20 11:53	7440-44-0	
Total Organic Carbon	113000	mg/kg	2340	1680	1		03/18/20 11:53	7440-44-0	
Mean Total Organic Carbon	113000	mg/kg	2340	1680	1		03/18/20 11:53	7440-44-0	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14A_SE_20200301 (0-0.5) **Lab ID:** 92467731014 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	6640	1710	5	03/05/20 11:38	03/06/20 19:58	83-32-9	
Acenaphthylene	3360J	ug/kg	6640	1570	5	03/05/20 11:38	03/06/20 19:58	208-96-8	
Aniline	ND	ug/kg	6640	1490	5	03/05/20 11:38	03/06/20 19:58	62-53-3	
Anthracene	10500	ug/kg	6640	1720	5	03/05/20 11:38	03/06/20 19:58	120-12-7	
Benzo(a)anthracene	22800	ug/kg	6640	2110	5	03/05/20 11:38	03/06/20 19:58	56-55-3	
Benzo(a)pyrene	20800	ug/kg	6640	2880	5	03/05/20 11:38	03/06/20 19:58	50-32-8	
Benzo(b)fluoranthene	23200	ug/kg	6640	2680	5	03/05/20 11:38	03/06/20 19:58	205-99-2	
Benzo(g,h,i)perylene	11400	ug/kg	6640	2590	5	03/05/20 11:38	03/06/20 19:58	191-24-2	
Benzo(k)fluoranthene	8810	ug/kg	6640	2800	5	03/05/20 11:38	03/06/20 19:58	207-08-9	
Benzoic Acid	ND	ug/kg	33200	7160	5	03/05/20 11:38	03/06/20 19:58	65-85-0	
Benzyl alcohol	ND	ug/kg	13300	3520	5	03/05/20 11:38	03/06/20 19:58	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	6640	1740	5	03/05/20 11:38	03/06/20 19:58	101-55-3	
Butylbenzylphthalate	ND	ug/kg	6640	1770	5	03/05/20 11:38	03/06/20 19:58	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	13300	4040	5	03/05/20 11:38	03/06/20 19:58	59-50-7	
4-Chloroaniline	ND	ug/kg	13300	4060	5	03/05/20 11:38	03/06/20 19:58	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	6640	1770	5	03/05/20 11:38	03/06/20 19:58	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	6640	1410	5	03/05/20 11:38	03/06/20 19:58	111-44-4	
2-Chloronaphthalene	ND	ug/kg	6640	1480	5	03/05/20 11:38	03/06/20 19:58	91-58-7	
2-Chlorophenol	ND	ug/kg	6640	1540	5	03/05/20 11:38	03/06/20 19:58	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	6640	1720	5	03/05/20 11:38	03/06/20 19:58	7005-72-3	
Chrysene	19700	ug/kg	6640	1930	5	03/05/20 11:38	03/06/20 19:58	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	6640	2660	5	03/05/20 11:38	03/06/20 19:58	53-70-3	
Dibenzofuran	ND	ug/kg	6640	1660	5	03/05/20 11:38	03/06/20 19:58	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	6640	1440	5	03/05/20 11:38	03/06/20 19:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	6640	1490	5	03/05/20 11:38	03/06/20 19:58	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	6640	1460	5	03/05/20 11:38	03/06/20 19:58	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	13300	4630	5	03/05/20 11:38	03/06/20 19:58	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	6640	2190	5	03/05/20 11:38	03/06/20 19:58	120-83-2	
Diethylphthalate	ND	ug/kg	6640	1440	5	03/05/20 11:38	03/06/20 19:58	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	6640	1650	5	03/05/20 11:38	03/06/20 19:58	105-67-9	
Dimethylphthalate	ND	ug/kg	6640	1500	5	03/05/20 11:38	03/06/20 19:58	131-11-3	
Di-n-butylphthalate	ND	ug/kg	6640	1640	5	03/05/20 11:38	03/06/20 19:58	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	13300	10700	5	03/05/20 11:38	03/06/20 19:58	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	33200	21200	5	03/05/20 11:38	03/06/20 19:58	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	6640	1760	5	03/05/20 11:38	03/06/20 19:58	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	6640	1740	5	03/05/20 11:38	03/06/20 19:58	606-20-2	
Di-n-octylphthalate	ND	ug/kg	6640	3780	5	03/05/20 11:38	03/06/20 19:58	117-84-0	v1
bis(2-Ethylhexyl)phthalate	ND	ug/kg	6640	2170	5	03/05/20 11:38	03/06/20 19:58	117-81-7	
Fluoranthene	44500	ug/kg	6640	2010	5	03/05/20 11:38	03/06/20 19:58	206-44-0	
Fluorene	3230J	ug/kg	6640	1780	5	03/05/20 11:38	03/06/20 19:58	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	6640	1610	5	03/05/20 11:38	03/06/20 19:58	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	6640	1690	5	03/05/20 11:38	03/06/20 19:58	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	6640	2660	5	03/05/20 11:38	03/06/20 19:58	77-47-4	
Hexachloroethane	ND	ug/kg	6640	1510	5	03/05/20 11:38	03/06/20 19:58	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14A_SE_20200301 (0-0.5) **Lab ID:** 92467731014 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	10400	ug/kg	6640	3040	5	03/05/20 11:38	03/06/20 19:58	193-39-5	
Isophorone	ND	ug/kg	6640	1440	5	03/05/20 11:38	03/06/20 19:58	78-59-1	
1-Methylnaphthalene	ND	ug/kg	6640	1770	5	03/05/20 11:38	03/06/20 19:58	90-12-0	
2-Methylnaphthalene	ND	ug/kg	6640	1690	5	03/05/20 11:38	03/06/20 19:58	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	6640	1470	5	03/05/20 11:38	03/06/20 19:58	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	6640	1670	5	03/05/20 11:38	03/06/20 19:58	15831-10-4	
Naphthalene	2180J	ug/kg	6640	1590	5	03/05/20 11:38	03/06/20 19:58	91-20-3	
2-Nitroaniline	ND	ug/kg	33200	3340	5	03/05/20 11:38	03/06/20 19:58	88-74-4	
3-Nitroaniline	ND	ug/kg	33200	3520	5	03/05/20 11:38	03/06/20 19:58	99-09-2	
4-Nitroaniline	ND	ug/kg	13300	3280	5	03/05/20 11:38	03/06/20 19:58	100-01-6	
Nitrobenzene	ND	ug/kg	6640	1590	5	03/05/20 11:38	03/06/20 19:58	98-95-3	
2-Nitrophenol	ND	ug/kg	6640	2050	5	03/05/20 11:38	03/06/20 19:58	88-75-5	
4-Nitrophenol	ND	ug/kg	33200	10600	5	03/05/20 11:38	03/06/20 19:58	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	6640	1870	5	03/05/20 11:38	03/06/20 19:58	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	6640	1860	5	03/05/20 11:38	03/06/20 19:58	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	6640	1690	5	03/05/20 11:38	03/06/20 19:58	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	6640	1840	5	03/05/20 11:38	03/06/20 19:58	108-60-1	
Pentachlorophenol	ND	ug/kg	13300	3040	5	03/05/20 11:38	03/06/20 19:58	87-86-5	
Phenanthrene	28600	ug/kg	6640	1670	5	03/05/20 11:38	03/06/20 19:58	85-01-8	
Phenol	ND	ug/kg	6640	1590	5	03/05/20 11:38	03/06/20 19:58	108-95-2	
Pyrene	43400	ug/kg	6640	1830	5	03/05/20 11:38	03/06/20 19:58	129-00-0	
Pyridine	ND	ug/kg	6640	1680	5	03/05/20 11:38	03/06/20 19:58	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	6640	1520	5	03/05/20 11:38	03/06/20 19:58	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	6640	1720	5	03/05/20 11:38	03/06/20 19:58	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	6640	1670	5	03/05/20 11:38	03/06/20 19:58	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	48	%	23-110		5	03/05/20 11:38	03/06/20 19:58	4165-60-0	D3
2-Fluorobiphenyl (S)	45	%	30-110		5	03/05/20 11:38	03/06/20 19:58	321-60-8	
Terphenyl-d14 (S)	30	%	28-110		5	03/05/20 11:38	03/06/20 19:58	1718-51-0	
Phenol-d6 (S)	47	%	22-110		5	03/05/20 11:38	03/06/20 19:58	13127-88-3	
2-Fluorophenol (S)	52	%	13-110		5	03/05/20 11:38	03/06/20 19:58	367-12-4	
2,4,6-Tribromophenol (S)	53	%	27-110		5	03/05/20 11:38	03/06/20 19:58	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	ND	ug/kg	625	59.0	1	03/06/20 09:59	03/06/20 15:29	67-64-1	
Benzene	ND	ug/kg	31.3	5.6	1	03/06/20 09:59	03/06/20 15:29	71-43-2	
Bromobenzene	ND	ug/kg	31.3	8.5	1	03/06/20 09:59	03/06/20 15:29	108-86-1	
Bromochloromethane	ND	ug/kg	31.3	7.7	1	03/06/20 09:59	03/06/20 15:29	74-97-5	
Bromodichloromethane	ND	ug/kg	31.3	6.1	1	03/06/20 09:59	03/06/20 15:29	75-27-4	
Bromoform	ND	ug/kg	31.3	15.3	1	03/06/20 09:59	03/06/20 15:29	75-25-2	
Bromomethane	ND	ug/kg	62.5	14.8	1	03/06/20 09:59	03/06/20 15:29	74-83-9	IH
2-Butanone (MEK)	ND	ug/kg	625	74.4	1	03/06/20 09:59	03/06/20 15:29	78-93-3	
n-Butylbenzene	ND	ug/kg	31.3	17.6	1	03/06/20 09:59	03/06/20 15:29	104-51-8	
sec-Butylbenzene	ND	ug/kg	31.3	13.3	1	03/06/20 09:59	03/06/20 15:29	135-98-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14A_SE_20200301 (0-0.5) **Lab ID:** 92467731014 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	31.3	10.6	1	03/06/20 09:59	03/06/20 15:29	98-06-6	
Carbon tetrachloride	ND	ug/kg	31.3	6.0	1	03/06/20 09:59	03/06/20 15:29	56-23-5	
Chlorobenzene	ND	ug/kg	31.3	6.1	1	03/06/20 09:59	03/06/20 15:29	108-90-7	
Chloroethane	ND	ug/kg	62.5	13.1	1	03/06/20 09:59	03/06/20 15:29	75-00-3	
Chloroform	ND	ug/kg	31.3	6.6	1	03/06/20 09:59	03/06/20 15:29	67-66-3	
Chloromethane	ND	ug/kg	62.5	20.5	1	03/06/20 09:59	03/06/20 15:29	74-87-3	
2-Chlorotoluene	ND	ug/kg	31.3	9.5	1	03/06/20 09:59	03/06/20 15:29	95-49-8	
4-Chlorotoluene	ND	ug/kg	31.3	9.4	1	03/06/20 09:59	03/06/20 15:29	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	31.3	15.9	1	03/06/20 09:59	03/06/20 15:29	96-12-8	
Dibromochloromethane	ND	ug/kg	31.3	15.6	1	03/06/20 09:59	03/06/20 15:29	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	31.3	7.0	1	03/06/20 09:59	03/06/20 15:29	106-93-4	
Dibromomethane	ND	ug/kg	31.3	9.3	1	03/06/20 09:59	03/06/20 15:29	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	31.3	11.0	1	03/06/20 09:59	03/06/20 15:29	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	31.3	11.1	1	03/06/20 09:59	03/06/20 15:29	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	31.3	10.8	1	03/06/20 09:59	03/06/20 15:29	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	62.5	25.7	1	03/06/20 09:59	03/06/20 15:29	75-71-8	
1,1-Dichloroethane	ND	ug/kg	31.3	4.6	1	03/06/20 09:59	03/06/20 15:29	75-34-3	
1,2-Dichloroethane	ND	ug/kg	31.3	6.3	1	03/06/20 09:59	03/06/20 15:29	107-06-2	
1,1-Dichloroethene	ND	ug/kg	31.3	7.3	1	03/06/20 09:59	03/06/20 15:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	31.3	5.4	1	03/06/20 09:59	03/06/20 15:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	31.3	6.1	1	03/06/20 09:59	03/06/20 15:29	156-60-5	
1,2-Dichloropropane	ND	ug/kg	31.3	11.8	1	03/06/20 09:59	03/06/20 15:29	78-87-5	
1,3-Dichloropropane	ND	ug/kg	31.3	11.8	1	03/06/20 09:59	03/06/20 15:29	142-28-9	
2,2-Dichloropropane	ND	ug/kg	31.3	3.1	1	03/06/20 09:59	03/06/20 15:29	594-20-7	
1,1-Dichloropropene	ND	ug/kg	31.3	13.3	1	03/06/20 09:59	03/06/20 15:29	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	31.3	14.2	1	03/06/20 09:59	03/06/20 15:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	31.3	5.5	1	03/06/20 09:59	03/06/20 15:29	10061-02-6	
Diisopropyl ether	ND	ug/kg	31.3	17.9	1	03/06/20 09:59	03/06/20 15:29	108-20-3	
Ethylbenzene	ND	ug/kg	31.3	6.6	1	03/06/20 09:59	03/06/20 15:29	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	31.3	15.4	1	03/06/20 09:59	03/06/20 15:29	87-68-3	
2-Hexanone	ND	ug/kg	313	32.4	1	03/06/20 09:59	03/06/20 15:29	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	31.3	9.1	1	03/06/20 09:59	03/06/20 15:29	98-82-8	
p-Isopropyltoluene	ND	ug/kg	31.3	15.1	1	03/06/20 09:59	03/06/20 15:29	99-87-6	
Methylene Chloride	ND	ug/kg	125	36.9	1	03/06/20 09:59	03/06/20 15:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	313	23.3	1	03/06/20 09:59	03/06/20 15:29	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	31.3	17.9	1	03/06/20 09:59	03/06/20 15:29	1634-04-4	
Naphthalene	ND	ug/kg	31.3	26.6	1	03/06/20 09:59	03/06/20 15:29	91-20-3	
n-Propylbenzene	ND	ug/kg	31.3	10.4	1	03/06/20 09:59	03/06/20 15:29	103-65-1	
Styrene	ND	ug/kg	31.3	9.3	1	03/06/20 09:59	03/06/20 15:29	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	31.3	7.7	1	03/06/20 09:59	03/06/20 15:29	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	31.3	10.8	1	03/06/20 09:59	03/06/20 15:29	79-34-5	
Tetrachloroethene	ND	ug/kg	31.3	9.9	1	03/06/20 09:59	03/06/20 15:29	127-18-4	
Toluene	ND	ug/kg	31.3	10.1	1	03/06/20 09:59	03/06/20 15:29	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	31.3	22.3	1	03/06/20 09:59	03/06/20 15:29	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14A_SE_20200301 (0-0.5) Lab ID: 92467731014 Collected: 03/02/20 11:50 Received: 03/03/20 14:00 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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	31.3	16.6	1	03/06/20 09:59	03/06/20 15:29	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	31.3	5.4	1	03/06/20 09:59	03/06/20 15:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	31.3	7.1	1	03/06/20 09:59	03/06/20 15:29	79-00-5	
Trichloroethene	ND	ug/kg	31.3	8.1	1	03/06/20 09:59	03/06/20 15:29	79-01-6	
Trichlorofluoromethane	ND	ug/kg	31.3	7.4	1	03/06/20 09:59	03/06/20 15:29	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	31.3	10.6	1	03/06/20 09:59	03/06/20 15:29	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	31.3	12.2	1	03/06/20 09:59	03/06/20 15:29	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	31.3	10.4	1	03/06/20 09:59	03/06/20 15:29	108-67-8	
Vinyl acetate	ND	ug/kg	313	102	1	03/06/20 09:59	03/06/20 15:29	108-05-4	
Vinyl chloride	ND	ug/kg	62.5	11.9	1	03/06/20 09:59	03/06/20 15:29	75-01-4	
Xylene (Total)	ND	ug/kg	62.5	21.9	1	03/06/20 09:59	03/06/20 15:29	1330-20-7	
m&p-Xylene	ND	ug/kg	62.5	14.8	1	03/06/20 09:59	03/06/20 15:29	179601-23-1	
o-Xylene	ND	ug/kg	31.3	7.3	1	03/06/20 09:59	03/06/20 15:29	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	70-130		1	03/06/20 09:59	03/06/20 15:29	2037-26-5	
4-Bromofluorobenzene (S)	93	%	70-130		1	03/06/20 09:59	03/06/20 15:29	460-00-4	
1,2-Dichloroethane-d4 (S)	89	%	70-132		1	03/06/20 09:59	03/06/20 15:29	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	75.4	%	0.10	0.10	1		03/04/20 12:50		
Total Organic Carbon Analytical Method: EPA 9060A									
Total Organic Carbon	198000	mg/kg	2440	1740	1		03/18/20 12:17	7440-44-0	
Total Organic Carbon	207000	mg/kg	2440	1740	1		03/18/20 12:17	7440-44-0	
Total Organic Carbon	171000	mg/kg	2440	1740	1		03/18/20 12:17	7440-44-0	
Total Organic Carbon	178000	mg/kg	2440	1740	1		03/18/20 12:17	7440-44-0	
Mean Total Organic Carbon	189000	mg/kg	2440	1740	1		03/18/20 12:17	7440-44-0	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: **SW-16_SE_20200301 (0-0.5)** Lab ID: **92467731015** Collected: 03/01/20 15:00 Received: 03/03/20 14:00 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
8270E MSSV Microwave		Analytical Method: EPA 8270E Preparation Method: EPA 3546							
Acenaphthene	ND	ug/kg	657	169	1	03/05/20 11:38	03/06/20 14:05	83-32-9	
Acenaphthylene	566J	ug/kg	657	155	1	03/05/20 11:38	03/06/20 14:05	208-96-8	
Aniline	ND	ug/kg	657	148	1	03/05/20 11:38	03/06/20 14:05	62-53-3	
Anthracene	1910	ug/kg	657	170	1	03/05/20 11:38	03/06/20 14:05	120-12-7	
Benzo(a)anthracene	4710	ug/kg	657	209	1	03/05/20 11:38	03/06/20 14:05	56-55-3	
Benzo(a)pyrene	3970	ug/kg	657	285	1	03/05/20 11:38	03/06/20 14:05	50-32-8	
Benzo(b)fluoranthene	4540	ug/kg	657	265	1	03/05/20 11:38	03/06/20 14:05	205-99-2	
Benzo(g,h,i)perylene	2210	ug/kg	657	257	1	03/05/20 11:38	03/06/20 14:05	191-24-2	
Benzo(k)fluoranthene	2070	ug/kg	657	277	1	03/05/20 11:38	03/06/20 14:05	207-08-9	
Benzoic Acid	ND	ug/kg	3290	709	1	03/05/20 11:38	03/06/20 14:05	65-85-0	
Benzyl alcohol	ND	ug/kg	1310	348	1	03/05/20 11:38	03/06/20 14:05	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	657	172	1	03/05/20 11:38	03/06/20 14:05	101-55-3	
Butylbenzylphthalate	ND	ug/kg	657	175	1	03/05/20 11:38	03/06/20 14:05	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	1310	400	1	03/05/20 11:38	03/06/20 14:05	59-50-7	
4-Chloroaniline	ND	ug/kg	1310	402	1	03/05/20 11:38	03/06/20 14:05	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	657	175	1	03/05/20 11:38	03/06/20 14:05	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	657	140	1	03/05/20 11:38	03/06/20 14:05	111-44-4	
2-Chloronaphthalene	ND	ug/kg	657	146	1	03/05/20 11:38	03/06/20 14:05	91-58-7	
2-Chlorophenol	ND	ug/kg	657	153	1	03/05/20 11:38	03/06/20 14:05	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	657	171	1	03/05/20 11:38	03/06/20 14:05	7005-72-3	
Chrysene	4040	ug/kg	657	191	1	03/05/20 11:38	03/06/20 14:05	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	657	263	1	03/05/20 11:38	03/06/20 14:05	53-70-3	
Dibenzofuran	242J	ug/kg	657	164	1	03/05/20 11:38	03/06/20 14:05	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	657	142	1	03/05/20 11:38	03/06/20 14:05	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	657	148	1	03/05/20 11:38	03/06/20 14:05	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	657	145	1	03/05/20 11:38	03/06/20 14:05	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1310	458	1	03/05/20 11:38	03/06/20 14:05	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	657	217	1	03/05/20 11:38	03/06/20 14:05	120-83-2	
Diethylphthalate	ND	ug/kg	657	143	1	03/05/20 11:38	03/06/20 14:05	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	657	164	1	03/05/20 11:38	03/06/20 14:05	105-67-9	
Dimethylphthalate	ND	ug/kg	657	149	1	03/05/20 11:38	03/06/20 14:05	131-11-3	
Di-n-butylphthalate	ND	ug/kg	657	162	1	03/05/20 11:38	03/06/20 14:05	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1310	1060	1	03/05/20 11:38	03/06/20 14:05	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	3290	2100	1	03/05/20 11:38	03/06/20 14:05	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	657	174	1	03/05/20 11:38	03/06/20 14:05	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	657	172	1	03/05/20 11:38	03/06/20 14:05	606-20-2	
Di-n-octylphthalate	ND	ug/kg	657	374	1	03/05/20 11:38	03/06/20 14:05	117-84-0	v1
bis(2-Ethylhexyl)phthalate	ND	ug/kg	657	215	1	03/05/20 11:38	03/06/20 14:05	117-81-7	
Fluoranthene	11400	ug/kg	1310	397	2	03/05/20 11:38	03/09/20 11:39	206-44-0	
Fluorene	412J	ug/kg	657	176	1	03/05/20 11:38	03/06/20 14:05	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	657	160	1	03/05/20 11:38	03/06/20 14:05	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	657	167	1	03/05/20 11:38	03/06/20 14:05	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	657	263	1	03/05/20 11:38	03/06/20 14:05	77-47-4	
Hexachloroethane	ND	ug/kg	657	150	1	03/05/20 11:38	03/06/20 14:05	67-72-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (0-0.5) **Lab ID:** 92467731015 **Collected:** 03/01/20 15:00 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	2000	ug/kg	657	301	1	03/05/20 11:38	03/06/20 14:05	193-39-5	
Isophorone	ND	ug/kg	657	143	1	03/05/20 11:38	03/06/20 14:05	78-59-1	
1-Methylnaphthalene	ND	ug/kg	657	175	1	03/05/20 11:38	03/06/20 14:05	90-12-0	
2-Methylnaphthalene	ND	ug/kg	657	167	1	03/05/20 11:38	03/06/20 14:05	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	657	146	1	03/05/20 11:38	03/06/20 14:05	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	657	165	1	03/05/20 11:38	03/06/20 14:05	15831-10-4	
Naphthalene	240J	ug/kg	657	157	1	03/05/20 11:38	03/06/20 14:05	91-20-3	
2-Nitroaniline	ND	ug/kg	3290	331	1	03/05/20 11:38	03/06/20 14:05	88-74-4	
3-Nitroaniline	ND	ug/kg	3290	348	1	03/05/20 11:38	03/06/20 14:05	99-09-2	
4-Nitroaniline	ND	ug/kg	1310	325	1	03/05/20 11:38	03/06/20 14:05	100-01-6	
Nitrobenzene	ND	ug/kg	657	157	1	03/05/20 11:38	03/06/20 14:05	98-95-3	
2-Nitrophenol	ND	ug/kg	657	203	1	03/05/20 11:38	03/06/20 14:05	88-75-5	
4-Nitrophenol	ND	ug/kg	3290	1050	1	03/05/20 11:38	03/06/20 14:05	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	657	185	1	03/05/20 11:38	03/06/20 14:05	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	657	184	1	03/05/20 11:38	03/06/20 14:05	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	657	168	1	03/05/20 11:38	03/06/20 14:05	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	657	183	1	03/05/20 11:38	03/06/20 14:05	108-60-1	
Pentachlorophenol	ND	ug/kg	1310	301	1	03/05/20 11:38	03/06/20 14:05	87-86-5	
Phenanthrene	6630	ug/kg	657	165	1	03/05/20 11:38	03/06/20 14:05	85-01-8	
Phenol	ND	ug/kg	657	157	1	03/05/20 11:38	03/06/20 14:05	108-95-2	
Pyrene	8250	ug/kg	1310	362	2	03/05/20 11:38	03/09/20 11:39	129-00-0	
Pyridine	ND	ug/kg	657	166	1	03/05/20 11:38	03/06/20 14:05	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	657	151	1	03/05/20 11:38	03/06/20 14:05	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	657	171	1	03/05/20 11:38	03/06/20 14:05	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	657	165	1	03/05/20 11:38	03/06/20 14:05	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	67	%	23-110		1	03/05/20 11:38	03/06/20 14:05	4165-60-0	
2-Fluorobiphenyl (S)	49	%	30-110		1	03/05/20 11:38	03/06/20 14:05	321-60-8	
Terphenyl-d14 (S)	33	%	28-110		1	03/05/20 11:38	03/06/20 14:05	1718-51-0	
Phenol-d6 (S)	58	%	22-110		1	03/05/20 11:38	03/06/20 14:05	13127-88-3	
2-Fluorophenol (S)	63	%	13-110		1	03/05/20 11:38	03/06/20 14:05	367-12-4	
2,4,6-Tribromophenol (S)	75	%	27-110		1	03/05/20 11:38	03/06/20 14:05	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	184J	ug/kg	393	37.1	1	03/05/20 11:29	03/05/20 15:30	67-64-1	
Benzene	ND	ug/kg	19.6	3.5	1	03/05/20 11:29	03/05/20 15:30	71-43-2	
Bromobenzene	ND	ug/kg	19.6	5.3	1	03/05/20 11:29	03/05/20 15:30	108-86-1	
Bromochloromethane	ND	ug/kg	19.6	4.8	1	03/05/20 11:29	03/05/20 15:30	74-97-5	
Bromodichloromethane	ND	ug/kg	19.6	3.8	1	03/05/20 11:29	03/05/20 15:30	75-27-4	
Bromoform	ND	ug/kg	19.6	9.6	1	03/05/20 11:29	03/05/20 15:30	75-25-2	
Bromomethane	ND	ug/kg	39.3	9.3	1	03/05/20 11:29	03/05/20 15:30	74-83-9	
2-Butanone (MEK)	ND	ug/kg	393	46.7	1	03/05/20 11:29	03/05/20 15:30	78-93-3	
n-Butylbenzene	ND	ug/kg	19.6	11.1	1	03/05/20 11:29	03/05/20 15:30	104-51-8	
sec-Butylbenzene	ND	ug/kg	19.6	8.3	1	03/05/20 11:29	03/05/20 15:30	135-98-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (0-0.5) Lab ID: 92467731015 Collected: 03/01/20 15:00 Received: 03/03/20 14:00 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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	19.6	6.6	1	03/05/20 11:29	03/05/20 15:30	98-06-6	
Carbon tetrachloride	ND	ug/kg	19.6	3.8	1	03/05/20 11:29	03/05/20 15:30	56-23-5	
Chlorobenzene	ND	ug/kg	19.6	3.8	1	03/05/20 11:29	03/05/20 15:30	108-90-7	
Chloroethane	ND	ug/kg	39.3	8.2	1	03/05/20 11:29	03/05/20 15:30	75-00-3	
Chloroform	ND	ug/kg	19.6	4.2	1	03/05/20 11:29	03/05/20 15:30	67-66-3	
Chloromethane	ND	ug/kg	39.3	12.9	1	03/05/20 11:29	03/05/20 15:30	74-87-3	
2-Chlorotoluene	ND	ug/kg	19.6	6.0	1	03/05/20 11:29	03/05/20 15:30	95-49-8	
4-Chlorotoluene	ND	ug/kg	19.6	5.9	1	03/05/20 11:29	03/05/20 15:30	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	19.6	10	1	03/05/20 11:29	03/05/20 15:30	96-12-8	
Dibromochloromethane	ND	ug/kg	19.6	9.8	1	03/05/20 11:29	03/05/20 15:30	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	19.6	4.4	1	03/05/20 11:29	03/05/20 15:30	106-93-4	
Dibromomethane	ND	ug/kg	19.6	5.9	1	03/05/20 11:29	03/05/20 15:30	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	19.6	6.9	1	03/05/20 11:29	03/05/20 15:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	19.6	7.0	1	03/05/20 11:29	03/05/20 15:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	19.6	6.8	1	03/05/20 11:29	03/05/20 15:30	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	39.3	16.1	1	03/05/20 11:29	03/05/20 15:30	75-71-8	
1,1-Dichloroethane	ND	ug/kg	19.6	2.9	1	03/05/20 11:29	03/05/20 15:30	75-34-3	
1,2-Dichloroethane	ND	ug/kg	19.6	3.9	1	03/05/20 11:29	03/05/20 15:30	107-06-2	
1,1-Dichloroethene	ND	ug/kg	19.6	4.6	1	03/05/20 11:29	03/05/20 15:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	19.6	3.4	1	03/05/20 11:29	03/05/20 15:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	19.6	3.9	1	03/05/20 11:29	03/05/20 15:30	156-60-5	
1,2-Dichloropropane	ND	ug/kg	19.6	7.4	1	03/05/20 11:29	03/05/20 15:30	78-87-5	
1,3-Dichloropropane	ND	ug/kg	19.6	7.4	1	03/05/20 11:29	03/05/20 15:30	142-28-9	
2,2-Dichloropropane	ND	ug/kg	19.6	1.9	1	03/05/20 11:29	03/05/20 15:30	594-20-7	
1,1-Dichloropropene	ND	ug/kg	19.6	8.3	1	03/05/20 11:29	03/05/20 15:30	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	19.6	8.9	1	03/05/20 11:29	03/05/20 15:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	19.6	3.4	1	03/05/20 11:29	03/05/20 15:30	10061-02-6	
Diisopropyl ether	ND	ug/kg	19.6	11.2	1	03/05/20 11:29	03/05/20 15:30	108-20-3	
Ethylbenzene	ND	ug/kg	19.6	4.2	1	03/05/20 11:29	03/05/20 15:30	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	19.6	9.7	1	03/05/20 11:29	03/05/20 15:30	87-68-3	
2-Hexanone	ND	ug/kg	196	20.3	1	03/05/20 11:29	03/05/20 15:30	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	19.6	5.7	1	03/05/20 11:29	03/05/20 15:30	98-82-8	
p-Isopropyltoluene	ND	ug/kg	19.6	9.5	1	03/05/20 11:29	03/05/20 15:30	99-87-6	
Methylene Chloride	ND	ug/kg	78.6	23.2	1	03/05/20 11:29	03/05/20 15:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	196	14.7	1	03/05/20 11:29	03/05/20 15:30	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	19.6	11.2	1	03/05/20 11:29	03/05/20 15:30	1634-04-4	
Naphthalene	ND	ug/kg	19.6	16.7	1	03/05/20 11:29	03/05/20 15:30	91-20-3	
n-Propylbenzene	ND	ug/kg	19.6	6.6	1	03/05/20 11:29	03/05/20 15:30	103-65-1	
Styrene	ND	ug/kg	19.6	5.8	1	03/05/20 11:29	03/05/20 15:30	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	19.6	4.8	1	03/05/20 11:29	03/05/20 15:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	19.6	6.8	1	03/05/20 11:29	03/05/20 15:30	79-34-5	
Tetrachloroethene	ND	ug/kg	19.6	6.2	1	03/05/20 11:29	03/05/20 15:30	127-18-4	
Toluene	ND	ug/kg	19.6	6.4	1	03/05/20 11:29	03/05/20 15:30	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	19.6	14.0	1	03/05/20 11:29	03/05/20 15:30	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-16_SE_20200301 (0-0.5) Lab ID: 92467731015 Collected: 03/01/20 15:00 Received: 03/03/20 14:00 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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	19.6	10.4	1	03/05/20 11:29	03/05/20 15:30	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	19.6	3.4	1	03/05/20 11:29	03/05/20 15:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	19.6	4.4	1	03/05/20 11:29	03/05/20 15:30	79-00-5	
Trichloroethene	ND	ug/kg	19.6	5.1	1	03/05/20 11:29	03/05/20 15:30	79-01-6	
Trichlorofluoromethane	ND	ug/kg	19.6	4.6	1	03/05/20 11:29	03/05/20 15:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	19.6	6.6	1	03/05/20 11:29	03/05/20 15:30	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	19.6	7.7	1	03/05/20 11:29	03/05/20 15:30	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	19.6	6.6	1	03/05/20 11:29	03/05/20 15:30	108-67-8	
Vinyl acetate	ND	ug/kg	196	64.0	1	03/05/20 11:29	03/05/20 15:30	108-05-4	
Vinyl chloride	ND	ug/kg	39.3	7.5	1	03/05/20 11:29	03/05/20 15:30	75-01-4	
Xylene (Total)	ND	ug/kg	39.3	13.7	1	03/05/20 11:29	03/05/20 15:30	1330-20-7	
m&p-Xylene	ND	ug/kg	39.3	9.3	1	03/05/20 11:29	03/05/20 15:30	179601-23-1	
o-Xylene	ND	ug/kg	19.6	4.6	1	03/05/20 11:29	03/05/20 15:30	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	70-130		1	03/05/20 11:29	03/05/20 15:30	2037-26-5	
4-Bromofluorobenzene (S)	86	%	70-130		1	03/05/20 11:29	03/05/20 15:30	460-00-4	
1,2-Dichloroethane-d4 (S)	90	%	70-132		1	03/05/20 11:29	03/05/20 15:30	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	50.3	%	0.10	0.10	1		03/04/20 12:50		
Total Organic Carbon Analytical Method: EPA 9060A									
Total Organic Carbon	73000	mg/kg	1210	863	1		03/18/20 12:28	7440-44-0	
Total Organic Carbon	164000	mg/kg	1210	863	1		03/18/20 12:28	7440-44-0	
Total Organic Carbon	78100	mg/kg	1210	863	1		03/18/20 12:28	7440-44-0	
Total Organic Carbon	76300	mg/kg	1210	863	1		03/18/20 12:28	7440-44-0	
Mean Total Organic Carbon	97900	mg/kg	1210	863	1		03/18/20 12:28	7440-44-0	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13A_SE_20200301 **Lab ID:** 92467731016 **Collected:** 03/02/20 09:15 **Received:** 03/03/20 14:00 **Matrix:** Solid (0.5-1.0)

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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	933	240	1	03/05/20 11:38	03/06/20 14:32	83-32-9	
Acenaphthylene	ND	ug/kg	933	221	1	03/05/20 11:38	03/06/20 14:32	208-96-8	
Aniline	ND	ug/kg	933	209	1	03/05/20 11:38	03/06/20 14:32	62-53-3	
Anthracene	ND	ug/kg	933	242	1	03/05/20 11:38	03/06/20 14:32	120-12-7	
Benzo(a)anthracene	432J	ug/kg	933	297	1	03/05/20 11:38	03/06/20 14:32	56-55-3	
Benzo(a)pyrene	421J	ug/kg	933	404	1	03/05/20 11:38	03/06/20 14:32	50-32-8	
Benzo(b)fluoranthene	469J	ug/kg	933	376	1	03/05/20 11:38	03/06/20 14:32	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	933	365	1	03/05/20 11:38	03/06/20 14:32	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	933	393	1	03/05/20 11:38	03/06/20 14:32	207-08-9	
Benzoic Acid	ND	ug/kg	4660	1010	1	03/05/20 11:38	03/06/20 14:32	65-85-0	
Benzyl alcohol	ND	ug/kg	1870	495	1	03/05/20 11:38	03/06/20 14:32	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	933	245	1	03/05/20 11:38	03/06/20 14:32	101-55-3	
Butylbenzylphthalate	ND	ug/kg	933	248	1	03/05/20 11:38	03/06/20 14:32	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	1870	568	1	03/05/20 11:38	03/06/20 14:32	59-50-7	
4-Chloroaniline	ND	ug/kg	1870	571	1	03/05/20 11:38	03/06/20 14:32	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	933	249	1	03/05/20 11:38	03/06/20 14:32	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	933	198	1	03/05/20 11:38	03/06/20 14:32	111-44-4	
2-Chloronaphthalene	ND	ug/kg	933	208	1	03/05/20 11:38	03/06/20 14:32	91-58-7	
2-Chlorophenol	ND	ug/kg	933	217	1	03/05/20 11:38	03/06/20 14:32	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	933	242	1	03/05/20 11:38	03/06/20 14:32	7005-72-3	
Chrysene	396J	ug/kg	933	271	1	03/05/20 11:38	03/06/20 14:32	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	933	373	1	03/05/20 11:38	03/06/20 14:32	53-70-3	
Dibenzofuran	ND	ug/kg	933	233	1	03/05/20 11:38	03/06/20 14:32	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	933	202	1	03/05/20 11:38	03/06/20 14:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	933	210	1	03/05/20 11:38	03/06/20 14:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	933	205	1	03/05/20 11:38	03/06/20 14:32	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	1870	650	1	03/05/20 11:38	03/06/20 14:32	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	933	308	1	03/05/20 11:38	03/06/20 14:32	120-83-2	
Diethylphthalate	ND	ug/kg	933	202	1	03/05/20 11:38	03/06/20 14:32	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	933	232	1	03/05/20 11:38	03/06/20 14:32	105-67-9	
Dimethylphthalate	ND	ug/kg	933	211	1	03/05/20 11:38	03/06/20 14:32	131-11-3	
Di-n-butylphthalate	ND	ug/kg	933	230	1	03/05/20 11:38	03/06/20 14:32	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1870	1500	1	03/05/20 11:38	03/06/20 14:32	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	4660	2980	1	03/05/20 11:38	03/06/20 14:32	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	933	247	1	03/05/20 11:38	03/06/20 14:32	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	933	244	1	03/05/20 11:38	03/06/20 14:32	606-20-2	
Di-n-octylphthalate	ND	ug/kg	933	531	1	03/05/20 11:38	03/06/20 14:32	117-84-0	v1
bis(2-Ethylhexyl)phthalate	ND	ug/kg	933	305	1	03/05/20 11:38	03/06/20 14:32	117-81-7	
Fluoranthene	875J	ug/kg	933	282	1	03/05/20 11:38	03/06/20 14:32	206-44-0	R1
Fluorene	ND	ug/kg	933	250	1	03/05/20 11:38	03/06/20 14:32	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	933	227	1	03/05/20 11:38	03/06/20 14:32	87-68-3	v2
Hexachlorobenzene	ND	ug/kg	933	237	1	03/05/20 11:38	03/06/20 14:32	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	933	373	1	03/05/20 11:38	03/06/20 14:32	77-47-4	
Hexachloroethane	ND	ug/kg	933	213	1	03/05/20 11:38	03/06/20 14:32	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13A_SE_20200301 **Lab ID:** 92467731016 **Collected:** 03/02/20 09:15 **Received:** 03/03/20 14:00 **Matrix:** Solid (0.5-1.0)

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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	ND	ug/kg	933	427	1	03/05/20 11:38	03/06/20 14:32	193-39-5	
Isophorone	ND	ug/kg	933	203	1	03/05/20 11:38	03/06/20 14:32	78-59-1	
1-Methylnaphthalene	ND	ug/kg	933	248	1	03/05/20 11:38	03/06/20 14:32	90-12-0	
2-Methylnaphthalene	ND	ug/kg	933	237	1	03/05/20 11:38	03/06/20 14:32	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	933	207	1	03/05/20 11:38	03/06/20 14:32	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	933	235	1	03/05/20 11:38	03/06/20 14:32	15831-10-4	
Naphthalene	ND	ug/kg	933	223	1	03/05/20 11:38	03/06/20 14:32	91-20-3	
2-Nitroaniline	ND	ug/kg	4660	469	1	03/05/20 11:38	03/06/20 14:32	88-74-4	
3-Nitroaniline	ND	ug/kg	4660	495	1	03/05/20 11:38	03/06/20 14:32	99-09-2	
4-Nitroaniline	ND	ug/kg	1870	461	1	03/05/20 11:38	03/06/20 14:32	100-01-6	
Nitrobenzene	ND	ug/kg	933	223	1	03/05/20 11:38	03/06/20 14:32	98-95-3	
2-Nitrophenol	ND	ug/kg	933	288	1	03/05/20 11:38	03/06/20 14:32	88-75-5	
4-Nitrophenol	ND	ug/kg	4660	1490	1	03/05/20 11:38	03/06/20 14:32	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	933	262	1	03/05/20 11:38	03/06/20 14:32	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	933	261	1	03/05/20 11:38	03/06/20 14:32	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	933	238	1	03/05/20 11:38	03/06/20 14:32	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	933	259	1	03/05/20 11:38	03/06/20 14:32	108-60-1	
Pentachlorophenol	ND	ug/kg	1870	427	1	03/05/20 11:38	03/06/20 14:32	87-86-5	
Phenanthrene	389J	ug/kg	933	235	1	03/05/20 11:38	03/06/20 14:32	85-01-8	
Phenol	ND	ug/kg	933	223	1	03/05/20 11:38	03/06/20 14:32	108-95-2	
Pyrene	901J	ug/kg	933	257	1	03/05/20 11:38	03/06/20 14:32	129-00-0	R1
Pyridine	ND	ug/kg	933	236	1	03/05/20 11:38	03/06/20 14:32	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	933	214	1	03/05/20 11:38	03/06/20 14:32	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	933	242	1	03/05/20 11:38	03/06/20 14:32	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	933	234	1	03/05/20 11:38	03/06/20 14:32	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	75	%	23-110		1	03/05/20 11:38	03/06/20 14:32	4165-60-0	
2-Fluorobiphenyl (S)	60	%	30-110		1	03/05/20 11:38	03/06/20 14:32	321-60-8	
Terphenyl-d14 (S)	54	%	28-110		1	03/05/20 11:38	03/06/20 14:32	1718-51-0	
Phenol-d6 (S)	68	%	22-110		1	03/05/20 11:38	03/06/20 14:32	13127-88-3	
2-Fluorophenol (S)	73	%	13-110		1	03/05/20 11:38	03/06/20 14:32	367-12-4	
2,4,6-Tribromophenol (S)	81	%	27-110		1	03/05/20 11:38	03/06/20 14:32	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Acetone	59.5J	ug/kg	402	37.9	1	03/06/20 09:59	03/06/20 15:53	67-64-1	
Benzene	ND	ug/kg	20.1	3.6	1	03/06/20 09:59	03/06/20 15:53	71-43-2	R1
Bromobenzene	ND	ug/kg	20.1	5.5	1	03/06/20 09:59	03/06/20 15:53	108-86-1	R1
Bromochloromethane	ND	ug/kg	20.1	4.9	1	03/06/20 09:59	03/06/20 15:53	74-97-5	R1
Bromodichloromethane	ND	ug/kg	20.1	3.9	1	03/06/20 09:59	03/06/20 15:53	75-27-4	R1
Bromoform	ND	ug/kg	20.1	9.8	1	03/06/20 09:59	03/06/20 15:53	75-25-2	M1,R1
Bromomethane	ND	ug/kg	40.2	9.5	1	03/06/20 09:59	03/06/20 15:53	74-83-9	IH
2-Butanone (MEK)	ND	ug/kg	402	47.8	1	03/06/20 09:59	03/06/20 15:53	78-93-3	
n-Butylbenzene	ND	ug/kg	20.1	11.3	1	03/06/20 09:59	03/06/20 15:53	104-51-8	
sec-Butylbenzene	ND	ug/kg	20.1	8.5	1	03/06/20 09:59	03/06/20 15:53	135-98-8	R1

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13A_SE_20200301 **Lab ID:** 92467731016 **Collected:** 03/02/20 09:15 **Received:** 03/03/20 14:00 **Matrix:** Solid
(0.5-1.0)

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 8260D Preparation Method: EPA 5035A									
tert-Butylbenzene	ND	ug/kg	20.1	6.8	1	03/06/20 09:59	03/06/20 15:53	98-06-6	M1,R1
Carbon tetrachloride	ND	ug/kg	20.1	3.8	1	03/06/20 09:59	03/06/20 15:53	56-23-5	M1,R1
Chlorobenzene	ND	ug/kg	20.1	3.9	1	03/06/20 09:59	03/06/20 15:53	108-90-7	R1
Chloroethane	ND	ug/kg	40.2	8.4	1	03/06/20 09:59	03/06/20 15:53	75-00-3	
Chloroform	ND	ug/kg	20.1	4.3	1	03/06/20 09:59	03/06/20 15:53	67-66-3	R1
Chloromethane	ND	ug/kg	40.2	13.2	1	03/06/20 09:59	03/06/20 15:53	74-87-3	
2-Chlorotoluene	ND	ug/kg	20.1	6.1	1	03/06/20 09:59	03/06/20 15:53	95-49-8	
4-Chlorotoluene	ND	ug/kg	20.1	6.0	1	03/06/20 09:59	03/06/20 15:53	106-43-4	M1,R1
1,2-Dibromo-3-chloropropane	ND	ug/kg	20.1	10.2	1	03/06/20 09:59	03/06/20 15:53	96-12-8	R1
Dibromochloromethane	ND	ug/kg	20.1	10.0	1	03/06/20 09:59	03/06/20 15:53	124-48-1	R1
1,2-Dibromoethane (EDB)	ND	ug/kg	20.1	4.5	1	03/06/20 09:59	03/06/20 15:53	106-93-4	
Dibromomethane	ND	ug/kg	20.1	6.0	1	03/06/20 09:59	03/06/20 15:53	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	20.1	7.1	1	03/06/20 09:59	03/06/20 15:53	95-50-1	R1
1,3-Dichlorobenzene	ND	ug/kg	20.1	7.1	1	03/06/20 09:59	03/06/20 15:53	541-73-1	M1,R1
1,4-Dichlorobenzene	ND	ug/kg	20.1	6.9	1	03/06/20 09:59	03/06/20 15:53	106-46-7	M1,R1
Dichlorodifluoromethane	ND	ug/kg	40.2	16.5	1	03/06/20 09:59	03/06/20 15:53	75-71-8	
1,1-Dichloroethane	ND	ug/kg	20.1	3.0	1	03/06/20 09:59	03/06/20 15:53	75-34-3	
1,2-Dichloroethane	ND	ug/kg	20.1	4.0	1	03/06/20 09:59	03/06/20 15:53	107-06-2	
1,1-Dichloroethene	ND	ug/kg	20.1	4.7	1	03/06/20 09:59	03/06/20 15:53	75-35-4	R1
cis-1,2-Dichloroethene	ND	ug/kg	20.1	3.5	1	03/06/20 09:59	03/06/20 15:53	156-59-2	R1
trans-1,2-Dichloroethene	ND	ug/kg	20.1	3.9	1	03/06/20 09:59	03/06/20 15:53	156-60-5	R1
1,2-Dichloropropane	ND	ug/kg	20.1	7.6	1	03/06/20 09:59	03/06/20 15:53	78-87-5	R1
1,3-Dichloropropane	ND	ug/kg	20.1	7.6	1	03/06/20 09:59	03/06/20 15:53	142-28-9	R1
2,2-Dichloropropane	ND	ug/kg	20.1	2.0	1	03/06/20 09:59	03/06/20 15:53	594-20-7	R1
1,1-Dichloropropene	ND	ug/kg	20.1	8.5	1	03/06/20 09:59	03/06/20 15:53	563-58-6	R1
cis-1,3-Dichloropropene	ND	ug/kg	20.1	9.1	1	03/06/20 09:59	03/06/20 15:53	10061-01-5	R1
trans-1,3-Dichloropropene	ND	ug/kg	20.1	3.5	1	03/06/20 09:59	03/06/20 15:53	10061-02-6	R1
Diisopropyl ether	ND	ug/kg	20.1	11.5	1	03/06/20 09:59	03/06/20 15:53	108-20-3	
Ethylbenzene	ND	ug/kg	20.1	4.3	1	03/06/20 09:59	03/06/20 15:53	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	20.1	9.9	1	03/06/20 09:59	03/06/20 15:53	87-68-3	
2-Hexanone	ND	ug/kg	201	20.8	1	03/06/20 09:59	03/06/20 15:53	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	20.1	5.8	1	03/06/20 09:59	03/06/20 15:53	98-82-8	R1
p-Isopropyltoluene	ND	ug/kg	20.1	9.7	1	03/06/20 09:59	03/06/20 15:53	99-87-6	R1
Methylene Chloride	ND	ug/kg	80.3	23.7	1	03/06/20 09:59	03/06/20 15:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	201	15.0	1	03/06/20 09:59	03/06/20 15:53	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	20.1	11.5	1	03/06/20 09:59	03/06/20 15:53	1634-04-4	
Naphthalene	ND	ug/kg	20.1	17.1	1	03/06/20 09:59	03/06/20 15:53	91-20-3	R1
n-Propylbenzene	ND	ug/kg	20.1	6.7	1	03/06/20 09:59	03/06/20 15:53	103-65-1	
Styrene	ND	ug/kg	20.1	5.9	1	03/06/20 09:59	03/06/20 15:53	100-42-5	R1
1,1,1,2-Tetrachloroethane	ND	ug/kg	20.1	4.9	1	03/06/20 09:59	03/06/20 15:53	630-20-6	M1,R1
1,1,2,2-Tetrachloroethane	ND	ug/kg	20.1	6.9	1	03/06/20 09:59	03/06/20 15:53	79-34-5	R1
Tetrachloroethene	ND	ug/kg	20.1	6.3	1	03/06/20 09:59	03/06/20 15:53	127-18-4	R1
Toluene	ND	ug/kg	20.1	6.5	1	03/06/20 09:59	03/06/20 15:53	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	20.1	14.3	1	03/06/20 09:59	03/06/20 15:53	87-61-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-13A_SE_20200301 **Lab ID:** 92467731016 **Collected:** 03/02/20 09:15 **Received:** 03/03/20 14:00 **Matrix:** Solid
(0.5-1.0)

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 8260D Preparation Method: EPA 5035A									
1,2,4-Trichlorobenzene	ND	ug/kg	20.1	10.6	1	03/06/20 09:59	03/06/20 15:53	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	20.1	3.5	1	03/06/20 09:59	03/06/20 15:53	71-55-6	R1
1,1,2-Trichloroethane	ND	ug/kg	20.1	4.5	1	03/06/20 09:59	03/06/20 15:53	79-00-5	
Trichloroethene	ND	ug/kg	20.1	5.2	1	03/06/20 09:59	03/06/20 15:53	79-01-6	R1
Trichlorofluoromethane	ND	ug/kg	20.1	4.7	1	03/06/20 09:59	03/06/20 15:53	75-69-4	R1
1,2,3-Trichloropropane	ND	ug/kg	20.1	6.8	1	03/06/20 09:59	03/06/20 15:53	96-18-4	R1
1,2,4-Trimethylbenzene	ND	ug/kg	20.1	7.8	1	03/06/20 09:59	03/06/20 15:53	95-63-6	M1,R1
1,3,5-Trimethylbenzene	ND	ug/kg	20.1	6.7	1	03/06/20 09:59	03/06/20 15:53	108-67-8	M1,R1
Vinyl acetate	ND	ug/kg	201	65.5	1	03/06/20 09:59	03/06/20 15:53	108-05-4	
Vinyl chloride	ND	ug/kg	40.2	7.6	1	03/06/20 09:59	03/06/20 15:53	75-01-4	
Xylene (Total)	ND	ug/kg	40.2	14.1	1	03/06/20 09:59	03/06/20 15:53	1330-20-7	
m&p-Xylene	ND	ug/kg	40.2	9.5	1	03/06/20 09:59	03/06/20 15:53	179601-23-1	
o-Xylene	ND	ug/kg	20.1	4.7	1	03/06/20 09:59	03/06/20 15:53	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	70-130		1	03/06/20 09:59	03/06/20 15:53	2037-26-5	
4-Bromofluorobenzene (S)	93	%	70-130		1	03/06/20 09:59	03/06/20 15:53	460-00-4	
1,2-Dichloroethane-d4 (S)	92	%	70-132		1	03/06/20 09:59	03/06/20 15:53	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	64.0	%	0.10	0.10	1		03/04/20 12:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (2.0-3.0) Lab ID: 92467731017 Collected: 03/02/20 11:50 Received: 03/03/20 14:00 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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Acenaphthene	ND	ug/kg	487	125	1	03/05/20 11:38	03/06/20 15:24	83-32-9	
Acenaphthylene	ND	ug/kg	487	115	1	03/05/20 11:38	03/06/20 15:24	208-96-8	
Aniline	ND	ug/kg	487	109	1	03/05/20 11:38	03/06/20 15:24	62-53-3	
Anthracene	ND	ug/kg	487	126	1	03/05/20 11:38	03/06/20 15:24	120-12-7	
Benzo(a)anthracene	ND	ug/kg	487	155	1	03/05/20 11:38	03/06/20 15:24	56-55-3	
Benzo(a)pyrene	ND	ug/kg	487	211	1	03/05/20 11:38	03/06/20 15:24	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	487	196	1	03/05/20 11:38	03/06/20 15:24	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	487	190	1	03/05/20 11:38	03/06/20 15:24	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	487	205	1	03/05/20 11:38	03/06/20 15:24	207-08-9	
Benzoic Acid	ND	ug/kg	2440	526	1	03/05/20 11:38	03/06/20 15:24	65-85-0	
Benzyl alcohol	ND	ug/kg	974	258	1	03/05/20 11:38	03/06/20 15:24	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	487	128	1	03/05/20 11:38	03/06/20 15:24	101-55-3	
Butylbenzylphthalate	ND	ug/kg	487	130	1	03/05/20 11:38	03/06/20 15:24	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	974	297	1	03/05/20 11:38	03/06/20 15:24	59-50-7	
4-Chloroaniline	ND	ug/kg	974	298	1	03/05/20 11:38	03/06/20 15:24	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	487	130	1	03/05/20 11:38	03/06/20 15:24	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	487	103	1	03/05/20 11:38	03/06/20 15:24	111-44-4	
2-Chloronaphthalene	ND	ug/kg	487	109	1	03/05/20 11:38	03/06/20 15:24	91-58-7	
2-Chlorophenol	ND	ug/kg	487	113	1	03/05/20 11:38	03/06/20 15:24	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	487	127	1	03/05/20 11:38	03/06/20 15:24	7005-72-3	
Chrysene	ND	ug/kg	487	141	1	03/05/20 11:38	03/06/20 15:24	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	487	195	1	03/05/20 11:38	03/06/20 15:24	53-70-3	
Dibenzofuran	ND	ug/kg	487	122	1	03/05/20 11:38	03/06/20 15:24	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	487	105	1	03/05/20 11:38	03/06/20 15:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	487	110	1	03/05/20 11:38	03/06/20 15:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	487	107	1	03/05/20 11:38	03/06/20 15:24	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	974	340	1	03/05/20 11:38	03/06/20 15:24	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	487	161	1	03/05/20 11:38	03/06/20 15:24	120-83-2	
Diethylphthalate	ND	ug/kg	487	106	1	03/05/20 11:38	03/06/20 15:24	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	487	121	1	03/05/20 11:38	03/06/20 15:24	105-67-9	
Dimethylphthalate	ND	ug/kg	487	110	1	03/05/20 11:38	03/06/20 15:24	131-11-3	
Di-n-butylphthalate	ND	ug/kg	487	120	1	03/05/20 11:38	03/06/20 15:24	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	974	785	1	03/05/20 11:38	03/06/20 15:24	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2440	1560	1	03/05/20 11:38	03/06/20 15:24	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	487	129	1	03/05/20 11:38	03/06/20 15:24	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	487	127	1	03/05/20 11:38	03/06/20 15:24	606-20-2	
Di-n-octylphthalate	ND	ug/kg	487	278	1	03/05/20 11:38	03/06/20 15:24	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	487	159	1	03/05/20 11:38	03/06/20 15:24	117-81-7	
Fluoranthene	ND	ug/kg	487	147	1	03/05/20 11:38	03/06/20 15:24	206-44-0	
Fluorene	ND	ug/kg	487	130	1	03/05/20 11:38	03/06/20 15:24	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	487	118	1	03/05/20 11:38	03/06/20 15:24	87-68-3	
Hexachlorobenzene	ND	ug/kg	487	124	1	03/05/20 11:38	03/06/20 15:24	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	487	195	1	03/05/20 11:38	03/06/20 15:24	77-47-4	
Hexachloroethane	ND	ug/kg	487	111	1	03/05/20 11:38	03/06/20 15:24	67-72-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: SW-14_SE_20200301 (2.0-3.0) **Lab ID:** 92467731017 **Collected:** 03/02/20 11:50 **Received:** 03/03/20 14:00 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Indeno(1,2,3-cd)pyrene	ND	ug/kg	487	223	1	03/05/20 11:38	03/06/20 15:24	193-39-5	
Isophorone	ND	ug/kg	487	106	1	03/05/20 11:38	03/06/20 15:24	78-59-1	
1-Methylnaphthalene	ND	ug/kg	487	130	1	03/05/20 11:38	03/06/20 15:24	90-12-0	
2-Methylnaphthalene	ND	ug/kg	487	124	1	03/05/20 11:38	03/06/20 15:24	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	487	108	1	03/05/20 11:38	03/06/20 15:24	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	487	123	1	03/05/20 11:38	03/06/20 15:24	15831-10-4	
Naphthalene	ND	ug/kg	487	117	1	03/05/20 11:38	03/06/20 15:24	91-20-3	
2-Nitroaniline	ND	ug/kg	2440	245	1	03/05/20 11:38	03/06/20 15:24	88-74-4	
3-Nitroaniline	ND	ug/kg	2440	258	1	03/05/20 11:38	03/06/20 15:24	99-09-2	
4-Nitroaniline	ND	ug/kg	974	241	1	03/05/20 11:38	03/06/20 15:24	100-01-6	
Nitrobenzene	ND	ug/kg	487	116	1	03/05/20 11:38	03/06/20 15:24	98-95-3	
2-Nitrophenol	ND	ug/kg	487	151	1	03/05/20 11:38	03/06/20 15:24	88-75-5	
4-Nitrophenol	ND	ug/kg	2440	777	1	03/05/20 11:38	03/06/20 15:24	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	487	137	1	03/05/20 11:38	03/06/20 15:24	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	487	136	1	03/05/20 11:38	03/06/20 15:24	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	487	124	1	03/05/20 11:38	03/06/20 15:24	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	487	135	1	03/05/20 11:38	03/06/20 15:24	108-60-1	
Pentachlorophenol	ND	ug/kg	974	223	1	03/05/20 11:38	03/06/20 15:24	87-86-5	
Phenanthrene	ND	ug/kg	487	123	1	03/05/20 11:38	03/06/20 15:24	85-01-8	
Phenol	ND	ug/kg	487	116	1	03/05/20 11:38	03/06/20 15:24	108-95-2	
Pyrene	ND	ug/kg	487	134	1	03/05/20 11:38	03/06/20 15:24	129-00-0	
Pyridine	ND	ug/kg	487	123	1	03/05/20 11:38	03/06/20 15:24	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	487	112	1	03/05/20 11:38	03/06/20 15:24	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	487	127	1	03/05/20 11:38	03/06/20 15:24	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	487	122	1	03/05/20 11:38	03/06/20 15:24	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	66	%	23-110		1	03/05/20 11:38	03/06/20 15:24	4165-60-0	
2-Fluorobiphenyl (S)	67	%	30-110		1	03/05/20 11:38	03/06/20 15:24	321-60-8	
Terphenyl-d14 (S)	48	%	28-110		1	03/05/20 11:38	03/06/20 15:24	1718-51-0	
Phenol-d6 (S)	66	%	22-110		1	03/05/20 11:38	03/06/20 15:24	13127-88-3	
2-Fluorophenol (S)	72	%	13-110		1	03/05/20 11:38	03/06/20 15:24	367-12-4	
2,4,6-Tribromophenol (S)	73	%	27-110		1	03/05/20 11:38	03/06/20 15:24	118-79-6	
Percent Moisture Analytical Method: ASTM D2974-87									
Percent Moisture	32.0	%	0.10	0.10	1		03/04/20 12:50		

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: EB-01_WQ_20200302 Lab ID: 92467731018 Collected: 03/02/20 17:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270E RVE	Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	83-32-9	L1,v1
Acenaphthylene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:43	208-96-8	
Aniline	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:43	62-53-3	
Anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:43	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:43	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 20:43	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:43	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:43	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:43	207-08-9	
Benzoic Acid	ND	ug/L	50.0	19.5	1	03/05/20 18:44	03/06/20 20:43	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	2.6	1	03/05/20 18:44	03/06/20 20:43	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 20:43	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1.9	1	03/05/20 18:44	03/06/20 20:43	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	10.0	2.8	1	03/05/20 18:44	03/06/20 20:43	59-50-7	
4-Chloroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 20:43	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:43	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:43	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:43	7005-72-3	
Chrysene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:43	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:43	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:43	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	2.7	1	03/05/20 18:44	03/06/20 20:43	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:43	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:43	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:43	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:43	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	4.5	1	03/05/20 18:44	03/06/20 20:43	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	7.3	1	03/05/20 18:44	03/06/20 20:43	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:43	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:43	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	2.2	1	03/05/20 18:44	03/06/20 20:43	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.0	1	03/05/20 18:44	03/06/20 20:43	117-81-7	
Fluoranthene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:43	206-44-0	
Fluorene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:43	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:43	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	2.4	1	03/05/20 18:44	03/06/20 20:43	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:43	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:43	193-39-5	
Isophorone	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:43	78-59-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: EB-01_WQ_20200302 Lab ID: 92467731018 Collected: 03/02/20 17:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E RVE Analytical Method: EPA 8270E Preparation Method: EPA 3510C									
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 20:43	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 20:43	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:43	91-20-3	
2-Nitroaniline	ND	ug/L	20.0	3.0	1	03/05/20 18:44	03/06/20 20:43	88-74-4	
3-Nitroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 20:43	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	3.1	1	03/05/20 18:44	03/06/20 20:43	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:43	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 20:43	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	9.4	1	03/05/20 18:44	03/06/20 20:43	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 20:43	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:43	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 20:43	108-60-1	
Pentachlorophenol	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 20:43	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	85-01-8	
Phenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:43	108-95-2	
Pyrene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:43	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 20:43	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 20:43	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 20:43	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	66	%	13-130		1	03/05/20 18:44	03/06/20 20:43	4165-60-0	
2-Fluorobiphenyl (S)	56	%	13-130		1	03/05/20 18:44	03/06/20 20:43	321-60-8	
Terphenyl-d14 (S)	119	%	25-130		1	03/05/20 18:44	03/06/20 20:43	1718-51-0	
Phenol-d6 (S)	38	%	10-130		1	03/05/20 18:44	03/06/20 20:43	13127-88-3	
2-Fluorophenol (S)	49	%	10-130		1	03/05/20 18:44	03/06/20 20:43	367-12-4	
2,4,6-Tribromophenol (S)	67	%	10-137		1	03/05/20 18:44	03/06/20 20:43	118-79-6	
8260 MSV Low Level SC Analytical Method: EPA 8260D									
Acetone	ND	ug/L	25.0	6.2	1		03/04/20 17:06	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		03/04/20 17:06	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		03/04/20 17:06	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		03/04/20 17:06	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		03/04/20 17:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		03/04/20 17:06	75-25-2	
Bromomethane	ND	ug/L	2.0	0.62	1		03/04/20 17:06	74-83-9	IH,IK, L1,v1
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		03/04/20 17:06	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		03/04/20 17:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		03/04/20 17:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		03/04/20 17:06	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		03/04/20 17:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		03/04/20 17:06	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 17:06	95-49-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: EB-01_WQ_20200302 Lab ID: 92467731018 Collected: 03/02/20 17:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 17:06	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		03/04/20 17:06	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		03/04/20 17:06	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		03/04/20 17:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		03/04/20 17:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 17:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		03/04/20 17:06	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		03/04/20 17:06	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		03/04/20 17:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		03/04/20 17:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		03/04/20 17:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		03/04/20 17:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		03/04/20 17:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		03/04/20 17:06	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		03/04/20 17:06	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		03/04/20 17:06	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		03/04/20 17:06	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		03/04/20 17:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		03/04/20 17:06	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		03/04/20 17:06	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		03/04/20 17:06	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		03/04/20 17:06	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		03/04/20 17:06	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		03/04/20 17:06	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		03/04/20 17:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		03/04/20 17:06	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		03/04/20 17:06	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		03/04/20 17:06	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		03/04/20 17:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		03/04/20 17:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		03/04/20 17:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.16	1		03/04/20 17:06	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		03/04/20 17:06	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		03/04/20 17:06	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 17:06	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		03/04/20 17:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		03/04/20 17:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		03/04/20 17:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		03/04/20 17:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		03/04/20 17:06	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		03/04/20 17:06	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		03/04/20 17:06	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		03/04/20 17:06	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.41	1		03/04/20 17:06	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		03/04/20 17:06	95-47-6	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: EB-01_WQ_20200302		Lab ID: 92467731018		Collected: 03/02/20 17:00		Received: 03/03/20 14:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		03/04/20 17:06	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		03/04/20 17:06	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		03/04/20 17:06	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: EB-02_WQ_20200301 Lab ID: 92467731019 Collected: 03/01/20 17:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report	MDL	DF	Prepared	Analyzed	CAS No.	Qual
			Limit						
8270E RVE	Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Acenaphthene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	83-32-9	L1,v1
Acenaphthylene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 21:09	208-96-8	
Aniline	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 21:09	62-53-3	
Anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 21:09	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 21:09	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 21:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 21:09	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 21:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 21:09	207-08-9	
Benzoic Acid	ND	ug/L	50.0	19.5	1	03/05/20 18:44	03/06/20 21:09	65-85-0	
Benzyl alcohol	ND	ug/L	20.0	2.6	1	03/05/20 18:44	03/06/20 21:09	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 21:09	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1.9	1	03/05/20 18:44	03/06/20 21:09	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	10.0	2.8	1	03/05/20 18:44	03/06/20 21:09	59-50-7	
4-Chloroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 21:09	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 21:09	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 21:09	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 21:09	7005-72-3	
Chrysene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 21:09	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 21:09	132-64-9	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 21:09	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	2.7	1	03/05/20 18:44	03/06/20 21:09	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 21:09	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 21:09	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 21:09	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 21:09	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	4.5	1	03/05/20 18:44	03/06/20 21:09	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	7.3	1	03/05/20 18:44	03/06/20 21:09	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 21:09	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 21:09	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	2.2	1	03/05/20 18:44	03/06/20 21:09	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.0	1	03/05/20 18:44	03/06/20 21:09	117-81-7	
Fluoranthene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 21:09	206-44-0	
Fluorene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 21:09	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 21:09	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	10.0	2.4	1	03/05/20 18:44	03/06/20 21:09	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 21:09	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 21:09	193-39-5	
Isophorone	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 21:09	78-59-1	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: EB-02_WQ_20200301 Lab ID: 92467731019 Collected: 03/01/20 17:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E RVE Analytical Method: EPA 8270E Preparation Method: EPA 3510C									
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 21:09	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.2	1	03/05/20 18:44	03/06/20 21:09	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 21:09	91-20-3	
2-Nitroaniline	ND	ug/L	20.0	3.0	1	03/05/20 18:44	03/06/20 21:09	88-74-4	
3-Nitroaniline	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 21:09	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	3.1	1	03/05/20 18:44	03/06/20 21:09	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 21:09	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.7	1	03/05/20 18:44	03/06/20 21:09	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	9.4	1	03/05/20 18:44	03/06/20 21:09	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.8	1	03/05/20 18:44	03/06/20 21:09	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 21:09	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.3	1	03/05/20 18:44	03/06/20 21:09	108-60-1	
Pentachlorophenol	ND	ug/L	20.0	2.8	1	03/05/20 18:44	03/06/20 21:09	87-86-5	
Phenanthrene	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	85-01-8	
Phenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 21:09	108-95-2	
Pyrene	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 21:09	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.6	1	03/05/20 18:44	03/06/20 21:09	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	03/05/20 18:44	03/06/20 21:09	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	03/05/20 18:44	03/06/20 21:09	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	58	%	13-130		1	03/05/20 18:44	03/06/20 21:09	4165-60-0	
2-Fluorobiphenyl (S)	51	%	13-130		1	03/05/20 18:44	03/06/20 21:09	321-60-8	
Terphenyl-d14 (S)	115	%	25-130		1	03/05/20 18:44	03/06/20 21:09	1718-51-0	
Phenol-d6 (S)	38	%	10-130		1	03/05/20 18:44	03/06/20 21:09	13127-88-3	
2-Fluorophenol (S)	49	%	10-130		1	03/05/20 18:44	03/06/20 21:09	367-12-4	
2,4,6-Tribromophenol (S)	51	%	10-137		1	03/05/20 18:44	03/06/20 21:09	118-79-6	
8260 MSV Low Level SC Analytical Method: EPA 8260D									
Acetone	ND	ug/L	25.0	6.2	1		03/04/20 17:24	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		03/04/20 17:24	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		03/04/20 17:24	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		03/04/20 17:24	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		03/04/20 17:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		03/04/20 17:24	75-25-2	
Bromomethane	ND	ug/L	2.0	0.62	1		03/04/20 17:24	74-83-9	IH,IK, L1,v1
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		03/04/20 17:24	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		03/04/20 17:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		03/04/20 17:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		03/04/20 17:24	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		03/04/20 17:24	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		03/04/20 17:24	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 17:24	95-49-8	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: EB-02_WQ_20200301 Lab ID: 92467731019 Collected: 03/01/20 17:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 17:24	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		03/04/20 17:24	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		03/04/20 17:24	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		03/04/20 17:24	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		03/04/20 17:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 17:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		03/04/20 17:24	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		03/04/20 17:24	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		03/04/20 17:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		03/04/20 17:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		03/04/20 17:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		03/04/20 17:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		03/04/20 17:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		03/04/20 17:24	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		03/04/20 17:24	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		03/04/20 17:24	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		03/04/20 17:24	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		03/04/20 17:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		03/04/20 17:24	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		03/04/20 17:24	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		03/04/20 17:24	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		03/04/20 17:24	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		03/04/20 17:24	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		03/04/20 17:24	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		03/04/20 17:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		03/04/20 17:24	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		03/04/20 17:24	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		03/04/20 17:24	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		03/04/20 17:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		03/04/20 17:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		03/04/20 17:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.16	1		03/04/20 17:24	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		03/04/20 17:24	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		03/04/20 17:24	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 17:24	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		03/04/20 17:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		03/04/20 17:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		03/04/20 17:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		03/04/20 17:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		03/04/20 17:24	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		03/04/20 17:24	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		03/04/20 17:24	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		03/04/20 17:24	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.41	1		03/04/20 17:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		03/04/20 17:24	95-47-6	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: EB-02_WQ_20200301		Lab ID: 92467731019		Collected: 03/01/20 17:00		Received: 03/03/20 14:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		03/04/20 17:24	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		03/04/20 17:24	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		03/04/20 17:24	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: TB-01_WQ_20200302 Lab ID: 92467731020 Collected: 03/02/20 00:00 Received: 03/03/20 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D							
Acetone	ND	ug/L	25.0	6.2	1		03/04/20 17:42	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		03/04/20 17:42	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		03/04/20 17:42	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		03/04/20 17:42	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		03/04/20 17:42	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		03/04/20 17:42	75-25-2	
Bromomethane	ND	ug/L	2.0	0.62	1		03/04/20 17:42	74-83-9	IH,IK, L1,v1
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		03/04/20 17:42	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		03/04/20 17:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		03/04/20 17:42	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		03/04/20 17:42	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		03/04/20 17:42	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		03/04/20 17:42	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 17:42	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		03/04/20 17:42	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		03/04/20 17:42	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		03/04/20 17:42	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		03/04/20 17:42	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		03/04/20 17:42	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 17:42	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		03/04/20 17:42	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		03/04/20 17:42	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		03/04/20 17:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		03/04/20 17:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		03/04/20 17:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		03/04/20 17:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		03/04/20 17:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		03/04/20 17:42	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		03/04/20 17:42	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		03/04/20 17:42	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		03/04/20 17:42	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		03/04/20 17:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		03/04/20 17:42	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		03/04/20 17:42	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		03/04/20 17:42	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		03/04/20 17:42	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		03/04/20 17:42	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		03/04/20 17:42	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		03/04/20 17:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		03/04/20 17:42	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		03/04/20 17:42	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		03/04/20 17:42	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		03/04/20 17:42	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		03/04/20 17:42	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		03/04/20 17:42	79-34-5	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Sample: TB-01_WQ_20200302 **Lab ID:** 92467731020 **Collected:** 03/02/20 00:00 **Received:** 03/03/20 14:00 **Matrix:** Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC Analytical Method: EPA 8260D									
Tetrachloroethene	ND	ug/L	1.0	0.16	1		03/04/20 17:42	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		03/04/20 17:42	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		03/04/20 17:42	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		03/04/20 17:42	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		03/04/20 17:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		03/04/20 17:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		03/04/20 17:42	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		03/04/20 17:42	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		03/04/20 17:42	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		03/04/20 17:42	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		03/04/20 17:42	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		03/04/20 17:42	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.41	1		03/04/20 17:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		03/04/20 17:42	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		03/04/20 17:42	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		03/04/20 17:42	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		03/04/20 17:42	2037-26-5	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

QC Batch:	528517	Analysis Method:	EPA 8260D
QC Batch Method:	EPA 8260D	Analysis Description:	8260 MSV Low Level SC
Associated Lab Samples:	92467731018, 92467731019, 92467731020		

METHOD BLANK: 2822905 Matrix: Water

Associated Lab Samples: 92467731018, 92467731019, 92467731020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.34	03/04/20 14:24	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.18	03/04/20 14:24	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.22	03/04/20 14:24	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.24	03/04/20 14:24	
1,1-Dichloroethane	ug/L	ND	1.0	0.27	03/04/20 14:24	
1,1-Dichloroethene	ug/L	ND	1.0	0.24	03/04/20 14:24	
1,1-Dichloropropene	ug/L	ND	1.0	0.21	03/04/20 14:24	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.34	03/04/20 14:24	
1,2,3-Trichloropropane	ug/L	ND	1.0	0.35	03/04/20 14:24	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.22	03/04/20 14:24	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	0.26	03/04/20 14:24	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.29	03/04/20 14:24	
1,2-Dichloroethane	ug/L	ND	1.0	0.34	03/04/20 14:24	
1,2-Dichloropropane	ug/L	ND	1.0	0.19	03/04/20 14:24	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.22	03/04/20 14:24	
1,3-Dichloropropane	ug/L	ND	1.0	0.16	03/04/20 14:24	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.26	03/04/20 14:24	
2,2-Dichloropropane	ug/L	ND	1.0	0.27	03/04/20 14:24	
2-Butanone (MEK)	ug/L	ND	5.0	3.3	03/04/20 14:24	
2-Chlorotoluene	ug/L	ND	1.0	0.20	03/04/20 14:24	
2-Hexanone	ug/L	ND	5.0	0.57	03/04/20 14:24	
4-Chlorotoluene	ug/L	ND	1.0	0.20	03/04/20 14:24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	4.5	03/04/20 14:24	
Acetone	ug/L	ND	25.0	6.2	03/04/20 14:24	
Benzene	ug/L	ND	1.0	0.15	03/04/20 14:24	
Bromobenzene	ug/L	ND	1.0	0.22	03/04/20 14:24	
Bromochloromethane	ug/L	ND	1.0	0.34	03/04/20 14:24	
Bromodichloromethane	ug/L	ND	1.0	0.26	03/04/20 14:24	
Bromoform	ug/L	ND	1.0	0.62	03/04/20 14:24	
Bromomethane	ug/L	ND	2.0	0.62	03/04/20 14:24	IH,IK,v1
Carbon tetrachloride	ug/L	ND	1.0	0.22	03/04/20 14:24	
Chlorobenzene	ug/L	ND	1.0	0.23	03/04/20 14:24	
Chloroethane	ug/L	ND	1.0	0.49	03/04/20 14:24	
Chloroform	ug/L	ND	5.0	2.3	03/04/20 14:24	
Chloromethane	ug/L	ND	1.0	0.39	03/04/20 14:24	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.29	03/04/20 14:24	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.30	03/04/20 14:24	
Dibromochloromethane	ug/L	ND	1.0	0.41	03/04/20 14:24	
Dibromomethane	ug/L	ND	1.0	0.46	03/04/20 14:24	
Dichlorodifluoromethane	ug/L	ND	1.0	0.23	03/04/20 14:24	
Diisopropyl ether	ug/L	ND	1.0	0.22	03/04/20 14:24	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

METHOD BLANK: 2822905

Matrix: Water

Associated Lab Samples: 92467731018, 92467731019, 92467731020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethylbenzene	ug/L	ND	1.0	0.26	03/04/20 14:24	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.44	03/04/20 14:24	
m&p-Xylene	ug/L	ND	2.0	0.41	03/04/20 14:24	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.28	03/04/20 14:24	
Methylene Chloride	ug/L	ND	5.0	3.7	03/04/20 14:24	
Naphthalene	ug/L	ND	1.0	0.35	03/04/20 14:24	
o-Xylene	ug/L	ND	1.0	0.22	03/04/20 14:24	
p-Isopropyltoluene	ug/L	ND	1.0	0.21	03/04/20 14:24	
Styrene	ug/L	ND	1.0	0.27	03/04/20 14:24	
Tetrachloroethene	ug/L	ND	1.0	0.16	03/04/20 14:24	
Toluene	ug/L	ND	1.0	0.24	03/04/20 14:24	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.25	03/04/20 14:24	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.31	03/04/20 14:24	
Trichloroethene	ug/L	ND	1.0	0.22	03/04/20 14:24	
Trichlorofluoromethane	ug/L	ND	1.0	0.31	03/04/20 14:24	
Vinyl acetate	ug/L	ND	2.0	1.4	03/04/20 14:24	
Vinyl chloride	ug/L	ND	1.0	0.24	03/04/20 14:24	
Xylene (Total)	ug/L	ND	1.0	0.63	03/04/20 14:24	
1,2-Dichloroethane-d4 (S)	%	99	70-130		03/04/20 14:24	
4-Bromofluorobenzene (S)	%	104	70-130		03/04/20 14:24	
Toluene-d8 (S)	%	105	70-130		03/04/20 14:24	

LABORATORY CONTROL SAMPLE: 2822906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	53.1	106	70-130	
1,1,1-Trichloroethane	ug/L	50	48.6	97	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	52.1	104	70-130	
1,1,2-Trichloroethane	ug/L	50	52.2	104	70-130	
1,1-Dichloroethane	ug/L	50	46.3	93	70-130	
1,1-Dichloroethene	ug/L	50	47.6	95	70-130	
1,1-Dichloropropene	ug/L	50	53.8	108	70-130	
1,2,3-Trichlorobenzene	ug/L	50	54.4	109	70-130	
1,2,3-Trichloropropane	ug/L	50	54.0	108	70-130	
1,2,4-Trichlorobenzene	ug/L	50	53.7	107	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	59.6	119	70-130	
1,2-Dichlorobenzene	ug/L	50	50.3	101	70-130	
1,2-Dichloroethane	ug/L	50	46.1	92	70-130	
1,2-Dichloropropane	ug/L	50	50.5	101	70-130	
1,3-Dichlorobenzene	ug/L	50	48.4	97	70-130	
1,3-Dichloropropane	ug/L	50	51.6	103	70-130	
1,4-Dichlorobenzene	ug/L	50	47.9	96	70-130	
2,2-Dichloropropane	ug/L	50	48.7	97	70-130	
2-Butanone (MEK)	ug/L	100	102	102	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

LABORATORY CONTROL SAMPLE: 2822906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chlorotoluene	ug/L	50	49.7	99	70-130	
2-Hexanone	ug/L	100	109	109	70-130	
4-Chlorotoluene	ug/L	50	49.1	98	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	107	107	70-130	
Acetone	ug/L	100	107	107	70-130	
Benzene	ug/L	50	48.8	98	70-130	
Bromobenzene	ug/L	50	50.6	101	70-130	
Bromochloromethane	ug/L	50	50.5	101	70-130	
Bromodichloromethane	ug/L	50	49.9	100	70-130	
Bromoform	ug/L	50	52.3	105	70-130	
Bromomethane	ug/L	50	79.3	159	70-130	IH,IK,L1,v1
Carbon tetrachloride	ug/L	50	49.4	99	70-130	
Chlorobenzene	ug/L	50	47.9	96	70-130	
Chloroethane	ug/L	50	37.7	75	70-130	
Chloroform	ug/L	50	48.4	97	70-130	
Chloromethane	ug/L	50	41.1	82	70-130	
cis-1,2-Dichloroethene	ug/L	50	46.3	93	70-130	
cis-1,3-Dichloropropene	ug/L	50	52.4	105	70-130	
Dibromochloromethane	ug/L	50	55.1	110	70-130	
Dibromomethane	ug/L	50	50.3	101	70-130	
Dichlorodifluoromethane	ug/L	50	43.4	87	70-130	
Diisopropyl ether	ug/L	50	50.7	101	70-130	
Ethylbenzene	ug/L	50	45.9	92	70-130	
Hexachloro-1,3-butadiene	ug/L	50	52.6	105	70-130	
m&p-Xylene	ug/L	100	91.6	92	70-130	
Methyl-tert-butyl ether	ug/L	50	52.7	105	70-130	
Methylene Chloride	ug/L	50	46.8	94	70-130	
Naphthalene	ug/L	50	53.5	107	70-130	
o-Xylene	ug/L	50	47.1	94	70-130	
p-Isopropyltoluene	ug/L	50	49.0	98	70-130	
Styrene	ug/L	50	50.4	101	70-130	
Tetrachloroethene	ug/L	50	48.0	96	70-130	
Toluene	ug/L	50	45.7	91	70-130	
trans-1,2-Dichloroethene	ug/L	50	47.3	95	70-130	
trans-1,3-Dichloropropene	ug/L	50	53.1	106	70-130	
Trichloroethene	ug/L	50	50.4	101	70-130	
Trichlorofluoromethane	ug/L	50	41.9	84	70-130	
Vinyl acetate	ug/L	100	99.8	100	70-130	
Vinyl chloride	ug/L	50	43.9	88	70-130	
Xylene (Total)	ug/L	150	139	92	70-130	
1,2-Dichloroethane-d4 (S)	%			92	70-130	
4-Bromofluorobenzene (S)	%			96	70-130	
Toluene-d8 (S)	%			99	70-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2823618 2823619											
Parameter	Units	92467161002		MS	MSD	MS		MS	MSD	% Rec Limits	Max RPD
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec		
1,1,1,2-Tetrachloroethane	ug/L	ND	80	80	80	87.6	86.5	110	108	73-134	1 30
1,1,1-Trichloroethane	ug/L	ND	80	80	80	87.8	89.1	110	111	82-143	1 30
1,1,2,2-Tetrachloroethane	ug/L	ND	80	80	80	86.2	83.9	108	105	70-136	3 30
1,1,2-Trichloroethane	ug/L	ND	80	80	80	90.7	91.0	113	114	70-135	0 30
1,1-Dichloroethane	ug/L	ND	80	80	80	83.6	85.1	105	106	70-139	2 30
1,1-Dichloroethene	ug/L	ND	80	80	80	89.0	88.2	111	110	70-154	1 30
1,1-Dichloropropene	ug/L	ND	80	80	80	94.6	95.6	118	119	70-149	1 30
1,2,3-Trichlorobenzene	ug/L	ND	80	80	80	87.5	89.4	109	112	70-135	2 30
1,2,3-Trichloropropane	ug/L	ND	80	80	80	85.6	83.8	107	105	71-137	2 30
1,2,4-Trichlorobenzene	ug/L	ND	80	80	80	85.1	87.0	106	109	73-140	2 30
1,2-Dibromo-3-chloropropane	ug/L	ND	80	80	80	93.8	91.0	117	114	65-134	3 30
1,2-Dichlorobenzene	ug/L	ND	80	80	80	86.5	88.1	108	110	70-133	2 30
1,2-Dichloroethane	ug/L	ND	80	80	80	79.6	82.1	99	103	70-137	3 30
1,2-Dichloropropane	ug/L	ND	80	80	80	89.0	89.3	111	112	70-140	0 30
1,3-Dichlorobenzene	ug/L	ND	80	80	80	85.0	86.3	106	108	70-135	1 30
1,3-Dichloropropane	ug/L	ND	80	80	80	86.3	86.7	108	108	70-143	1 30
1,4-Dichlorobenzene	ug/L	ND	80	80	80	85.0	85.0	106	106	70-133	0 30
2,2-Dichloropropane	ug/L	ND	80	80	80	85.4	86.4	107	108	61-148	1 30
2-Butanone (MEK)	ug/L	ND	160	160	160	174	171	109	107	60-139	2 30
2-Chlorotoluene	ug/L	ND	80	80	80	86.5	88.6	108	111	70-144	2 30
2-Hexanone	ug/L	ND	160	160	160	185	176	116	110	65-138	5 30
4-Chlorotoluene	ug/L	ND	80	80	80	86.2	90.0	108	113	70-137	4 30
4-Methyl-2-pentanone (MIBK)	ug/L	ND	160	160	160	179	174	112	109	65-135	3 30
Acetone	ug/L	372	160	160	160	500	491	80	74	60-148	2 30
Benzene	ug/L	3.3J	80	80	80	90.5	91.6	109	110	70-151	1 30
Bromobenzene	ug/L	ND	80	80	80	90.1	89.7	113	112	70-136	0 30
Bromochloromethane	ug/L	ND	80	80	80	87.6	87.6	109	110	70-141	0 30
Bromodichloromethane	ug/L	ND	80	80	80	84.9	87.3	106	109	70-138	3 30
Bromoform	ug/L	ND	80	80	80	84.1	80.7	105	101	63-130	4 30
Bromomethane	ug/L	ND	80	80	80	76.2	69.8	95	87	15-152	9 30 IH,IK
Carbon tetrachloride	ug/L	ND	80	80	80	89.0	92.9	111	116	70-143	4 30
Chlorobenzene	ug/L	ND	80	80	80	85.4	84.5	107	106	70-138	1 30
Chloroethane	ug/L	ND	80	80	80	86.6	95.1	108	119	52-163	9 30
Chloroform	ug/L	ND	80	80	80	85.9	86.9	107	109	70-139	1 30
Chloromethane	ug/L	ND	80	80	80	69.5	70.9	87	89	41-139	2 30
cis-1,2-Dichloroethene	ug/L	559	80	80	80	553	575	-7	20	70-141	4 30 M1
cis-1,3-Dichloropropene	ug/L	ND	80	80	80	85.9	86.2	107	108	70-137	0 30
Dibromochloromethane	ug/L	ND	80	80	80	86.8	87.3	109	109	70-134	1 30
Dibromomethane	ug/L	ND	80	80	80	85.3	87.0	107	109	70-138	2 30
Dichlorodifluoromethane	ug/L	ND	80	80	80	72.8	73.6	91	92	47-155	1 30
Diisopropyl ether	ug/L	ND	80	80	80	86.1	86.2	108	108	63-144	0 30
Ethylbenzene	ug/L	ND	80	80	80	83.2	81.7	104	102	66-153	2 30
Hexachloro-1,3-butadiene	ug/L	ND	80	80	80	82.9	84.8	104	106	65-149	2 30
m&p-Xylene	ug/L	ND	160	160	160	167	169	104	106	69-152	1 30

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2823618 2823619											
Parameter	Units	MS		MSD		MS		MSD		% Rec Limits	Max RPD
		92467161002	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Result		
Methyl-tert-butyl ether	ug/L	2.6J	80	80	91.6	92.4	111	112	54-156	1	30
Methylene Chloride	ug/L	ND	80	80	84.0	86.1	105	108	42-159	3	30
Naphthalene	ug/L	ND	80	80	87.8	88.6	110	111	61-148	1	30
o-Xylene	ug/L	ND	80	80	83.5	86.1	104	108	70-148	3	30
p-Isopropyltoluene	ug/L	ND	80	80	82.3	85.0	103	106	70-146	3	30
Styrene	ug/L	ND	80	80	86.4	87.2	108	109	70-135	1	30
Tetrachloroethene	ug/L	ND	80	80	85.0	86.4	106	108	59-143	2	30
Toluene	ug/L	1.5J	80	80	82.9	83.6	102	103	59-148	1	30
trans-1,2-Dichloroethene	ug/L	ND	80	80	85.4	87.0	107	109	70-146	2	30
trans-1,3-Dichloropropene	ug/L	ND	80	80	84.1	85.1	105	106	70-135	1	30
Trichloroethene	ug/L	50.7	80	80	155	157	130	133	70-147	2	30
Trichlorofluoromethane	ug/L	ND	80	80	77.9	80.3	97	100	70-148	3	30
Vinyl acetate	ug/L	ND	160	160	168	170	105	106	49-151	1	30
Vinyl chloride	ug/L	ND	80	80	78.6	80.5	98	101	70-156	2	30
Xylene (Total)	ug/L	ND	240	240	250	255	104	106	63-158	2	30
1,2-Dichloroethane-d4 (S)	%						101	103	70-130		
4-Bromofluorobenzene (S)	%						98	96	70-130		
Toluene-d8 (S)	%						99	99	70-130		

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

QC Batch:	528728	Analysis Method:	EPA 8260D
QC Batch Method:	EPA 5035A	Analysis Description:	8260 MSV 5035A Volatile Organics
Associated Lab Samples:	92467731007, 92467731008, 92467731009, 92467731010, 92467731011, 92467731015		

METHOD BLANK:	2823949	Matrix:	Solid
Associated Lab Samples:	92467731007, 92467731008, 92467731009, 92467731010, 92467731011, 92467731015		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	1.2	03/05/20 12:35	
1,1,1-Trichloroethane	ug/kg	ND	5.0	0.87	03/05/20 12:35	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	1.7	03/05/20 12:35	
1,1,2-Trichloroethane	ug/kg	ND	5.0	1.1	03/05/20 12:35	
1,1-Dichloroethane	ug/kg	ND	5.0	0.74	03/05/20 12:35	
1,1-Dichloroethene	ug/kg	ND	5.0	1.2	03/05/20 12:35	
1,1-Dichloropropene	ug/kg	ND	5.0	2.1	03/05/20 12:35	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	3.6	03/05/20 12:35	
1,2,3-Trichloropropane	ug/kg	ND	5.0	1.7	03/05/20 12:35	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	2.6	03/05/20 12:35	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	2.0	03/05/20 12:35	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.0	2.5	03/05/20 12:35	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	1.1	03/05/20 12:35	
1,2-Dichlorobenzene	ug/kg	ND	5.0	1.8	03/05/20 12:35	
1,2-Dichloroethane	ug/kg	ND	5.0	1.0	03/05/20 12:35	
1,2-Dichloropropane	ug/kg	ND	5.0	1.9	03/05/20 12:35	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.7	03/05/20 12:35	
1,3-Dichlorobenzene	ug/kg	ND	5.0	1.8	03/05/20 12:35	
1,3-Dichloropropane	ug/kg	ND	5.0	1.9	03/05/20 12:35	
1,4-Dichlorobenzene	ug/kg	ND	5.0	1.7	03/05/20 12:35	
2,2-Dichloropropane	ug/kg	ND	5.0	0.49	03/05/20 12:35	
2-Butanone (MEK)	ug/kg	ND	100	11.9	03/05/20 12:35	
2-Chlorotoluene	ug/kg	ND	5.0	1.5	03/05/20 12:35	
2-Hexanone	ug/kg	ND	50.0	5.2	03/05/20 12:35	
4-Chlorotoluene	ug/kg	ND	5.0	1.5	03/05/20 12:35	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	50.0	3.7	03/05/20 12:35	
Acetone	ug/kg	ND	100	9.4	03/05/20 12:35	
Benzene	ug/kg	ND	5.0	0.90	03/05/20 12:35	
Bromobenzene	ug/kg	ND	5.0	1.4	03/05/20 12:35	
Bromochloromethane	ug/kg	ND	5.0	1.2	03/05/20 12:35	
Bromodichloromethane	ug/kg	ND	5.0	0.98	03/05/20 12:35	
Bromoform	ug/kg	ND	5.0	2.4	03/05/20 12:35	
Bromomethane	ug/kg	ND	10.0	2.4	03/05/20 12:35	
Carbon tetrachloride	ug/kg	ND	5.0	0.96	03/05/20 12:35	
Chlorobenzene	ug/kg	ND	5.0	0.97	03/05/20 12:35	
Chloroethane	ug/kg	ND	10.0	2.1	03/05/20 12:35	
Chloroform	ug/kg	ND	5.0	1.1	03/05/20 12:35	
Chloromethane	ug/kg	ND	10.0	3.3	03/05/20 12:35	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	0.87	03/05/20 12:35	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	2.3	03/05/20 12:35	
Dibromochloromethane	ug/kg	ND	5.0	2.5	03/05/20 12:35	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

METHOD BLANK: 2823949

Matrix: Solid

Associated Lab Samples: 92467731007, 92467731008, 92467731009, 92467731010, 92467731011, 92467731015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromomethane	ug/kg	ND	5.0	1.5	03/05/20 12:35	
Dichlorodifluoromethane	ug/kg	ND	10.0	4.1	03/05/20 12:35	
Diisopropyl ether	ug/kg	ND	5.0	2.9	03/05/20 12:35	
Ethylbenzene	ug/kg	ND	5.0	1.1	03/05/20 12:35	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	2.5	03/05/20 12:35	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.4	03/05/20 12:35	
m&p-Xylene	ug/kg	ND	10.0	2.4	03/05/20 12:35	
Methyl-tert-butyl ether	ug/kg	ND	5.0	2.9	03/05/20 12:35	
Methylene Chloride	ug/kg	ND	20.0	5.9	03/05/20 12:35	
n-Butylbenzene	ug/kg	ND	5.0	2.8	03/05/20 12:35	
n-Propylbenzene	ug/kg	ND	5.0	1.7	03/05/20 12:35	
Naphthalene	ug/kg	ND	5.0	4.2	03/05/20 12:35	
o-Xylene	ug/kg	ND	5.0	1.2	03/05/20 12:35	
p-Isopropyltoluene	ug/kg	ND	5.0	2.4	03/05/20 12:35	
sec-Butylbenzene	ug/kg	ND	5.0	2.1	03/05/20 12:35	
Styrene	ug/kg	ND	5.0	1.5	03/05/20 12:35	
tert-Butylbenzene	ug/kg	ND	5.0	1.7	03/05/20 12:35	
Tetrachloroethene	ug/kg	ND	5.0	1.6	03/05/20 12:35	
Toluene	ug/kg	ND	5.0	1.6	03/05/20 12:35	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	0.98	03/05/20 12:35	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	0.88	03/05/20 12:35	
Trichloroethene	ug/kg	ND	5.0	1.3	03/05/20 12:35	
Trichlorofluoromethane	ug/kg	ND	5.0	1.2	03/05/20 12:35	
Vinyl acetate	ug/kg	ND	50.0	16.3	03/05/20 12:35	
Vinyl chloride	ug/kg	ND	10.0	1.9	03/05/20 12:35	
Xylene (Total)	ug/kg	ND	10.0	3.5	03/05/20 12:35	
1,2-Dichloroethane-d4 (S)	%	96	70-132		03/05/20 12:35	
4-Bromofluorobenzene (S)	%	100	70-130		03/05/20 12:35	
Toluene-d8 (S)	%	101	70-130		03/05/20 12:35	

LABORATORY CONTROL SAMPLE & LCSD: 2823950

2823951

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	52.1	52.4	104	105	70-130	1		
1,1,1-Trichloroethane	ug/kg	50	45.5	45.7	91	91	70-130	1		
1,1,2,2-Tetrachloroethane	ug/kg	50	49.2	49.0	98	98	55-130	0		
1,1,2-Trichloroethane	ug/kg	50	52.0	52.7	104	105	70-130	1		
1,1-Dichloroethane	ug/kg	50	45.9	44.7	92	89	68-130	3		
1,1-Dichloroethene	ug/kg	50	46.0	45.8	92	92	70-130	0		
1,1-Dichloropropene	ug/kg	50	49.3	49.3	99	99	70-130	0		
1,2,3-Trichlorobenzene	ug/kg	50	51.1	52.4	102	105	70-130	3		
1,2,3-Trichloropropane	ug/kg	50	46.6	51.2	93	102	70-130	9		
1,2,4-Trichlorobenzene	ug/kg	50	53.0	52.9	106	106	70-130	0		
1,2,4-Trimethylbenzene	ug/kg	50	51.5	52.5	103	105	69-130	2		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

LABORATORY CONTROL SAMPLE & LCSD: 2823950		2823951								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromo-3-chloropropane	ug/kg	50	51.3	52.3	103	105	57-141	2		
1,2-Dibromoethane (EDB)	ug/kg	50	50.4	52.5	101	105	70-130	4		
1,2-Dichlorobenzene	ug/kg	50	50.9	52.2	102	104	70-130	3		
1,2-Dichloroethane	ug/kg	50	46.6	46.9	93	94	70-130	0		
1,2-Dichloropropane	ug/kg	50	50.8	51.0	102	102	70-130	0		
1,3,5-Trimethylbenzene	ug/kg	50	52.6	53.1	105	106	70-130	1		
1,3-Dichlorobenzene	ug/kg	50	51.3	51.9	103	104	70-130	1		
1,3-Dichloropropane	ug/kg	50	50.3	50.5	101	101	70-130	0		
1,4-Dichlorobenzene	ug/kg	50	51.9	52.0	104	104	70-130	0		
2,2-Dichloropropane	ug/kg	50	46.4	46.6	93	93	70-130	0		
2-Butanone (MEK)	ug/kg	100	92.3J	93.7J	92	94	60-130			
2-Chlorotoluene	ug/kg	50	52.6	54.1	105	108	70-130	3		
2-Hexanone	ug/kg	100	94.3	96.3	94	96	70-132	2		
4-Chlorotoluene	ug/kg	50	53.1	53.2	106	106	70-130	0		
4-Methyl-2-pentanone (MIBK)	ug/kg	100	93.5	97.3	93	97	69-130	4		
Acetone	ug/kg	100	85.1J	88.3J	85	88	49-148			
Benzene	ug/kg	50	49.0	49.1	98	98	70-130	0		
Bromobenzene	ug/kg	50	52.0	53.3	104	107	70-130	2		
Bromochloromethane	ug/kg	50	48.9	47.4	98	95	70-130	3		
Bromodichloromethane	ug/kg	50	53.2	53.6	106	107	70-130	1		
Bromoform	ug/kg	50	53.2	53.7	106	107	68-136	1		
Bromomethane	ug/kg	50	59.7	56.7	119	113	60-140	5		
Carbon tetrachloride	ug/kg	50	51.1	52.9	102	106	70-130	3		
Chlorobenzene	ug/kg	50	50.5	51.2	101	102	70-130	1		
Chloroethane	ug/kg	50	47.9	48.4	96	97	51-147	1		
Chloroform	ug/kg	50	46.4	46.4	93	93	70-130	0		
Chloromethane	ug/kg	50	34.7	34.2	69	68	48-130	1		
cis-1,2-Dichloroethene	ug/kg	50	44.6	45.4	89	91	70-130	2		
cis-1,3-Dichloropropene	ug/kg	50	51.6	52.1	103	104	70-130	1		
Dibromochloromethane	ug/kg	50	53.2	53.3	106	107	70-130	0		
Dibromomethane	ug/kg	50	49.3	49.4	99	99	70-130	0		
Dichlorodifluoromethane	ug/kg	50	42.9	42.9	86	86	49-130	0		
Diisopropyl ether	ug/kg	50	45.9	47.3	92	95	66-130	3		
Ethylbenzene	ug/kg	50	49.2	49.5	98	99	70-130	1		
Hexachloro-1,3-butadiene	ug/kg	50	55.2	55.2	110	110	70-130	0		
Isopropylbenzene (Cumene)	ug/kg	50	52.1	52.6	104	105	70-130	1		
m&p-Xylene	ug/kg	100	101	101	101	101	70-130	0		
Methyl-tert-butyl ether	ug/kg	50	47.6	49.2	95	98	70-130	3		
Methylene Chloride	ug/kg	50	42.0	41.8	84	84	50-137	1		
n-Butylbenzene	ug/kg	50	53.3	53.5	107	107	70-130	0		
n-Propylbenzene	ug/kg	50	52.4	52.6	105	105	70-130	1		
Naphthalene	ug/kg	50	49.7	49.9	99	100	70-131	0		
o-Xylene	ug/kg	50	51.1	50.5	102	101	70-130	1		
p-Isopropyltoluene	ug/kg	50	53.4	52.9	107	106	70-130	1		
sec-Butylbenzene	ug/kg	50	52.0	51.9	104	104	70-130	0		
Styrene	ug/kg	50	52.9	52.9	106	106	70-130	0		
tert-Butylbenzene	ug/kg	50	46.1	46.5	92	93	69-130	1		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

LABORATORY CONTROL SAMPLE & LCSD: 2823950			2823951							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Tetrachloroethene	ug/kg	50	51.3	50.9	103	102	56-130	1		
Toluene	ug/kg	50	48.3	49.0	97	98	70-130	1		
trans-1,2-Dichloroethene	ug/kg	50	45.0	45.4	90	91	70-130	1		
trans-1,3-Dichloropropene	ug/kg	50	51.6	52.8	103	106	70-130	2		
Trichloroethene	ug/kg	50	52.5	52.8	105	106	70-141	1		
Trichlorofluoromethane	ug/kg	50	45.9	45.5	92	91	67-130	1		
Vinyl acetate	ug/kg	100	122	119	122	119	10-136	2		
Vinyl chloride	ug/kg	50	47.7	48.0	95	96	67-130	0		
Xylene (Total)	ug/kg	150	153	152	102	101	70-130	1		
1,2-Dichloroethane-d4 (S)	%				92	89	70-132			
4-Bromofluorobenzene (S)	%				101	99	70-130			
Toluene-d8 (S)	%				100	99	70-130			

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

QC Batch:	528968	Analysis Method:	EPA 8260D
QC Batch Method:	EPA 5035A	Analysis Description:	8260 MSV 5035A Volatile Organics
Associated Lab Samples:	92467731001, 92467731002, 92467731003, 92467731004, 92467731005, 92467731006, 92467731012, 92467731013, 92467731014, 92467731016		

METHOD BLANK: 2825123

Matrix: Solid

Associated Lab Samples: 92467731001, 92467731002, 92467731003, 92467731004, 92467731005, 92467731006, 92467731012, 92467731013, 92467731014, 92467731016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	1.2	03/06/20 11:04	
1,1,1-Trichloroethane	ug/kg	ND	5.0	0.87	03/06/20 11:04	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	1.7	03/06/20 11:04	
1,1,2-Trichloroethane	ug/kg	ND	5.0	1.1	03/06/20 11:04	
1,1-Dichloroethane	ug/kg	ND	5.0	0.74	03/06/20 11:04	
1,1-Dichloroethene	ug/kg	ND	5.0	1.2	03/06/20 11:04	
1,1-Dichloropropene	ug/kg	ND	5.0	2.1	03/06/20 11:04	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	3.6	03/06/20 11:04	
1,2,3-Trichloropropane	ug/kg	ND	5.0	1.7	03/06/20 11:04	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	2.6	03/06/20 11:04	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	2.0	03/06/20 11:04	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.0	2.5	03/06/20 11:04	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	1.1	03/06/20 11:04	
1,2-Dichlorobenzene	ug/kg	ND	5.0	1.8	03/06/20 11:04	
1,2-Dichloroethane	ug/kg	ND	5.0	1.0	03/06/20 11:04	
1,2-Dichloropropane	ug/kg	ND	5.0	1.9	03/06/20 11:04	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.7	03/06/20 11:04	
1,3-Dichlorobenzene	ug/kg	ND	5.0	1.8	03/06/20 11:04	
1,3-Dichloropropane	ug/kg	ND	5.0	1.9	03/06/20 11:04	
1,4-Dichlorobenzene	ug/kg	ND	5.0	1.7	03/06/20 11:04	
2,2-Dichloropropane	ug/kg	ND	5.0	0.49	03/06/20 11:04	
2-Butanone (MEK)	ug/kg	ND	100	11.9	03/06/20 11:04	
2-Chlorotoluene	ug/kg	ND	5.0	1.5	03/06/20 11:04	
2-Hexanone	ug/kg	ND	50.0	5.2	03/06/20 11:04	
4-Chlorotoluene	ug/kg	ND	5.0	1.5	03/06/20 11:04	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	50.0	3.7	03/06/20 11:04	
Acetone	ug/kg	ND	100	9.4	03/06/20 11:04	
Benzene	ug/kg	ND	5.0	0.90	03/06/20 11:04	
Bromobenzene	ug/kg	ND	5.0	1.4	03/06/20 11:04	
Bromochloromethane	ug/kg	ND	5.0	1.2	03/06/20 11:04	
Bromodichloromethane	ug/kg	ND	5.0	0.98	03/06/20 11:04	
Bromoform	ug/kg	ND	5.0	2.4	03/06/20 11:04	
Bromomethane	ug/kg	ND	10.0	2.4	03/06/20 11:04	IH
Carbon tetrachloride	ug/kg	ND	5.0	0.96	03/06/20 11:04	
Chlorobenzene	ug/kg	ND	5.0	0.97	03/06/20 11:04	
Chloroethane	ug/kg	ND	10.0	2.1	03/06/20 11:04	
Chloroform	ug/kg	ND	5.0	1.1	03/06/20 11:04	
Chloromethane	ug/kg	ND	10.0	3.3	03/06/20 11:04	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	0.87	03/06/20 11:04	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	2.3	03/06/20 11:04	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

METHOD BLANK: 2825123

Matrix: Solid

Associated Lab Samples: 92467731001, 92467731002, 92467731003, 92467731004, 92467731005, 92467731006, 92467731012, 92467731013, 92467731014, 92467731016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	ND	5.0	2.5	03/06/20 11:04	
Dibromomethane	ug/kg	ND	5.0	1.5	03/06/20 11:04	
Dichlorodifluoromethane	ug/kg	ND	10.0	4.1	03/06/20 11:04	
Diisopropyl ether	ug/kg	ND	5.0	2.9	03/06/20 11:04	
Ethylbenzene	ug/kg	ND	5.0	1.1	03/06/20 11:04	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	2.5	03/06/20 11:04	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.4	03/06/20 11:04	
m&p-Xylene	ug/kg	ND	10.0	2.4	03/06/20 11:04	
Methyl-tert-butyl ether	ug/kg	ND	5.0	2.9	03/06/20 11:04	
Methylene Chloride	ug/kg	ND	20.0	5.9	03/06/20 11:04	
n-Butylbenzene	ug/kg	ND	5.0	2.8	03/06/20 11:04	
n-Propylbenzene	ug/kg	ND	5.0	1.7	03/06/20 11:04	
Naphthalene	ug/kg	ND	5.0	4.2	03/06/20 11:04	
o-Xylene	ug/kg	ND	5.0	1.2	03/06/20 11:04	
p-Isopropyltoluene	ug/kg	ND	5.0	2.4	03/06/20 11:04	
sec-Butylbenzene	ug/kg	ND	5.0	2.1	03/06/20 11:04	
Styrene	ug/kg	ND	5.0	1.5	03/06/20 11:04	
tert-Butylbenzene	ug/kg	ND	5.0	1.7	03/06/20 11:04	
Tetrachloroethene	ug/kg	ND	5.0	1.6	03/06/20 11:04	
Toluene	ug/kg	ND	5.0	1.6	03/06/20 11:04	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	0.98	03/06/20 11:04	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	0.88	03/06/20 11:04	
Trichloroethene	ug/kg	ND	5.0	1.3	03/06/20 11:04	
Trichlorofluoromethane	ug/kg	ND	5.0	1.2	03/06/20 11:04	
Vinyl acetate	ug/kg	ND	50.0	16.3	03/06/20 11:04	
Vinyl chloride	ug/kg	ND	10.0	1.9	03/06/20 11:04	
Xylene (Total)	ug/kg	ND	10.0	3.5	03/06/20 11:04	
1,2-Dichloroethane-d4 (S)	%	88	70-132		03/06/20 11:04	
4-Bromofluorobenzene (S)	%	99	70-130		03/06/20 11:04	
Toluene-d8 (S)	%	102	70-130		03/06/20 11:04	

LABORATORY CONTROL SAMPLE: 2825124

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	48.5	97	70-130	
1,1,1-Trichloroethane	ug/kg	50	40.6	81	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	50	47.8	96	55-130	
1,1,2-Trichloroethane	ug/kg	50	47.3	95	70-130	
1,1-Dichloroethane	ug/kg	50	41.7	83	68-130	
1,1-Dichloroethene	ug/kg	50	42.3	85	70-130	
1,1-Dichloropropene	ug/kg	50	46.1	92	70-130	
1,2,3-Trichlorobenzene	ug/kg	50	56.1	112	70-130	
1,2,3-Trichloropropane	ug/kg	50	46.8	94	70-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

LABORATORY CONTROL SAMPLE: 2825124

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	50	56.1	112	70-130	
1,2,4-Trimethylbenzene	ug/kg	50	52.7	105	69-130	
1,2-Dibromo-3-chloropropane	ug/kg	50	55.4	111	57-141	
1,2-Dibromoethane (EDB)	ug/kg	50	47.9	96	70-130	
1,2-Dichlorobenzene	ug/kg	50	52.1	104	70-130	
1,2-Dichloroethane	ug/kg	50	39.0	78	70-130	
1,2-Dichloropropane	ug/kg	50	47.7	95	70-130	
1,3,5-Trimethylbenzene	ug/kg	50	52.3	105	70-130	
1,3-Dichlorobenzene	ug/kg	50	52.4	105	70-130	
1,3-Dichloropropane	ug/kg	50	48.2	96	70-130	
1,4-Dichlorobenzene	ug/kg	50	52.3	105	70-130	
2,2-Dichloropropane	ug/kg	50	41.3	83	70-130	
2-Butanone (MEK)	ug/kg	100	101	101	60-130	
2-Chlorotoluene	ug/kg	50	51.2	102	70-130	
2-Hexanone	ug/kg	100	105	105	70-132	
4-Chlorotoluene	ug/kg	50	51.3	103	70-130	
4-Methyl-2-pentanone (MIBK)	ug/kg	100	95.0	95	69-130	
Acetone	ug/kg	100	110	110	49-148	
Benzene	ug/kg	50	47.4	95	70-130	
Bromobenzene	ug/kg	50	50.2	100	70-130	
Bromochloromethane	ug/kg	50	43.0	86	70-130	
Bromodichloromethane	ug/kg	50	46.5	93	70-130	
Bromoform	ug/kg	50	47.5	95	68-136	
Bromomethane	ug/kg	50	49.9	100	60-140	IH
Carbon tetrachloride	ug/kg	50	52.2	104	70-130	
Chlorobenzene	ug/kg	50	49.5	99	70-130	
Chloroethane	ug/kg	50	42.8	86	51-147	
Chloroform	ug/kg	50	42.2	84	70-130	
Chloromethane	ug/kg	50	35.2	70	48-130	
cis-1,2-Dichloroethene	ug/kg	50	41.9	84	70-130	
cis-1,3-Dichloropropene	ug/kg	50	46.3	93	70-130	
Dibromochloromethane	ug/kg	50	48.0	96	70-130	
Dibromomethane	ug/kg	50	45.0	90	70-130	
Dichlorodifluoromethane	ug/kg	50	37.7	75	49-130	
Diisopropyl ether	ug/kg	50	42.9	86	66-130	
Ethylbenzene	ug/kg	50	46.9	94	70-130	
Hexachloro-1,3-butadiene	ug/kg	50	57.3	115	70-130	
Isopropylbenzene (Cumene)	ug/kg	50	49.5	99	70-130	
m&p-Xylene	ug/kg	100	95.2	95	70-130	
Methyl-tert-butyl ether	ug/kg	50	41.9	84	70-130	
Methylene Chloride	ug/kg	50	41.8	84	50-137	
n-Butylbenzene	ug/kg	50	54.5	109	70-130	
n-Propylbenzene	ug/kg	50	50.3	101	70-130	
Naphthalene	ug/kg	50	54.8	110	70-131	
o-Xylene	ug/kg	50	48.2	96	70-130	
p-Isopropyltoluene	ug/kg	50	54.0	108	70-130	
sec-Butylbenzene	ug/kg	50	52.9	106	70-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

LABORATORY CONTROL SAMPLE: 2825124

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Styrene	ug/kg	50	50.5	101	70-130	
tert-Butylbenzene	ug/kg	50	44.8	90	69-130	
Tetrachloroethene	ug/kg	50	46.4	93	56-130	
Toluene	ug/kg	50	44.9	90	70-130	
trans-1,2-Dichloroethene	ug/kg	50	43.2	86	70-130	
trans-1,3-Dichloropropene	ug/kg	50	45.8	92	70-130	
Trichloroethene	ug/kg	50	49.3	99	70-141	
Trichlorofluoromethane	ug/kg	50	40.2	80	67-130	
Vinyl acetate	ug/kg	100	89.0	89	10-136	
Vinyl chloride	ug/kg	50	43.6	87	67-130	
Xylene (Total)	ug/kg	150	143	96	70-130	
1,2-Dichloroethane-d4 (S)	%			87	70-132	
4-Bromofluorobenzene (S)	%			95	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2825125 2825126

Parameter	Units	92467731016 Result	MS	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.								
1,1,1,2-Tetrachloroethane	ug/kg	ND	66.4	80.6	30.1	47.6	45	59	52-133	45	30	M1,R1
1,1,1-Trichloroethane	ug/kg	ND	66.4	80.6	35.6	54.0	54	67	49-137	41	30	R1
1,1,2,2-Tetrachloroethane	ug/kg	ND	66.4	80.6	35.5	49.8	53	62	39-150	34	30	R1
1,1,2-Trichloroethane	ug/kg	ND	66.4	80.6	42.4	55.7	64	69	48-140	27	30	
1,1-Dichloroethane	ug/kg	ND	66.4	80.6	48.9	65.3	74	81	46-135	29	30	
1,1-Dichloroethene	ug/kg	ND	66.4	80.6	42.5	58.6	64	73	38-149	32	30	R1
1,1-Dichloropropene	ug/kg	ND	66.4	80.6	28.5	46.7	43	58	41-140	48	30	R1
1,2,3-Trichlorobenzene	ug/kg	ND	66.4	80.6	12.0J	17.8J	18	22	10-158		30	
1,2,3-Trichloropropane	ug/kg	ND	66.4	80.6	38.4	55.4	58	69	33-157	36	30	R1
1,2,4-Trichlorobenzene	ug/kg	ND	66.4	80.6	12.1J	17.6J	18	22	10-155		30	
1,2,4-Trimethylbenzene	ug/kg	ND	66.4	80.6	291	130	438	162	24-154	76	30	M1,R1
1,2-Dibromo-3-chloropropane	ug/kg	ND	66.4	80.6	32.9	48.3	49	60	33-158	38	30	R1
1,2-Dibromoethane (EDB)	ug/kg	ND	66.4	80.6	39.7	54.0	60	67	40-136	30	30	
1,2-Dichlorobenzene	ug/kg	ND	66.4	80.6	19.8	30.8	30	38	27-146	44	30	R1
1,2-Dichloroethane	ug/kg	ND	66.4	80.6	42.5	57.0	64	71	49-140	29	30	
1,2-Dichloropropane	ug/kg	ND	66.4	80.6	45.3	62.7	68	78	44-143	32	30	R1
1,3,5-Trimethylbenzene	ug/kg	ND	66.4	80.6	120	67.9	180	84	40-144	55	30	M1,R1
1,3-Dichlorobenzene	ug/kg	ND	66.4	80.6	19.7	29.9	30	37	33-140	41	30	M1,R1
1,3-Dichloropropane	ug/kg	ND	66.4	80.6	45.0	61.3	68	76	47-147	31	30	R1
1,4-Dichlorobenzene	ug/kg	ND	66.4	80.6	21.5	30.5	32	38	35-139	35	30	M1,R1
2,2-Dichloropropane	ug/kg	ND	66.4	80.6	41.9	59.1	63	73	41-140	34	30	R1
2-Butanone (MEK)	ug/kg	ND	133	161	105J	122J	79	76	10-181		30	
2-Chlorotoluene	ug/kg	ND	66.4	80.6	32.5	30.8	49	38	38-147	5	30	
2-Hexanone	ug/kg	ND	133	161	99.2J	126J	75	78	18-169		30	
4-Chlorotoluene	ug/kg	ND	66.4	80.6	21.8	35.3	33	44	36-145	47	30	M1,R1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2825125 2825126											
Parameter	Units	92467731016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	133	161	117J	132J	88	82	16-175	30	
Acetone	ug/kg	59.5J	133	161	263J	289J	153	143	10-200	30	
Benzene	ug/kg	ND	66.4	80.6	44.2	63.3	67	79	46-136	36	30 R1
Bromobenzene	ug/kg	ND	66.4	80.6	27.4	42.0	41	52	38-149	42	30 R1
Bromochloromethane	ug/kg	ND	66.4	80.6	47.5	66.5	71	83	44-142	33	30 R1
Bromodichloromethane	ug/kg	ND	66.4	80.6	33.5	50.2	50	62	41-140	40	30 R1
Bromoform	ug/kg	ND	66.4	80.6	21.9	36.2	33	45	34-145	49	30 M1,R1
Bromomethane	ug/kg	ND	66.4	80.6	72.8	93.8	109	116	14-162	25	30 IH
Carbon tetrachloride	ug/kg	ND	66.4	80.6	24.4	46.4	37	58	44-141	62	30 M1,R1
Chlorobenzene	ug/kg	ND	66.4	80.6	27.3	42.9	41	53	39-141	45	30 R1
Chloroethane	ug/kg	ND	66.4	80.6	65.2	86.6	98	108	10-182	28	30
Chloroform	ug/kg	ND	66.4	80.6	48.4	66.6	73	83	45-140	32	30 R1
Chloromethane	ug/kg	ND	66.4	80.6	50.8	62.2	76	77	19-149	20	30
cis-1,2-Dichloroethene	ug/kg	ND	66.4	80.6	39.1	54.8	59	68	38-150	33	30 R1
cis-1,3-Dichloropropene	ug/kg	ND	66.4	80.6	30.6	43.0	46	53	30-144	34	30 R1
Dibromochloromethane	ug/kg	ND	66.4	80.6	29.3	46.6	44	58	36-145	46	30 R1
Dibromomethane	ug/kg	ND	66.4	80.6	45.4	58.7	68	73	41-145	26	30
Dichlorodifluoromethane	ug/kg	ND	66.4	80.6	42.5	56.4	64	70	16-146	28	30
Diisopropyl ether	ug/kg	ND	66.4	80.6	53.7	68.7	81	85	41-143	25	30
Ethylbenzene	ug/kg	ND	66.4	80.6	37.0	44.4	56	55	35-144	18	30
Hexachloro-1,3-butadiene	ug/kg	ND	66.4	80.6	8.5J	15.2J	13	19	10-160		30
Isopropylbenzene (Cumene)	ug/kg	ND	66.4	80.6	23.4	35.1	35	44	30-152	40	30 R1
m&p-Xylene	ug/kg	ND	133	161	128	98.9	96	61	33-145	26	30
Methyl-tert-butyl ether	ug/kg	ND	66.4	80.6	55.4	69.2	83	86	49-140	22	30
Methylene Chloride	ug/kg	ND	66.4	80.6	53.7J	69.4J	81	86	10-174		30
n-Butylbenzene	ug/kg	ND	66.4	80.6	33.8	39.8	51	49	10-160	16	30
n-Propylbenzene	ug/kg	ND	66.4	80.6	47.1	44.7	71	55	24-159	5	30
Naphthalene	ug/kg	ND	66.4	80.6	63.9	34.5	96	43	10-171	60	30 R1
o-Xylene	ug/kg	ND	66.4	80.6	55.9	47.6	84	59	31-150	16	30
p-Isopropyltoluene	ug/kg	ND	66.4	80.6	25.7	36.1	39	45	21-154	34	30 R1
sec-Butylbenzene	ug/kg	ND	66.4	80.6	23.4	31.9	35	40	19-159	31	30 R1
Styrene	ug/kg	ND	66.4	80.6	20.3	31.8	31	39	15-152	44	30 R1
tert-Butylbenzene	ug/kg	ND	66.4	80.6	18.7	29.7	28	37	31-141	45	30 M1,R1
Tetrachloroethene	ug/kg	ND	66.4	80.6	23.3	37.8	35	47	19-141	47	30 R1
Toluene	ug/kg	ND	66.4	80.6	38.6	49.6	58	62	31-146	25	30
trans-1,2-Dichloroethene	ug/kg	ND	66.4	80.6	34.8	51.5	52	64	28-157	39	30 R1
trans-1,3-Dichloropropene	ug/kg	ND	66.4	80.6	25.6	38.6	38	48	25-146	41	30 R1
Trichloroethene	ug/kg	ND	66.4	80.6	30.5	49.7	46	62	34-149	48	30 R1
Trichlorofluoromethane	ug/kg	ND	66.4	80.6	41.6	63.9	63	79	10-167	42	30 R1
Vinyl acetate	ug/kg	ND	133	161	ND	ND	10	10	10-200		30
Vinyl chloride	ug/kg	ND	66.4	80.6	52.8	71.0	79	88	36-155	29	30
Xylene (Total)	ug/kg	ND	200	242	184	146	92	61	29-148	23	30
1,2-Dichloroethane-d4 (S)	%						100	98	70-132		
4-Bromofluorobenzene (S)	%						88	90	70-130		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:											
			2825125		2825126						Max RPD
			MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	
Parameter	Units	92467731016 Result									Qual
Toluene-d8 (S)	%						94	95	70-130		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

QC Batch:	528828	Analysis Method:	EPA 8270E
QC Batch Method:	EPA 3510C	Analysis Description:	8270E Water MSSV RVE
Associated Lab Samples: 92467731018, 92467731019			

METHOD BLANK: 2824599 Matrix: Water

Associated Lab Samples: 92467731018, 92467731019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	10.0	1.6	03/06/20 16:29	
1,2-Dichlorobenzene	ug/L	ND	10.0	1.4	03/06/20 16:29	
1,3-Dichlorobenzene	ug/L	ND	10.0	1.4	03/06/20 16:29	
1,4-Dichlorobenzene	ug/L	ND	10.0	1.5	03/06/20 16:29	
1-Methylnaphthalene	ug/L	ND	10.0	1.4	03/06/20 16:29	
2,2'-Oxybis(1-chloropropane)	ug/L	ND	10.0	1.3	03/06/20 16:29	
2,4,5-Trichlorophenol	ug/L	ND	10.0	1.5	03/06/20 16:29	
2,4,6-Trichlorophenol	ug/L	ND	10.0	1.4	03/06/20 16:29	
2,4-Dichlorophenol	ug/L	ND	10.0	1.5	03/06/20 16:29	
2,4-Dimethylphenol	ug/L	ND	10.0	1.5	03/06/20 16:29	
2,4-Dinitrophenol	ug/L	ND	50.0	7.3	03/06/20 16:29	
2,4-Dinitrotoluene	ug/L	ND	10.0	1.7	03/06/20 16:29	
2,6-Dinitrotoluene	ug/L	ND	10.0	1.7	03/06/20 16:29	
2-Chloronaphthalene	ug/L	ND	10.0	1.4	03/06/20 16:29	
2-Chlorophenol	ug/L	ND	10.0	1.4	03/06/20 16:29	
2-Methylnaphthalene	ug/L	ND	10.0	1.4	03/06/20 16:29	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	1.2	03/06/20 16:29	
2-Nitroaniline	ug/L	ND	20.0	3.0	03/06/20 16:29	
2-Nitrophenol	ug/L	ND	10.0	1.7	03/06/20 16:29	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	1.2	03/06/20 16:29	
3,3'-Dichlorobenzidine	ug/L	ND	20.0	2.7	03/06/20 16:29	
3-Nitroaniline	ug/L	ND	20.0	2.8	03/06/20 16:29	
4,6-Dinitro-2-methylphenol	ug/L	ND	20.0	4.5	03/06/20 16:29	
4-Bromophenylphenyl ether	ug/L	ND	10.0	1.2	03/06/20 16:29	
4-Chloro-3-methylphenol	ug/L	ND	10.0	2.8	03/06/20 16:29	
4-Chloroaniline	ug/L	ND	20.0	2.8	03/06/20 16:29	
4-Chlorophenylphenyl ether	ug/L	ND	10.0	1.5	03/06/20 16:29	
4-Nitroaniline	ug/L	ND	20.0	3.1	03/06/20 16:29	
4-Nitrophenol	ug/L	ND	50.0	9.4	03/06/20 16:29	
Acenaphthene	ug/L	ND	10.0	1.4	03/06/20 16:29	
Acenaphthylene	ug/L	ND	10.0	1.5	03/06/20 16:29	
Aniline	ug/L	ND	10.0	1.6	03/06/20 16:29	
Anthracene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Benzo(a)anthracene	ug/L	ND	10.0	1.5	03/06/20 16:29	
Benzo(a)pyrene	ug/L	ND	10.0	1.8	03/06/20 16:29	
Benzo(b)fluoranthene	ug/L	ND	10.0	1.7	03/06/20 16:29	
Benzo(g,h,i)perylene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Benzo(k)fluoranthene	ug/L	ND	10.0	1.5	03/06/20 16:29	
Benzoic Acid	ug/L	ND	50.0	19.5	03/06/20 16:29	
Benzyl alcohol	ug/L	ND	20.0	2.6	03/06/20 16:29	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	1.3	03/06/20 16:29	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

METHOD BLANK: 2824599

Matrix: Water

Associated Lab Samples: 92467731018, 92467731019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Chloroethyl) ether	ug/L	ND	10.0	1.7	03/06/20 16:29	
bis(2-Ethylhexyl)phthalate	ug/L	ND	6.0	2.0	03/06/20 16:29	
Butylbenzylphthalate	ug/L	ND	10.0	1.9	03/06/20 16:29	
Chrysene	ug/L	ND	10.0	1.4	03/06/20 16:29	
Di-n-butylphthalate	ug/L	ND	10.0	1.6	03/06/20 16:29	
Di-n-octylphthalate	ug/L	ND	10.0	2.2	03/06/20 16:29	v1
Dibenz(a,h)anthracene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Dibenzofuran	ug/L	ND	10.0	1.3	03/06/20 16:29	
Diethylphthalate	ug/L	ND	10.0	1.6	03/06/20 16:29	
Dimethylphthalate	ug/L	ND	10.0	1.4	03/06/20 16:29	
Fluoranthene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Fluorene	ug/L	ND	10.0	1.4	03/06/20 16:29	
Hexachloro-1,3-butadiene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Hexachlorobenzene	ug/L	ND	10.0	1.3	03/06/20 16:29	
Hexachlorocyclopentadiene	ug/L	ND	10.0	2.4	03/06/20 16:29	
Hexachloroethane	ug/L	ND	10.0	1.3	03/06/20 16:29	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10.0	1.7	03/06/20 16:29	
Isophorone	ug/L	ND	10.0	1.3	03/06/20 16:29	
N-Nitroso-di-n-propylamine	ug/L	ND	10.0	1.3	03/06/20 16:29	
N-Nitrosodimethylamine	ug/L	ND	10.0	1.8	03/06/20 16:29	
N-Nitrosodiphenylamine	ug/L	ND	10.0	1.4	03/06/20 16:29	
Naphthalene	ug/L	ND	10.0	1.6	03/06/20 16:29	
Nitrobenzene	ug/L	ND	10.0	1.5	03/06/20 16:29	
Pentachlorophenol	ug/L	ND	20.0	2.8	03/06/20 16:29	
Phenanthrene	ug/L	ND	10.0	1.4	03/06/20 16:29	
Phenol	ug/L	ND	10.0	1.5	03/06/20 16:29	
Pyrene	ug/L	ND	10.0	1.5	03/06/20 16:29	
2,4,6-Tribromophenol (S)	%	59	10-137		03/06/20 16:29	
2-Fluorobiphenyl (S)	%	55	13-130		03/06/20 16:29	
2-Fluorophenol (S)	%	50	10-130		03/06/20 16:29	
Nitrobenzene-d5 (S)	%	62	13-130		03/06/20 16:29	
Phenol-d6 (S)	%	36	10-130		03/06/20 16:29	
Terphenyl-d14 (S)	%	90	25-130		03/06/20 16:29	

LABORATORY CONTROL SAMPLE: 2824600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	18.1	36	30-130	
1,2-Dichlorobenzene	ug/L	50	19.6	39	30-130	
1,3-Dichlorobenzene	ug/L	50	18.6	37	20-130	
1,4-Dichlorobenzene	ug/L	50	20.0	40	30-130	
1-Methylnaphthalene	ug/L	50	21.9	44	30-130	
2,2'-Oxybis(1-chloropropane)	ug/L	50	32.2	64	20-130	
2,4,5-Trichlorophenol	ug/L	50	30.0	60	40-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

LABORATORY CONTROL SAMPLE: 2824600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,6-Trichlorophenol	ug/L	50	29.1	58	40-130	
2,4-Dichlorophenol	ug/L	50	29.7	59	31-130	
2,4-Dimethylphenol	ug/L	50	29.0	58	30-130	
2,4-Dinitrophenol	ug/L	250	171	69	30-130	
2,4-Dinitrotoluene	ug/L	50	41.5	83	49-130	
2,6-Dinitrotoluene	ug/L	50	33.0	66	50-130	
2-Chloronaphthalene	ug/L	50	23.5	47	30-130	
2-Chlorophenol	ug/L	50	31.9	64	30-130	
2-Methylnaphthalene	ug/L	50	21.9	44	30-130	
2-Methylphenol(o-Cresol)	ug/L	50	31.4	63	30-130	
2-Nitroaniline	ug/L	100	58.0	58	40-130	
2-Nitrophenol	ug/L	50	34.6	69	20-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	29.6	59	20-130	
3,3'-Dichlorobenzidine	ug/L	100	99.8	100	10-150	
3-Nitroaniline	ug/L	100	69.1	69	40-130	
4,6-Dinitro-2-methylphenol	ug/L	100	95.5	95	40-130	
4-Bromophenylphenyl ether	ug/L	50	28.2	56	30-130	
4-Chloro-3-methylphenol	ug/L	100	59.8	60	30-130	
4-Chloroaniline	ug/L	100	59.6	60	20-130	
4-Chlorophenylphenyl ether	ug/L	50	25.5	51	20-130	
4-Nitroaniline	ug/L	100	93.5	93	40-130	
4-Nitrophenol	ug/L	250	126	51	10-130	
Acenaphthene	ug/L	50	26.5	53	30-130	
Acenaphthylene	ug/L	50	27.2	54	30-130	
Aniline	ug/L	50	27.2	54	20-130	
Anthracene	ug/L	50	36.3	73	50-130	
Benzo(a)anthracene	ug/L	50	54.1	108	50-130	
Benzo(a)pyrene	ug/L	50	55.1	110	50-130	
Benzo(b)fluoranthene	ug/L	50	55.0	110	50-130	
Benzo(g,h,i)perylene	ug/L	50	56.8	114	50-130	
Benzo(k)fluoranthene	ug/L	50	55.9	112	50-130	
Benzoic Acid	ug/L	250	86.4	35	10-130	
Benzyl alcohol	ug/L	100	60.7	61	20-130	
bis(2-Chloroethoxy)methane	ug/L	50	30.3	61	30-130	
bis(2-Chloroethyl) ether	ug/L	50	31.4	63	30-130	
bis(2-Ethylhexyl)phthalate	ug/L	50	64.7	129	50-130	
Butylbenzylphthalate	ug/L	50	63.7	127	50-150	
Chrysene	ug/L	50	53.0	106	50-130	
Di-n-butylphthalate	ug/L	50	57.6	115	50-130	
Di-n-octylphthalate	ug/L	50	68.3	137	50-130 L1,v1	
Dibenz(a,h)anthracene	ug/L	50	57.4	115	40-130	
Dibenzofuran	ug/L	50	27.5	55	40-130	
Diethylphthalate	ug/L	50	37.3	75	40-130	
Dimethylphthalate	ug/L	50	31.5	63	40-130	
Fluoranthene	ug/L	50	49.4	99	30-130	
Fluorene	ug/L	50	28.6	57	20-130	
Hexachloro-1,3-butadiene	ug/L	50	15.2	30	10-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

LABORATORY CONTROL SAMPLE: 2824600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachlorobenzene	ug/L	50	31.6	63	30-130	
Hexachlorocyclopentadiene	ug/L	50	15.0	30	10-150	
Hexachloroethane	ug/L	50	16.6	33	10-130	
Indeno(1,2,3-cd)pyrene	ug/L	50	57.0	114	40-130	
Isophorone	ug/L	50	30.2	60	30-130	
N-Nitroso-di-n-propylamine	ug/L	50	30.8	62	30-130	
N-Nitrosodimethylamine	ug/L	50	27.3	55	10-130	
N-Nitrosodiphenylamine	ug/L	50	33.3	67	30-130	
Naphthalene	ug/L	50	22.8	46	20-130	
Nitrobenzene	ug/L	50	30.1	60	20-130	
Pentachlorophenol	ug/L	100	91.8	92	10-140	
Phenanthrene	ug/L	50	36.2	72	50-130	
Phenol	ug/L	50	23.5	47	10-130	
Pyrene	ug/L	50	51.5	103	50-130	
2,4,6-Tribromophenol (S)	%			76	10-137	
2-Fluorobiphenyl (S)	%			60	13-130	
2-Fluorophenol (S)	%			55	10-130	
Nitrobenzene-d5 (S)	%			69	13-130	
Phenol-d6 (S)	%			44	10-130	
Terphenyl-d14 (S)	%			107	25-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2824601 2824602

Parameter	Units	92467724001		MS		MSD		MS	MSD	% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Conc.	Result	Result						
1,2,4-Trichlorobenzene	ug/L	ND	50	50	50	17.8	17.6	36	35	30-130	1	30			
1,2-Dichlorobenzene	ug/L	ND	50	50	50	20.2	19.0	40	38	30-130	6	30			
1,3-Dichlorobenzene	ug/L	ND	50	50	50	19.3	18.2	39	36	20-130	6	30			
1,4-Dichlorobenzene	ug/L	ND	50	50	50	20.8	19.6	42	39	30-130	6	30			
1-Methylnaphthalene	ug/L	ND	50	50	50	21.7	21.3	43	43	30-130	2	30			
2,2'-Oxybis(1-chloropropane)	ug/L	ND	50	50	50	31.8	30.6	64	61	20-130	4	30			
2,4,5-Trichlorophenol	ug/L	ND	50	50	50	25.9	28.0	52	56	40-130	8	30			
2,4,6-Trichlorophenol	ug/L	ND	50	50	50	25.6	27.0	51	54	40-130	6	30			
2,4-Dichlorophenol	ug/L	ND	50	50	50	27.0	28.2	54	56	31-130	5	30			
2,4-Dimethylphenol	ug/L	ND	50	50	50	27.2	29.1	54	58	30-130	7	30			
2,4-Dinitrophenol	ug/L	ND	250	250	250	113	109	45	44	30-130	4	30			
2,4-Dinitrotoluene	ug/L	ND	50	50	50	39.1	40.1	78	80	49-130	2	30			
2,6-Dinitrotoluene	ug/L	ND	50	50	50	30.5	31.9	61	64	50-130	5	30			
2-Chloronaphthalene	ug/L	ND	50	50	50	22.7	22.7	45	45	30-130	0	30			
2-Chlorophenol	ug/L	ND	50	50	50	30.0	29.6	60	59	30-130	1	30			
2-Methylnaphthalene	ug/L	ND	50	50	50	22.3	21.4	45	43	30-130	4	30			
2-Methylphenol(o-Cresol)	ug/L	ND	50	50	50	27.8	27.5	56	55	30-130	1	30			
2-Nitroaniline	ug/L	ND	100	100	100	53.1	56.1	53	56	40-130	6	30			
2-Nitrophenol	ug/L	ND	50	50	50	31.4	33.0	63	66	20-130	5	30			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:			2824601		2824602							
			MS	MSD								
		92467724001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
3&4-Methylphenol(m&p Cresol)	ug/L	ND	50	50	25.7	25.7	51	51	20-130	0	30	
3,3'-Dichlorobenzidine	ug/L	ND	100	100	76.1	90.8	76	91	10-150	18	30	
3-Nitroaniline	ug/L	ND	100	100	62.0	65.8	62	66	40-130	6	30	
4,6-Dinitro-2-methylphenol	ug/L	ND	100	100	73.9	77.4	74	77	40-130	5	30	
4-Bromophenylphenyl ether	ug/L	ND	50	50	27.1	28.6	54	57	30-130	5	30	
4-Chloro-3-methylphenol	ug/L	ND	100	100	52.1	55.4	52	55	30-130	6	30	
4-Chloroaniline	ug/L	ND	100	100	48.9	56.5	49	56	20-130	14	30	
4-Chlorophenylphenyl ether	ug/L	ND	50	50	23.1	24.7	46	49	20-130	7	30	
4-Nitroaniline	ug/L	ND	100	100	85.2	93.7	85	94	40-130	9	30	
4-Nitrophenol	ug/L	ND	250	250	107	103	43	41	10-130	4	30	
Acenaphthene	ug/L	ND	50	50	24.6	25.2	49	50	30-130	2	30	
Acenaphthylene	ug/L	ND	50	50	25.6	26.0	51	52	30-130	2	30	
Aniline	ug/L	ND	50	50	23.8	25.9	48	52	20-130	8	30	
Anthracene	ug/L	ND	50	50	35.6	37.7	71	75	50-130	6	30	
Benzo(a)anthracene	ug/L	ND	50	50	46.4	52.1	93	104	50-130	12	30	
Benzo(a)pyrene	ug/L	ND	50	50	46.8	52.7	94	105	50-130	12	30	
Benzo(b)fluoranthene	ug/L	ND	50	50	46.6	52.6	93	105	50-130	12	30	
Benzo(g,h,i)perylene	ug/L	ND	50	50	46.1	51.9	92	104	50-130	12	30	
Benzo(k)fluoranthene	ug/L	ND	50	50	48.2	54.5	96	109	50-130	12	30	
Benzoic Acid	ug/L	ND	250	250	48.0J	39.9J	19	16	10-130		30	
Benzyl alcohol	ug/L	ND	100	100	56.0	55.6	56	56	20-130	1	30	
bis(2-Chloroethoxy)methane	ug/L	ND	50	50	27.4	28.4	55	57	30-130	3	30	
bis(2-Chloroethyl) ether	ug/L	ND	50	50	29.2	29.2	58	58	30-130	0	30	
bis(2-Ethylhexyl)phthalate	ug/L	ND	50	50	55.9	63.7	112	127	50-130	13	30	
Butylbenzylphthalate	ug/L	ND	50	50	56.8	64.2	114	128	50-150	12	30	
Chrysene	ug/L	ND	50	50	45.5	50.4	91	101	50-130	10	30	
Di-n-butylphthalate	ug/L	ND	50	50	50.5	56.5	101	113	50-130	11	30	
Di-n-octylphthalate	ug/L	ND	50	50	58.2	66.0	116	132	50-130	13	30	M0,v1
Dibenz(a,h)anthracene	ug/L	ND	50	50	46.8	53.0	94	106	40-130	12	30	
Dibenzofuran	ug/L	ND	50	50	25.2	26.2	50	52	40-130	4	30	
Diethylphthalate	ug/L	ND	50	50	36.1	36.3	72	73	40-130	1	30	
Dimethylphthalate	ug/L	ND	50	50	29.5	30.0	59	60	40-130	2	30	
Fluoranthene	ug/L	ND	50	50	43.1	47.8	86	96	30-130	10	30	
Fluorene	ug/L	ND	50	50	26.0	27.0	52	54	20-130	4	30	
Hexachloro-1,3-butadiene	ug/L	ND	50	50	14.2	14.4	28	29	10-130	2	30	
Hexachlorobenzene	ug/L	ND	50	50	31.2	33.0	62	66	30-130	6	30	
Hexachlorocyclopentadiene	ug/L	ND	50	50	14.3	13.8	29	28	10-150	4	30	
Hexachloroethane	ug/L	ND	50	50	16.8	16.4	34	33	10-130	2	30	
Indeno(1,2,3-cd)pyrene	ug/L	ND	50	50	46.5	52.8	93	106	40-130	13	30	
Isophorone	ug/L	ND	50	50	27.2	28.8	54	58	30-130	6	30	
N-Nitroso-di-n-propylamine	ug/L	ND	50	50	28.5	28.3	57	57	30-130	1	30	
N-Nitrosodimethylamine	ug/L	ND	50	50	26.4	24.5	53	49	10-130	7	30	
N-Nitrosodiphenylamine	ug/L	ND	50	50	32.4	34.2	65	68	30-130	5	30	
Naphthalene	ug/L	ND	50	50	23.1	22.6	46	45	20-130	2	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2824601 2824602												
Parameter	Units	92467724001		MS	MSD	2824602		MS	MSD			Qual
		Result	Conc.	Spike	Spike	Result	Result	% Rec	% Rec	% Rec	Max	
										Limits	RPD	RPD
Nitrobenzene	ug/L	ND	50	50	50	28.4	29.1	57	58	20-130	2	30
Pentachlorophenol	ug/L	ND	100	100	100	76.6	84.1	77	84	10-140	9	30
Phenanthrene	ug/L	ND	50	50	50	35.6	37.4	71	75	50-130	5	30
Phenol	ug/L	ND	50	50	50	21.0	19.6	42	39	10-130	7	30
Pyrene	ug/L	ND	50	50	50	47.6	53.3	95	107	50-130	11	30
2,4,6-Tribromophenol (S)	%							73	78	10-137		
2-Fluorobiphenyl (S)	%							52	54	13-130		
2-Fluorophenol (S)	%							50	48	10-130		
Nitrobenzene-d5 (S)	%							61	63	13-130		
Phenol-d6 (S)	%							38	35	10-130		
Terphenyl-d14 (S)	%							91	105	25-130		

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

QC Batch:	528709	Analysis Method:	EPA 8270E
QC Batch Method:	EPA 3546	Analysis Description:	8270E Solid MSSV Microwave
Associated Lab Samples:	92467731001, 92467731002, 92467731003, 92467731004, 92467731005, 92467731006, 92467731007, 92467731008, 92467731009, 92467731010, 92467731011, 92467731012, 92467731013, 92467731014, 92467731015, 92467731016, 92467731017		

METHOD BLANK: 2823793

Matrix: Solid

Associated Lab Samples: 92467731001, 92467731002, 92467731003, 92467731004, 92467731005, 92467731006, 92467731007, 92467731008, 92467731009, 92467731010, 92467731011, 92467731012, 92467731013, 92467731014, 92467731015, 92467731016, 92467731017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	326	74.6	03/06/20 11:15	
1,2-Dichlorobenzene	ug/kg	ND	326	70.5	03/06/20 11:15	
1,3-Dichlorobenzene	ug/kg	ND	326	73.3	03/06/20 11:15	
1,4-Dichlorobenzene	ug/kg	ND	326	71.6	03/06/20 11:15	
1-Methylnaphthalene	ug/kg	ND	326	86.7	03/06/20 11:15	
2,2'-Oxybis(1-chloropropane)	ug/kg	ND	326	90.5	03/06/20 11:15	
2,4,5-Trichlorophenol	ug/kg	ND	326	84.6	03/06/20 11:15	
2,4,6-Trichlorophenol	ug/kg	ND	326	81.8	03/06/20 11:15	
2,4-Dichlorophenol	ug/kg	ND	326	108	03/06/20 11:15	
2,4-Dimethylphenol	ug/kg	ND	326	81.1	03/06/20 11:15	
2,4-Dinitrophenol	ug/kg	ND	1630	1040	03/06/20 11:15	
2,4-Dinitrotoluene	ug/kg	ND	326	86.2	03/06/20 11:15	
2,6-Dinitrotoluene	ug/kg	ND	326	85.2	03/06/20 11:15	
2-Chloronaphthalene	ug/kg	ND	326	72.5	03/06/20 11:15	
2-Chlorophenol	ug/kg	ND	326	75.8	03/06/20 11:15	
2-Methylnaphthalene	ug/kg	ND	326	82.9	03/06/20 11:15	
2-Methylphenol(o-Cresol)	ug/kg	ND	326	72.1	03/06/20 11:15	
2-Nitroaniline	ug/kg	ND	1630	164	03/06/20 11:15	
2-Nitrophenol	ug/kg	ND	326	101	03/06/20 11:15	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	326	81.9	03/06/20 11:15	
3,3'-Dichlorobenzidine	ug/kg	ND	651	227	03/06/20 11:15	
3-Nitroaniline	ug/kg	ND	1630	173	03/06/20 11:15	
4,6-Dinitro-2-methylphenol	ug/kg	ND	651	525	03/06/20 11:15	
4-Bromophenylphenyl ether	ug/kg	ND	326	85.5	03/06/20 11:15	
4-Chloro-3-methylphenol	ug/kg	ND	651	198	03/06/20 11:15	
4-Chloroaniline	ug/kg	ND	651	199	03/06/20 11:15	
4-Chlorophenylphenyl ether	ug/kg	ND	326	84.6	03/06/20 11:15	
4-Nitroaniline	ug/kg	ND	651	161	03/06/20 11:15	
4-Nitrophenol	ug/kg	ND	1630	519	03/06/20 11:15	
Acenaphthene	ug/kg	ND	326	83.8	03/06/20 11:15	
Acenaphthylene	ug/kg	ND	326	77.1	03/06/20 11:15	
Aniline	ug/kg	ND	326	73.1	03/06/20 11:15	
Anthracene	ug/kg	ND	326	84.5	03/06/20 11:15	
Benzo(a)anthracene	ug/kg	ND	326	104	03/06/20 11:15	
Benzo(a)pyrene	ug/kg	ND	326	141	03/06/20 11:15	
Benzo(b)fluoranthene	ug/kg	ND	326	131	03/06/20 11:15	
Benzo(g,h,i)perylene	ug/kg	ND	326	127	03/06/20 11:15	
Benzo(k)fluoranthene	ug/kg	ND	326	137	03/06/20 11:15	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

METHOD BLANK: 2823793

Matrix: Solid

Associated Lab Samples: 92467731001, 92467731002, 92467731003, 92467731004, 92467731005, 92467731006, 92467731007, 92467731008, 92467731009, 92467731010, 92467731011, 92467731012, 92467731013, 92467731014, 92467731015, 92467731016, 92467731017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzoic Acid	ug/kg	ND	1630	351	03/06/20 11:15	
Benzyl alcohol	ug/kg	ND	651	173	03/06/20 11:15	
bis(2-Chloroethoxy)methane	ug/kg	ND	326	86.9	03/06/20 11:15	
bis(2-Chloroethyl) ether	ug/kg	ND	326	69.2	03/06/20 11:15	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	326	107	03/06/20 11:15	
Butylbenzylphthalate	ug/kg	ND	326	86.7	03/06/20 11:15	
Chrysene	ug/kg	ND	326	94.5	03/06/20 11:15	
Di-n-butylphthalate	ug/kg	ND	326	80.3	03/06/20 11:15	
Di-n-octylphthalate	ug/kg	ND	326	186	03/06/20 11:15	
Dibenz(a,h)anthracene	ug/kg	ND	326	130	03/06/20 11:15	
Dibenzofuran	ug/kg	ND	326	81.4	03/06/20 11:15	
Diethylphthalate	ug/kg	ND	326	70.7	03/06/20 11:15	
Dimethylphthalate	ug/kg	ND	326	73.6	03/06/20 11:15	
Fluoranthene	ug/kg	ND	326	98.4	03/06/20 11:15	
Fluorene	ug/kg	ND	326	87.1	03/06/20 11:15	
Hexachloro-1,3-butadiene	ug/kg	ND	326	79.1	03/06/20 11:15	
Hexachlorobenzene	ug/kg	ND	326	82.7	03/06/20 11:15	
Hexachlorocyclopentadiene	ug/kg	ND	326	130	03/06/20 11:15	
Hexachloroethane	ug/kg	ND	326	74.2	03/06/20 11:15	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	326	149	03/06/20 11:15	
Isophorone	ug/kg	ND	326	70.8	03/06/20 11:15	
N-Nitroso-di-n-propylamine	ug/kg	ND	326	91.2	03/06/20 11:15	
N-Nitrosodimethylamine	ug/kg	ND	326	91.6	03/06/20 11:15	
N-Nitrosodiphenylamine	ug/kg	ND	326	83.1	03/06/20 11:15	
Naphthalene	ug/kg	ND	326	78.0	03/06/20 11:15	
Nitrobenzene	ug/kg	ND	326	77.8	03/06/20 11:15	
Pentachlorophenol	ug/kg	ND	651	149	03/06/20 11:15	
Phenanthrene	ug/kg	ND	326	82.0	03/06/20 11:15	
Phenol	ug/kg	ND	326	77.8	03/06/20 11:15	
Pyrene	ug/kg	ND	326	89.6	03/06/20 11:15	
Pyridine	ug/kg	ND	326	82.4	03/06/20 11:15	
2,4,6-Tribromophenol (S)	%	71	27-110		03/06/20 11:15	
2-Fluorobiphenyl (S)	%	69	30-110		03/06/20 11:15	
2-Fluorophenol (S)	%	72	13-110		03/06/20 11:15	
Nitrobenzene-d5 (S)	%	65	23-110		03/06/20 11:15	
Phenol-d6 (S)	%	66	22-110		03/06/20 11:15	
Terphenyl-d14 (S)	%	63	28-110		03/06/20 11:15	

LABORATORY CONTROL SAMPLE: 2823794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1250	75	52-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

LABORATORY CONTROL SAMPLE: 2823794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichlorobenzene	ug/kg	1670	1190	71	51-130	
1,3-Dichlorobenzene	ug/kg	1670	1170	70	50-130	
1,4-Dichlorobenzene	ug/kg	1670	1160	69	49-130	
1-Methylnaphthalene	ug/kg	1670	1260	75	55-130	
2,2'-Oxybis(1-chloropropane)	ug/kg	1670	1140	68	30-130	
2,4,5-Trichlorophenol	ug/kg	1670	1200	72	55-130	
2,4,6-Trichlorophenol	ug/kg	1670	1280	76	57-130	
2,4-Dichlorophenol	ug/kg	1670	1270	76	56-130	
2,4-Dimethylphenol	ug/kg	1670	1370	82	51-130	
2,4-Dinitrophenol	ug/kg	8360	5790	69	27-133	
2,4-Dinitrotoluene	ug/kg	1670	1360	82	61-130	
2,6-Dinitrotoluene	ug/kg	1670	1390	83	60-130	
2-Chloronaphthalene	ug/kg	1670	1220	73	52-130	
2-Chlorophenol	ug/kg	1670	1240	74	54-130	
2-Methylnaphthalene	ug/kg	1670	1230	73	54-130	
2-Methylphenol(o-Cresol)	ug/kg	1670	1150	69	51-130	
2-Nitroaniline	ug/kg	3340	2280	68	51-130	
2-Nitrophenol	ug/kg	1670	1230	74	49-130	
3&4-Methylphenol(m&p Cresol)	ug/kg	1670	1130	67	11-163	
3,3'-Dichlorobenzidine	ug/kg	3340	2350	70	10-132	
3-Nitroaniline	ug/kg	3340	2370	71	55-130	
4,6-Dinitro-2-methylphenol	ug/kg	3340	2860	86	47-142	
4-Bromophenylphenyl ether	ug/kg	1670	1370	82	59-130	
4-Chloro-3-methylphenol	ug/kg	3340	2630	79	55-130	
4-Chloroaniline	ug/kg	3340	2450	73	54-130	
4-Chlorophenylphenyl ether	ug/kg	1670	1230	74	58-130	
4-Nitroaniline	ug/kg	3340	2440	73	54-130	
4-Nitrophenol	ug/kg	8360	6430	77	48-130	
Acenaphthene	ug/kg	1670	1230	74	60-130	
Acenaphthylene	ug/kg	1670	1370	82	60-130	
Aniline	ug/kg	1670	1080	65	43-130	
Anthracene	ug/kg	1670	1410	84	63-130	
Benzo(a)anthracene	ug/kg	1670	1530	92	59-130	
Benzo(a)pyrene	ug/kg	1670	1540	92	57-130	
Benzo(b)fluoranthene	ug/kg	1670	1450	87	54-130	
Benzo(g,h,i)perylene	ug/kg	1670	1550	93	59-130	
Benzo(k)fluoranthene	ug/kg	1670	1440	86	54-130	
Benzoic Acid	ug/kg	8360	4550	54	19-130	
Benzyl alcohol	ug/kg	3340	2480	74	50-130	
bis(2-Chloroethoxy)methane	ug/kg	1670	1140	68	54-130	
bis(2-Chloroethyl) ether	ug/kg	1670	1170	70	48-130	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1420	85	45-134	
Butylbenzylphthalate	ug/kg	1670	1390	83	46-138	
Chrysene	ug/kg	1670	1480	88	58-130	
Di-n-butylphthalate	ug/kg	1670	1400	84	60-130	
Di-n-octylphthalate	ug/kg	1670	1600	96	53-130	
Dibenz(a,h)anthracene	ug/kg	1670	1450	87	59-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

LABORATORY CONTROL SAMPLE: 2823794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibenzofuran	ug/kg	1670	1240	74	60-130	
Diethylphthalate	ug/kg	1670	1300	78	60-130	
Dimethylphthalate	ug/kg	1670	1270	76	60-130	
Fluoranthene	ug/kg	1670	1480	89	65-130	
Fluorene	ug/kg	1670	1270	76	63-130	
Hexachloro-1,3-butadiene	ug/kg	1670	1250	75	46-130	
Hexachlorobenzene	ug/kg	1670	1290	77	58-130	
Hexachlorocyclopentadiene	ug/kg	1670	1250	75	23-130	
Hexachloroethane	ug/kg	1670	1220	73	47-130	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1560	93	60-130	
Isophorone	ug/kg	1670	1200	72	49-130	
N-Nitroso-di-n-propylamine	ug/kg	1670	1110	66	47-130	
N-Nitrosodimethylamine	ug/kg	1670	1100	66	45-130	
N-Nitrosodiphenylamine	ug/kg	1670	1270	76	59-130	
Naphthalene	ug/kg	1670	1260	76	55-130	
Nitrobenzene	ug/kg	1670	1230	73	49-130	
Pentachlorophenol	ug/kg	3340	2590	77	10-132	
Phenanthrene	ug/kg	1670	1400	84	62-130	
Phenol	ug/kg	1670	1270	76	46-130	
Pyrene	ug/kg	1670	1420	85	53-130	
Pyridine	ug/kg	1670	887	53	37-130	
2,4,6-Tribromophenol (S)	%			80	27-110	
2-Fluorobiphenyl (S)	%			65	30-110	
2-Fluorophenol (S)	%			73	13-110	
Nitrobenzene-d5 (S)	%			68	23-110	
Phenol-d6 (S)	%			67	22-110	
Terphenyl-d14 (S)	%			61	28-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2823795 2823796

Parameter	Units	92467731016 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	4610	4700	2220	2750	48	58	18-130	21	30	
1,2-Dichlorobenzene	ug/kg	ND	4610	4700	2700	3290	58	70	14-130	20	30	
1,3-Dichlorobenzene	ug/kg	ND	4610	4700	2620	3170	57	67	12-130	19	30	
1,4-Dichlorobenzene	ug/kg	ND	4610	4700	2660	3220	58	68	10-130	19	30	
1-Methylnaphthalene	ug/kg	ND	4610	4700	2620	3150	57	67	12-130	18	30	
2,2'-Oxybis(1-chloropropane)	ug/kg	ND	4610	4700	3340	3950	72	84	10-130	17	30	
2,4,5-Trichlorophenol	ug/kg	ND	4610	4700	3280	3280	71	70	13-130	0	30	
2,4,6-Trichlorophenol	ug/kg	ND	4610	4700	3370	3440	73	73	17-130	2	30	
2,4-Dichlorophenol	ug/kg	ND	4610	4700	2820	3240	61	69	10-130	14	30	
2,4-Dimethylphenol	ug/kg	ND	4610	4700	3490	3980	76	85	10-130	13	30	
2,4-Dinitrophenol	ug/kg	ND	23100	23500	17000	16000	74	68	10-130	6	30	
2,4-Dinitrotoluene	ug/kg	ND	4610	4700	4290	4150	93	88	24-130	3	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2823795 2823796											
Parameter	Units	92467731016		MS	MSD	MS		MS	MSD	% Rec Limits	Max RPD
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec		
2,6-Dinitrotoluene	ug/kg	ND	4610	4700	4310	4240	93	90	23-130	2	30
2-Chloronaphthalene	ug/kg	ND	4610	4700	2730	3070	59	65	19-130	12	30
2-Chlorophenol	ug/kg	ND	4610	4700	3330	3790	72	81	10-130	13	30
2-Methylnaphthalene	ug/kg	ND	4610	4700	2580	3070	56	65	18-130	17	30
2-Methylphenol(o-Cresol)	ug/kg	ND	4610	4700	3210	3670	69	78	10-130	13	30
2-Nitroaniline	ug/kg	ND	9230	9420	9270	8810	100	94	17-130	5	30
2-Nitrophenol	ug/kg	ND	4610	4700	3360	3880	73	82	10-130	14	30
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	4610	4700	3320	3770	72	80	10-130	13	30
3,3'-Dichlorobenzidine	ug/kg	ND	9230	9420	6580	6720	71	71	10-130	2	30
3-Nitroaniline	ug/kg	ND	9230	9420	8350	7840	90	83	24-130	6	30
4,6-Dinitro-2-methylphenol	ug/kg	ND	9230	9420	8060	7730	87	82	10-152	4	30
4-Bromophenylphenyl ether	ug/kg	ND	4610	4700	2860	3190	62	68	29-130	11	30
4-Chloro-3-methylphenol	ug/kg	ND	9230	9420	7980	8100	86	86	17-130	1	30
4-Chloroaniline	ug/kg	ND	9230	9420	6130	6650	66	71	14-130	8	30
4-Chlorophenylphenyl ether	ug/kg	ND	4610	4700	2830	2980	61	63	25-130	5	30
4-Nitroaniline	ug/kg	ND	9230	9420	8750	8540	95	91	22-130	2	30
4-Nitrophenol	ug/kg	ND	23100	23500	21600	20400	93	87	10-130	6	30
Acenaphthene	ug/kg	ND	4610	4700	3160	3390	68	72	20-130	7	30
Acenaphthylene	ug/kg	ND	4610	4700	3560	3920	74	81	25-130	10	30
Aniline	ug/kg	ND	4610	4700	2360	2600	51	55	10-130	10	30
Anthracene	ug/kg	ND	4610	4700	3540	4350	72	88	29-130	21	30
Benzo(a)anthracene	ug/kg	432J	4610	4700	3710	4690	71	90	19-130	23	30
Benzo(a)pyrene	ug/kg	421J	4610	4700	3700	4690	71	91	12-130	24	30
Benzo(b)fluoranthene	ug/kg	469J	4610	4700	3650	4690	69	90	14-130	25	30
Benzo(g,h,i)perylene	ug/kg	ND	4610	4700	3240	3950	64	78	10-130	20	30
Benzo(k)fluoranthene	ug/kg	ND	4610	4700	3410	4130	70	84	14-130	19	30
Benzoic Acid	ug/kg	ND	23100	23500	12900	12000	56	51	10-130	7	30
Benzyl alcohol	ug/kg	ND	9230	9420	6570	7440	71	79	13-130	12	30
bis(2-Chloroethoxy)methane	ug/kg	ND	4610	4700	2960	3420	64	73	16-130	14	30
bis(2-Chloroethyl) ether	ug/kg	ND	4610	4700	3200	3690	69	78	11-130	14	30
bis(2-Ethylhexyl)phthalate	ug/kg	ND	4610	4700	3970	4390	86	93	21-130	10	30
Butylbenzylphthalate	ug/kg	ND	4610	4700	3880	4250	84	90	23-130	9	30
Chrysene	ug/kg	396J	4610	4700	3570	4460	69	86	22-130	22	30
Di-n-butylphthalate	ug/kg	ND	4610	4700	3580	3880	78	82	30-130	8	30
Di-n-octylphthalate	ug/kg	ND	4610	4700	4480	4850	97	103	23-142	8	30 v1
Dibenz(a,h)anthracene	ug/kg	ND	4610	4700	3240	3450	70	73	10-130	6	30
Dibenzofuran	ug/kg	ND	4610	4700	3000	3210	65	68	24-130	7	30
Diethylphthalate	ug/kg	ND	4610	4700	3660	3560	79	76	26-130	3	30
Dimethylphthalate	ug/kg	ND	4610	4700	3900	3760	84	80	22-130	4	30
Fluoranthene	ug/kg	875J	4610	4700	4120	6110	70	111	33-130	39	30 R1
Fluorene	ug/kg	ND	4610	4700	3320	3650	72	77	22-130	9	30
Hexachloro-1,3-butadiene	ug/kg	ND	4610	4700	1810	2360	39	50	13-130	26	30 v3
Hexachlorobenzene	ug/kg	ND	4610	4700	2840	3190	61	68	29-130	12	30
Hexachlorocyclopentadiene	ug/kg	ND	4610	4700	1360	1470	29	31	10-130	8	30

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2823795 2823796											
Parameter	Units	92467731016		MS		MSD		MS		MSD	
		Result	Conc.	Spike	Conc.	Result	Conc.	% Rec	% Rec	Limits	Max
Hexachloroethane	ug/kg	ND	4610	4700	4700	2550	3220	55	68	10-130	23 30
Indeno(1,2,3-cd)pyrene	ug/kg	ND	4610	4700	4700	3340	3950	67	79	10-130	17 30
Isophorone	ug/kg	ND	4610	4700	4700	3360	3590	73	76	13-130	7 30
N-Nitroso-di-n-propylamine	ug/kg	ND	4610	4700	4700	3530	4040	77	86	12-130	13 30
N-Nitrosodimethylamine	ug/kg	ND	4610	4700	4700	3040	3330	66	71	11-130	9 30
N-Nitrosodiphenylamine	ug/kg	ND	4610	4700	4700	3490	3640	76	77	15-130	4 30
Naphthalene	ug/kg	ND	4610	4700	4700	2840	3440	61	73	15-130	19 30
Nitrobenzene	ug/kg	ND	4610	4700	4700	3220	3650	70	77	12-130	12 30
Pentachlorophenol	ug/kg	ND	9230	9420	9420	6560	7040	71	75	10-130	7 30
Phenanthrene	ug/kg	389J	4610	4700	4700	3700	4980	72	97	27-130	29 30
Phenol	ug/kg	ND	4610	4700	4700	2910	3310	63	70	10-130	13 30
Pyrene	ug/kg	901J	4610	4700	4700	3910	5500	65	98	19-130	34 30 R1
Pyridine	ug/kg	ND	4610	4700	4700	2320	2530	50	54	10-130	8 30
2,4,6-Tribromophenol (S)	%							81	84	27-110	
2-Fluorobiphenyl (S)	%							50	55	30-110	
2-Fluorophenol (S)	%							65	73	13-110	
Nitrobenzene-d5 (S)	%							64	72	23-110	
Phenol-d6 (S)	%							60	67	22-110	
Terphenyl-d14 (S)	%							45	49	28-110	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

QC Batch:	528465	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples:	92467731001, 92467731002, 92467731003, 92467731004, 92467731005, 92467731006, 92467731007, 92467731008, 92467731009, 92467731010, 92467731011, 92467731012, 92467731013, 92467731014, 92467731015, 92467731016, 92467731017		

SAMPLE DUPLICATE: 2822704

Parameter	Units	35533487008 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.6	18.6			

SAMPLE DUPLICATE: 2822705

Parameter	Units	92467731017 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	32.0	31.7	1	25	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

QC Batch: 528807 Analysis Method: EPA 9060A
QC Batch Method: EPA 9060A Analysis Description: 9060 TOC, AVL
Associated Lab Samples: 92467731013, 92467731014, 92467731015

METHOD BLANK: 2824520 Matrix: Water

Associated Lab Samples: 92467731013, 92467731014, 92467731015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mean Total Organic Carbon	mg/kg	ND	600	429	03/18/20 10:17	
Total Organic Carbon	mg/kg	ND	600	429	03/18/20 10:17	
Total Organic Carbon	mg/kg	700	600	429	03/18/20 10:17	
Total Organic Carbon	mg/kg	ND	600	429	03/18/20 10:17	
Total Organic Carbon	mg/kg	ND	600	429	03/18/20 10:17	

LABORATORY CONTROL SAMPLE: 2824521

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/kg	120000	125000	104	80-120	
Total Organic Carbon	mg/kg	120000	131000	109		
Total Organic Carbon	mg/kg	120000	118000	99		
Total Organic Carbon	mg/kg	120000	138000	115		
Total Organic Carbon	mg/kg	120000	113000	94		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2824522 2824523

Parameter	Units	92467454001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mean Total Organic Carbon	mg/kg	3890	50600	50600	58100	56300	107	103	80-120	3	20	
Total Organic Carbon	mg/kg	3520	50600	50600	67300	61600	126	114		9		
Total Organic Carbon	mg/kg	3490	50600	50600	61500	54300	114	100		12		
Total Organic Carbon	mg/kg	4670	50600	50600	53300	54700	95	98		3		
Total Organic Carbon	mg/kg	3850	50600	50600	50400	54300	92	99		7		

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QUALIFIERS

Project: FORMER BRAMLETTE MGP J20030083
Pace Project No.: 92467731

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-A Pace Analytical Services - Asheville
 PASI-C Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
 IH This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
 IK The recalculated concentration of the calibration standard(s) did not meet method acceptance criteria; this result should be considered an estimated value.
 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.
 R1 RPD value was outside control limits.
 S0 Surrogate recovery outside laboratory control limits.
 v1 The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
 v2 The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

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QUALIFIERS

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

ANALYTE QUALIFIERS

v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92467731018	EB-01_WQ_20200302	EPA 3510C	528828	EPA 8270E	529069
92467731019	EB-02_WQ_20200301	EPA 3510C	528828	EPA 8270E	529069
92467731001	SW-13_SE_20200301 (0-0.5)	EPA 3546	528709	EPA 8270E	529226
92467731002	SW-13_SE_20200301 (0.5-1.0)	EPA 3546	528709	EPA 8270E	529226
92467731003	SW-13_SE_20200301 (1.0-2.0)	EPA 3546	528709	EPA 8270E	529226
92467731004	SW-14_SE_20200301 (0-0.5)	EPA 3546	528709	EPA 8270E	529226
92467731005	SW-14_SE_20200301 (0.5-1.0)	EPA 3546	528709	EPA 8270E	529226
92467731006	SW-14_SE_20200301 (1.0-2.0)	EPA 3546	528709	EPA 8270E	529226
92467731007	SW-15_SE_20200301 (0-0.5)	EPA 3546	528709	EPA 8270E	529226
92467731008	SW-15_SE_20200301 (0.5-1.0)	EPA 3546	528709	EPA 8270E	529226
92467731009	SW-16_SE_20200301 (0.5-1.0)	EPA 3546	528709	EPA 8270E	529226
92467731010	SW-16_SE_20200301 (1.0-2.0)	EPA 3546	528709	EPA 8270E	529226
92467731011	SW-16_SE_20200301 (2.0-3.0)	EPA 3546	528709	EPA 8270E	529226
92467731012	FD-01_SE_20200302	EPA 3546	528709	EPA 8270E	529226
92467731013	SW-13A_SE_20200301 (0-0.5)	EPA 3546	528709	EPA 8270E	529226
92467731014	SW-14A_SE_20200301 (0-0.5)	EPA 3546	528709	EPA 8270E	529226
92467731015	SW-16_SE_20200301 (0-0.5)	EPA 3546	528709	EPA 8270E	529226
92467731016	SW-13A_SE_20200301 (0.5-1.0)	EPA 3546	528709	EPA 8270E	529226
92467731017	SW-14_SE_20200301 (2.0-3.0)	EPA 3546	528709	EPA 8270E	529226
92467731018	EB-01_WQ_20200302	EPA 8260D	528517		
92467731019	EB-02_WQ_20200301	EPA 8260D	528517		
92467731020	TB-01_WQ_20200302	EPA 8260D	528517		
92467731001	SW-13_SE_20200301 (0-0.5)	EPA 5035A	528968	EPA 8260D	528978
92467731002	SW-13_SE_20200301 (0.5-1.0)	EPA 5035A	528968	EPA 8260D	528978
92467731003	SW-13_SE_20200301 (1.0-2.0)	EPA 5035A	528968	EPA 8260D	528978
92467731004	SW-14_SE_20200301 (0-0.5)	EPA 5035A	528968	EPA 8260D	528978
92467731005	SW-14_SE_20200301 (0.5-1.0)	EPA 5035A	528968	EPA 8260D	528978
92467731006	SW-14_SE_20200301 (1.0-2.0)	EPA 5035A	528968	EPA 8260D	528978
92467731007	SW-15_SE_20200301 (0-0.5)	EPA 5035A	528728	EPA 8260D	528742
92467731008	SW-15_SE_20200301 (0.5-1.0)	EPA 5035A	528728	EPA 8260D	528742
92467731009	SW-16_SE_20200301 (0.5-1.0)	EPA 5035A	528728	EPA 8260D	528742
92467731010	SW-16_SE_20200301 (1.0-2.0)	EPA 5035A	528728	EPA 8260D	528742
92467731011	SW-16_SE_20200301 (2.0-3.0)	EPA 5035A	528728	EPA 8260D	528742
92467731012	FD-01_SE_20200302	EPA 5035A	528968	EPA 8260D	528978
92467731013	SW-13A_SE_20200301 (0-0.5)	EPA 5035A	528968	EPA 8260D	528978
92467731014	SW-14A_SE_20200301 (0-0.5)	EPA 5035A	528968	EPA 8260D	528978
92467731015	SW-16_SE_20200301 (0-0.5)	EPA 5035A	528728	EPA 8260D	528742
92467731016	SW-13A_SE_20200301 (0.5-1.0)	EPA 5035A	528968	EPA 8260D	528978
92467731001	SW-13_SE_20200301 (0-0.5)	ASTM D2974-87	528465		
92467731002	SW-13_SE_20200301 (0.5-1.0)	ASTM D2974-87	528465		
92467731003	SW-13_SE_20200301 (1.0-2.0)	ASTM D2974-87	528465		
92467731004	SW-14_SE_20200301 (0-0.5)	ASTM D2974-87	528465		
92467731005	SW-14_SE_20200301 (0.5-1.0)	ASTM D2974-87	528465		
92467731006	SW-14_SE_20200301 (1.0-2.0)	ASTM D2974-87	528465		
92467731007	SW-15_SE_20200301 (0-0.5)	ASTM D2974-87	528465		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

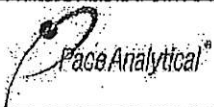
Project: FORMER BRAMLETTE MGP J20030083

Pace Project No.: 92467731

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92467731008	SW-15_SE_20200301 (0.5-1.0)	ASTM D2974-87	528465		
92467731009	SW-16_SE_20200301 (0.5-1.0)	ASTM D2974-87	528465		
92467731010	SW-16_SE_20200301 (1.0-2.0)	ASTM D2974-87	528465		
92467731011	SW-16_SE_20200301 (2.0-3.0)	ASTM D2974-87	528465		
92467731012	FD-01_SE_20200302	ASTM D2974-87	528465		
92467731013	SW-13A_SE_20200301 (0-0.5)	ASTM D2974-87	528465		
92467731014	SW-14A_SE_20200301 (0-0.5)	ASTM D2974-87	528465		
92467731015	SW-16_SE_20200301 (0-0.5)	ASTM D2974-87	528465		
92467731016	SW-13A_SE_20200301 (0.5-1.0)	ASTM D2974-87	528465		
92467731017	SW-14_SE_20200301 (2.0-3.0)	ASTM D2974-87	528465		
92467731013	SW-13A_SE_20200301 (0-0.5)	EPA 9060A	528807		
92467731014	SW-14A_SE_20200301 (0-0.5)	EPA 9060A	528807		
92467731015	SW-16_SE_20200301 (0-0.5)	EPA 9060A	528807		

REPORT OF LABORATORY ANALYSIS

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	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt (SCUR)	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

Client Name:

Project #:

W0# : 92467731



Courier:

☐ Commercial

☐ Fed Ex

☒ Pace

☐ UPS

☐ USPS

☐ Other:

☐ Client

Custody Seal Present?

☐ Yes

☒ No

Seals Intact?

☐ Yes

☒ No

Date/Initials Person Examining Contents:

JD

3.3.20

Packing Material:

☐ Bubble Wrap

☒ Bubble Bags

☐ None

☐ Other:

Thermometer:

☒ IR Gun ID:

037061

Type of Ice:

☒ Wet

☐ Blue

☐ None

Biological Tissue Frozen?

☐ Yes

☐ No

☐ N/A

Cooler Temp (°C):

4.4/1.6/1.7

Correction Factor: Add/Subtract (°C)

0.0

Cooler Temp Corrected (°C):

4.4/1.6/1.7

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?	☒ Yes ☐ No ☐ N/A	9.	
-Includes Date/Time/ID/Analysis Matrix:	WT		
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 SCURF Review:

Date:

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	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# : 92467731

PM: KLH1

Due Date: 03/10/20

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 2N Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFIU-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 Na2SO3 (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)	AGOU-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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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.

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt (SCUR)	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# : 92467731

PM: KLH1

Due Date: 03/10/20

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)-S03S 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																				
2									1																				
3									1																				
4									1																				
5									1																				
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9																													
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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.



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

Required Client Information:

Company:	Synterra
Address:	148 River street, Suite 220, Greenville, SC 29601
Email:	tking@synterracorp.com
Phone:	(803)429-3668
Requested Due Date:	

Section B

Required Project Information:

Report To:	Tom King
Copy To:	
Purchase Order #:	
Project Name:	Former Bramlette MGP Surface Water
Project #:	

Section C

Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	kevin.herring@pacelabs.com
Pace Profile #:	7754

Page : 1 Of

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9), -) Sample IDs must be unique	MATRIX CODE Drinking Water DW Waste Water WW Product P Soil/Solid SL Oil OL Wipe WP Air AR Other OT Tissue TS	CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analyte Type (V/N)	Requested Analysis Filtered (Y/N)							Residual Chlorine (Y/N)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
						START		END				Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other		VOC's	SVOC's	Trip BLANK	TDCL	MS/MSD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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Section B

Required Project Information:

Section C

Invoice Information:

Page : 2 Of

Company.	Synterra
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Report To: Tom King

Attention:

Address: 148 River street

Copy To:

Company Name:

Suite 220, Greenville, SC 29601

Purchase Order #:

Address;

Email: tking@synterra.com

Project Name:	Former Bramlette MGP Sediment
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Pace Quo	
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Phone:	(803) 429-3668	Fax:
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Project #

Peace Project Manager:	kevin.herring@pacelabs.com
------------------------	----------------------------

Requested Due Date:

Pace Profile #:	7754
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2

52467731

Voc's grad only	
	009
	010
	011
	012
	018
	020
	019

Received on	
by	
(Y/N)	Y
Cusbody	
Sealed	N
Cooler	
(Y/N)	Y
Sample	
Intact	

April 17, 2020

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

RE: Project: FORMER BRAMLETTE MGP J20040272
Pace Project No.: 92473288

Dear Program Manager:

Enclosed are the analytical results for sample(s) received by the laboratory on April 10, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Charlotte

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



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Pace Analytical Services Charlotte

9800 Kinsey 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

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SAMPLE SUMMARY

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92473288001	SW-17-SE-20200410 (0-.0.5)	Solid	04/10/20 10:00	04/10/20 11:55
92473288002	SW-17-SE-20200410 (0.5-1.0)	Solid	04/10/20 10:20	04/10/20 11:55
92473288003	SW-17-SE-20200410 (1.0-2.0)	Solid	04/10/20 10:40	04/10/20 11:55
92473288004	EB-WQ-20200410	Water	04/10/20 11:30	04/10/20 11:55
92473288005	TB-WQ-20200410	Water	04/10/20 00:00	04/10/20 11:55

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92473288001	SW-17-SE-20200410 (0-.0.5)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92473288002	SW-17-SE-20200410 (0.5-1.0)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92473288003	SW-17-SE-20200410 (1.0-2.0)	EPA 8270E	BPJ	75	PASI-C
		EPA 8260D	CL	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
92473288004	EB-WQ-20200410	EPA 8270E	PKS	74	PASI-C
		EPA 8260D	SAS	62	PASI-C
92473288005	TB-WQ-20200410	EPA 8260D	SAS	62	PASI-C

PASI-C = Pace Analytical Services - Charlotte

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92473288001	SW-17-SE-20200410 (0-0.5)					
ASTM D2974-87	Percent Moisture	14.0	%	0.10	04/13/20 14:16	
92473288002	SW-17-SE-20200410 (0.5-1.0)					
EPA 8260D	Acetone	23.6J	ug/kg	94.0	04/13/20 23:07	M1
ASTM D2974-87	Percent Moisture	26.5	%	0.10	04/13/20 14:16	
92473288003	SW-17-SE-20200410 (1.0-2.0)					
EPA 8260D	Acetone	37.6J	ug/kg	103	04/13/20 23:31	
EPA 8260D	Styrene	2.7J	ug/kg	5.1	04/13/20 23:31	
ASTM D2974-87	Percent Moisture	27.8	%	0.10	04/13/20 14:16	

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Method: EPA 8270E

Description: 8270E RVE

Client: Duke Energy

Date: April 17, 2020

General Information:

1 sample was analyzed for EPA 8270E by Pace Analytical Services Charlotte. 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.

QC Batch: 536397

v2: The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

- BLANK (Lab ID: 2861271)
 - Pentachlorophenol
- EB-WQ-20200410 (Lab ID: 92473288004)
 - Pentachlorophenol

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.

- LCS (Lab ID: 2861272)
 - Pentachlorophenol
- MS (Lab ID: 2861273)
 - Pentachlorophenol
- MSD (Lab ID: 2861274)
 - Pentachlorophenol

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.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Method: EPA 8270E

Description: 8270E RVE

Client: Duke Energy

Date: April 17, 2020

Matrix Spikes:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Method: EPA 8270E

Description: 8270E MSSV Microwave

Client: Duke Energy

Date: April 17, 2020

General Information:

3 samples were analyzed for EPA 8270E by Pace Analytical Services Charlotte. 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.

QC Batch: 535895

v2: The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.

- SW-17-SE-20200410 (0-.0.5) (Lab ID: 92473288001)
 - 2,4-Dinitrophenol
 - 3&4-Methylphenol(m&p Cresol)
 - bis(2-Ethylhexyl)phthalate
- SW-17-SE-20200410 (0.5-1.0) (Lab ID: 92473288002)
 - 2,4-Dinitrophenol
 - 3&4-Methylphenol(m&p Cresol)
 - bis(2-Ethylhexyl)phthalate

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: 535895

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- SW-17-SE-20200410 (0-.0.5) (Lab ID: 92473288001)
 - 2,4,6-Tribromophenol (S)
 - 2-Fluorobiphenyl (S)
 - 2-Fluorophenol (S)
 - Nitrobenzene-d5 (S)
 - Phenol-d6 (S)
 - Terphenyl-d14 (S)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Method: EPA 8270E

Description: 8270E MSSV Microwave

Client: Duke Energy

Date: April 17, 2020

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.

Duplicate Sample:

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

Additional Comments:

Analyte Comments:

QC Batch: 535895

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SW-17-SE-20200410 (0-.0.5) (Lab ID: 92473288001)
 - Nitrobenzene-d5 (S)
- SW-17-SE-20200410 (0.5-1.0) (Lab ID: 92473288002)
 - Nitrobenzene-d5 (S)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Method: EPA 8260D

Description: 8260 MSV Low Level SC

Client: Duke Energy

Date: April 17, 2020

General Information:

2 samples were analyzed for EPA 8260D by Pace Analytical Services Charlotte. 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: 536573

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: 2862133)
- Bromomethane

Matrix Spikes:

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Method: EPA 8260D

Description: 8260/5035A SC Volatile Org

Client: Duke Energy

Date: April 17, 2020

General Information:

3 samples were analyzed for EPA 8260D by Pace Analytical Services Charlotte. 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.

QC Batch: 535927

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- BLANK (Lab ID: 2859351)
 - Bromomethane
- DUP (Lab ID: 2859632)
 - 1,2-Dibromo-3-chloropropane
 - Bromomethane
 - Hexachloro-1,3-butadiene
- LCS (Lab ID: 2859352)
 - Bromomethane
- MS (Lab ID: 2859633)
 - 1,2-Dibromo-3-chloropropane
 - Bromomethane
 - Hexachloro-1,3-butadiene
- SW-17-SE-20200410 (0-.0.5) (Lab ID: 92473288001)
 - Bromomethane
- SW-17-SE-20200410 (0.5-1.0) (Lab ID: 92473288002)
 - Bromomethane
- SW-17-SE-20200410 (1.0-2.0) (Lab ID: 92473288003)
 - Bromomethane

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.

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Method: EPA 8260D

Description: 8260/5035A SC Volatile Org

Client: Duke Energy

Date: April 17, 2020

QC Batch: 535927

S3: Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

- DUP (Lab ID: 2859632)
- 1,2-Dichloroethane-d4 (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.

QC Batch: 535927

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: 2859352)
- Bromomethane

Matrix Spikes:

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

QC Batch: 535927

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92473288002

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

- MS (Lab ID: 2859633)
 - 1,1,1,2-Tetrachloroethane
 - 1,1,1-Trichloroethane
 - 1,1,2,2-Tetrachloroethane
 - 1,1,2-Trichloroethane
 - 1,1-Dichloropropene
 - 1,2,3-Trichlorobenzene
 - 1,2,4-Trichlorobenzene
 - 1,2,4-Trimethylbenzene
 - 1,2-Dibromo-3-chloropropane
 - 1,2-Dichlorobenzene
 - 1,3,5-Trimethylbenzene
 - 1,3-Dichlorobenzene
 - 1,3-Dichloropropane
 - 1,4-Dichlorobenzene
 - 2-Chlorotoluene
 - 4-Chlorotoluene
 - Acetone
 - Bromobenzene
 - Bromoform
 - Carbon tetrachloride
 - Chlorobenzene
 - Ethylbenzene

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PROJECT NARRATIVE

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Method: EPA 8260D

Description: 8260/5035A SC Volatile Org

Client: Duke Energy

Date: April 17, 2020

QC Batch: 535927

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92473288002

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

- Isopropylbenzene (Cumene)
- Vinyl acetate
- cis-1,3-Dichloropropene
- m&p-Xylene
- n-Propylbenzene
- o-Xylene
- p-Isopropyltoluene
- sec-Butylbenzene
- tert-Butylbenzene

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.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (0-.0.5) Lab ID: 92473288001 Collected: 04/10/20 10:00 Received: 04/10/20 11:55 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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546 Pace Analytical Services - Charlotte									
Acenaphthene	ND	ug/kg	3900	1000	10	04/13/20 17:09	04/15/20 20:42	83-32-9	
Acenaphthylene	ND	ug/kg	3900	923	10	04/13/20 17:09	04/15/20 20:42	208-96-8	
Aniline	ND	ug/kg	3900	876	10	04/13/20 17:09	04/15/20 20:42	62-53-3	
Anthracene	ND	ug/kg	3900	1010	10	04/13/20 17:09	04/15/20 20:42	120-12-7	
Benzo(a)anthracene	ND	ug/kg	3900	1240	10	04/13/20 17:09	04/15/20 20:42	56-55-3	
Benzo(a)pyrene	ND	ug/kg	3900	1690	10	04/13/20 17:09	04/15/20 20:42	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	3900	1570	10	04/13/20 17:09	04/15/20 20:42	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	3900	1530	10	04/13/20 17:09	04/15/20 20:42	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	3900	1640	10	04/13/20 17:09	04/15/20 20:42	207-08-9	
Benzoic Acid	ND	ug/kg	19500	4210	10	04/13/20 17:09	04/15/20 20:42	65-85-0	
Benzyl alcohol	ND	ug/kg	7800	2070	10	04/13/20 17:09	04/15/20 20:42	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	3900	1020	10	04/13/20 17:09	04/15/20 20:42	101-55-3	
Butylbenzylphthalate	ND	ug/kg	3900	1040	10	04/13/20 17:09	04/15/20 20:42	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	7800	2380	10	04/13/20 17:09	04/15/20 20:42	59-50-7	
4-Chloroaniline	ND	ug/kg	7800	2390	10	04/13/20 17:09	04/15/20 20:42	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	3900	1040	10	04/13/20 17:09	04/15/20 20:42	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	3900	829	10	04/13/20 17:09	04/15/20 20:42	111-44-4	
2-Chloronaphthalene	ND	ug/kg	3900	869	10	04/13/20 17:09	04/15/20 20:42	91-58-7	
2-Chlorophenol	ND	ug/kg	3900	908	10	04/13/20 17:09	04/15/20 20:42	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	3900	1010	10	04/13/20 17:09	04/15/20 20:42	7005-72-3	
Chrysene	ND	ug/kg	3900	1130	10	04/13/20 17:09	04/15/20 20:42	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	3900	1560	10	04/13/20 17:09	04/15/20 20:42	53-70-3	
Dibenzofuran	ND	ug/kg	3900	975	10	04/13/20 17:09	04/15/20 20:42	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	3900	844	10	04/13/20 17:09	04/15/20 20:42	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3900	878	10	04/13/20 17:09	04/15/20 20:42	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3900	858	10	04/13/20 17:09	04/15/20 20:42	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	7800	2720	10	04/13/20 17:09	04/15/20 20:42	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	3900	1290	10	04/13/20 17:09	04/15/20 20:42	120-83-2	
Diethylphthalate	ND	ug/kg	3900	846	10	04/13/20 17:09	04/15/20 20:42	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	3900	972	10	04/13/20 17:09	04/15/20 20:42	105-67-9	
Dimethylphthalate	ND	ug/kg	3900	882	10	04/13/20 17:09	04/15/20 20:42	131-11-3	
Di-n-butylphthalate	ND	ug/kg	3900	962	10	04/13/20 17:09	04/15/20 20:42	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	7800	6290	10	04/13/20 17:09	04/15/20 20:42	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	19500	12500	10	04/13/20 17:09	04/15/20 20:42	51-28-5	v2
2,4-Dinitrotoluene	ND	ug/kg	3900	1030	10	04/13/20 17:09	04/15/20 20:42	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	3900	1020	10	04/13/20 17:09	04/15/20 20:42	606-20-2	
Di-n-octylphthalate	ND	ug/kg	3900	2220	10	04/13/20 17:09	04/15/20 20:42	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	3900	1280	10	04/13/20 17:09	04/15/20 20:42	117-81-7	v2
Fluoranthene	ND	ug/kg	3900	1180	10	04/13/20 17:09	04/15/20 20:42	206-44-0	
Fluorene	ND	ug/kg	3900	1040	10	04/13/20 17:09	04/15/20 20:42	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	3900	948	10	04/13/20 17:09	04/15/20 20:42	87-68-3	
Hexachlorobenzene	ND	ug/kg	3900	991	10	04/13/20 17:09	04/15/20 20:42	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	3900	1560	10	04/13/20 17:09	04/15/20 20:42	77-47-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (0-.0.5) **Lab ID:** 92473288001 **Collected:** 04/10/20 10:00 **Received:** 04/10/20 11:55 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546 Pace Analytical Services - Charlotte									
Hexachloroethane	ND	ug/kg	3900	889	10	04/13/20 17:09	04/15/20 20:42	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	3900	1790	10	04/13/20 17:09	04/15/20 20:42	193-39-5	
Isophorone	ND	ug/kg	3900	848	10	04/13/20 17:09	04/15/20 20:42	78-59-1	
1-Methylnaphthalene	ND	ug/kg	3900	1040	10	04/13/20 17:09	04/15/20 20:42	90-12-0	
2-Methylnaphthalene	ND	ug/kg	3900	993	10	04/13/20 17:09	04/15/20 20:42	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	3900	864	10	04/13/20 17:09	04/15/20 20:42	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	3900	981	10	04/13/20 17:09	04/15/20 20:42	15831-10-4	v2
Naphthalene	ND	ug/kg	3900	934	10	04/13/20 17:09	04/15/20 20:42	91-20-3	
2-Nitroaniline	ND	ug/kg	19500	1960	10	04/13/20 17:09	04/15/20 20:42	88-74-4	
3-Nitroaniline	ND	ug/kg	19500	2070	10	04/13/20 17:09	04/15/20 20:42	99-09-2	
4-Nitroaniline	ND	ug/kg	7800	1930	10	04/13/20 17:09	04/15/20 20:42	100-01-6	
Nitrobenzene	ND	ug/kg	3900	932	10	04/13/20 17:09	04/15/20 20:42	98-95-3	
2-Nitrophenol	ND	ug/kg	3900	1210	10	04/13/20 17:09	04/15/20 20:42	88-75-5	
4-Nitrophenol	ND	ug/kg	19500	6220	10	04/13/20 17:09	04/15/20 20:42	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	3900	1100	10	04/13/20 17:09	04/15/20 20:42	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	3900	1090	10	04/13/20 17:09	04/15/20 20:42	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	3900	995	10	04/13/20 17:09	04/15/20 20:42	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	3900	1080	10	04/13/20 17:09	04/15/20 20:42	108-60-1	
Pentachlorophenol	ND	ug/kg	7800	1790	10	04/13/20 17:09	04/15/20 20:42	87-86-5	
Phenanthrene	ND	ug/kg	3900	982	10	04/13/20 17:09	04/15/20 20:42	85-01-8	
Phenol	ND	ug/kg	3900	932	10	04/13/20 17:09	04/15/20 20:42	108-95-2	
Pyrene	ND	ug/kg	3900	1070	10	04/13/20 17:09	04/15/20 20:42	129-00-0	
Pyridine	ND	ug/kg	3900	987	10	04/13/20 17:09	04/15/20 20:42	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	3900	894	10	04/13/20 17:09	04/15/20 20:42	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	3900	1010	10	04/13/20 17:09	04/15/20 20:42	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	3900	980	10	04/13/20 17:09	04/15/20 20:42	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	0	%	23-110		10	04/13/20 17:09	04/15/20 20:42	4165-60-0	D3,S4
2-Fluorobiphenyl (S)	0	%	30-110		10	04/13/20 17:09	04/15/20 20:42	321-60-8	S4
Terphenyl-d14 (S)	0	%	28-110		10	04/13/20 17:09	04/15/20 20:42	1718-51-0	S4
Phenol-d6 (S)	0	%	22-110		10	04/13/20 17:09	04/15/20 20:42	13127-88-3	S4
2-Fluorophenol (S)	0	%	13-110		10	04/13/20 17:09	04/15/20 20:42	367-12-4	S4
2,4,6-Tribromophenol (S)	0	%	27-110		10	04/13/20 17:09	04/15/20 20:42	118-79-6	S4

8260/5035A SC Volatile Org

Analytical Method: EPA 8260D Preparation Method: EPA 5035A
Pace Analytical Services - Charlotte

Acetone	ND	ug/kg	103	9.7	1	04/13/20 16:44	04/13/20 22:43	67-64-1	
Benzene	ND	ug/kg	5.1	0.92	1	04/13/20 16:44	04/13/20 22:43	71-43-2	
Bromobenzene	ND	ug/kg	5.1	1.4	1	04/13/20 16:44	04/13/20 22:43	108-86-1	
Bromochloromethane	ND	ug/kg	5.1	1.3	1	04/13/20 16:44	04/13/20 22:43	74-97-5	
Bromodichloromethane	ND	ug/kg	5.1	1.0	1	04/13/20 16:44	04/13/20 22:43	75-27-4	
Bromoform	ND	ug/kg	5.1	2.5	1	04/13/20 16:44	04/13/20 22:43	75-25-2	
Bromomethane	ND	ug/kg	10.3	2.4	1	04/13/20 16:44	04/13/20 22:43	74-83-9	IH,L1, v1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (0-.0.5) **Lab ID:** 92473288001 **Collected:** 04/10/20 10:00 **Received:** 04/10/20 11:55 **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 8260D Preparation Method: EPA 5035A Pace Analytical Services - Charlotte									
2-Butanone (MEK)	ND	ug/kg	103	12.2	1	04/13/20 16:44	04/13/20 22:43	78-93-3	
n-Butylbenzene	ND	ug/kg	5.1	2.9	1	04/13/20 16:44	04/13/20 22:43	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.1	2.2	1	04/13/20 16:44	04/13/20 22:43	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.1	1.7	1	04/13/20 16:44	04/13/20 22:43	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.1	0.99	1	04/13/20 16:44	04/13/20 22:43	56-23-5	
Chlorobenzene	ND	ug/kg	5.1	1.0	1	04/13/20 16:44	04/13/20 22:43	108-90-7	
Chloroethane	ND	ug/kg	10.3	2.2	1	04/13/20 16:44	04/13/20 22:43	75-00-3	
Chloroform	ND	ug/kg	5.1	1.1	1	04/13/20 16:44	04/13/20 22:43	67-66-3	
Chloromethane	ND	ug/kg	10.3	3.4	1	04/13/20 16:44	04/13/20 22:43	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.1	1.6	1	04/13/20 16:44	04/13/20 22:43	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.1	1.5	1	04/13/20 16:44	04/13/20 22:43	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.1	2.6	1	04/13/20 16:44	04/13/20 22:43	96-12-8	
Dibromochloromethane	ND	ug/kg	5.1	2.6	1	04/13/20 16:44	04/13/20 22:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.1	1.2	1	04/13/20 16:44	04/13/20 22:43	106-93-4	
Dibromomethane	ND	ug/kg	5.1	1.5	1	04/13/20 16:44	04/13/20 22:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.1	1.8	1	04/13/20 16:44	04/13/20 22:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.1	1.8	1	04/13/20 16:44	04/13/20 22:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.1	1.8	1	04/13/20 16:44	04/13/20 22:43	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.3	4.2	1	04/13/20 16:44	04/13/20 22:43	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.1	0.76	1	04/13/20 16:44	04/13/20 22:43	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.1	1.0	1	04/13/20 16:44	04/13/20 22:43	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.1	1.2	1	04/13/20 16:44	04/13/20 22:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.1	0.89	1	04/13/20 16:44	04/13/20 22:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.1	1.0	1	04/13/20 16:44	04/13/20 22:43	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.1	1.9	1	04/13/20 16:44	04/13/20 22:43	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.1	1.9	1	04/13/20 16:44	04/13/20 22:43	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.1	0.51	1	04/13/20 16:44	04/13/20 22:43	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.1	2.2	1	04/13/20 16:44	04/13/20 22:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.1	2.3	1	04/13/20 16:44	04/13/20 22:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.1	0.90	1	04/13/20 16:44	04/13/20 22:43	10061-02-6	
Diisopropyl ether	ND	ug/kg	5.1	2.9	1	04/13/20 16:44	04/13/20 22:43	108-20-3	
Ethylbenzene	ND	ug/kg	5.1	1.1	1	04/13/20 16:44	04/13/20 22:43	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.1	2.5	1	04/13/20 16:44	04/13/20 22:43	87-68-3	
2-Hexanone	ND	ug/kg	51.4	5.3	1	04/13/20 16:44	04/13/20 22:43	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.1	1.5	1	04/13/20 16:44	04/13/20 22:43	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.1	2.5	1	04/13/20 16:44	04/13/20 22:43	99-87-6	
Methylene Chloride	ND	ug/kg	20.6	6.1	1	04/13/20 16:44	04/13/20 22:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	51.4	3.8	1	04/13/20 16:44	04/13/20 22:43	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.1	2.9	1	04/13/20 16:44	04/13/20 22:43	1634-04-4	
Naphthalene	ND	ug/kg	5.1	4.4	1	04/13/20 16:44	04/13/20 22:43	91-20-3	
n-Propylbenzene	ND	ug/kg	5.1	1.7	1	04/13/20 16:44	04/13/20 22:43	103-65-1	
Styrene	ND	ug/kg	5.1	1.5	1	04/13/20 16:44	04/13/20 22:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.1	1.3	1	04/13/20 16:44	04/13/20 22:43	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (0-.0.5) **Lab ID:** 92473288001 **Collected:** 04/10/20 10:00 **Received:** 04/10/20 11:55 **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 8260D Preparation Method: EPA 5035A Pace Analytical Services - Charlotte									
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.1	1.8	1	04/13/20 16:44	04/13/20 22:43	79-34-5	
Tetrachloroethene	ND	ug/kg	5.1	1.6	1	04/13/20 16:44	04/13/20 22:43	127-18-4	
Toluene	ND	ug/kg	5.1	1.7	1	04/13/20 16:44	04/13/20 22:43	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.1	3.7	1	04/13/20 16:44	04/13/20 22:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.1	2.7	1	04/13/20 16:44	04/13/20 22:43	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.1	0.90	1	04/13/20 16:44	04/13/20 22:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.1	1.2	1	04/13/20 16:44	04/13/20 22:43	79-00-5	
Trichloroethene	ND	ug/kg	5.1	1.3	1	04/13/20 16:44	04/13/20 22:43	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.1	1.2	1	04/13/20 16:44	04/13/20 22:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.1	1.7	1	04/13/20 16:44	04/13/20 22:43	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.1	2.0	1	04/13/20 16:44	04/13/20 22:43	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.1	1.7	1	04/13/20 16:44	04/13/20 22:43	108-67-8	
Vinyl acetate	ND	ug/kg	51.4	16.8	1	04/13/20 16:44	04/13/20 22:43	108-05-4	
Vinyl chloride	ND	ug/kg	10.3	2.0	1	04/13/20 16:44	04/13/20 22:43	75-01-4	
Xylene (Total)	ND	ug/kg	10.3	3.6	1	04/13/20 16:44	04/13/20 22:43	1330-20-7	
m&p-Xylene	ND	ug/kg	10.3	2.4	1	04/13/20 16:44	04/13/20 22:43	179601-23-1	
o-Xylene	ND	ug/kg	5.1	1.2	1	04/13/20 16:44	04/13/20 22:43	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	70-130		1	04/13/20 16:44	04/13/20 22:43	2037-26-5	
4-Bromofluorobenzene (S)	94	%	70-130		1	04/13/20 16:44	04/13/20 22:43	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-132		1	04/13/20 16:44	04/13/20 22:43	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87 Pace Analytical Services - Charlotte									
Percent Moisture	14.0	%	0.10	0.10	1		04/13/20 14:16		

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (0.5-1.0) **Lab ID:** 92473288002 **Collected:** 04/10/20 10:20 **Received:** 04/10/20 11:55 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546 Pace Analytical Services - Charlotte									
Acenaphthene	ND	ug/kg	2270	584	5	04/13/20 17:09	04/15/20 21:09	83-32-9	
Acenaphthylene	ND	ug/kg	2270	537	5	04/13/20 17:09	04/15/20 21:09	208-96-8	
Aniline	ND	ug/kg	2270	510	5	04/13/20 17:09	04/15/20 21:09	62-53-3	
Anthracene	ND	ug/kg	2270	589	5	04/13/20 17:09	04/15/20 21:09	120-12-7	
Benzo(a)anthracene	ND	ug/kg	2270	722	5	04/13/20 17:09	04/15/20 21:09	56-55-3	
Benzo(a)pyrene	ND	ug/kg	2270	983	5	04/13/20 17:09	04/15/20 21:09	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	2270	915	5	04/13/20 17:09	04/15/20 21:09	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	2270	887	5	04/13/20 17:09	04/15/20 21:09	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	2270	956	5	04/13/20 17:09	04/15/20 21:09	207-08-9	
Benzoic Acid	ND	ug/kg	11300	2450	5	04/13/20 17:09	04/15/20 21:09	65-85-0	
Benzyl alcohol	ND	ug/kg	4540	1200	5	04/13/20 17:09	04/15/20 21:09	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	2270	595	5	04/13/20 17:09	04/15/20 21:09	101-55-3	
Butylbenzylphthalate	ND	ug/kg	2270	604	5	04/13/20 17:09	04/15/20 21:09	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	4540	1380	5	04/13/20 17:09	04/15/20 21:09	59-50-7	
4-Chloroaniline	ND	ug/kg	4540	1390	5	04/13/20 17:09	04/15/20 21:09	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	2270	606	5	04/13/20 17:09	04/15/20 21:09	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	2270	482	5	04/13/20 17:09	04/15/20 21:09	111-44-4	
2-Chloronaphthalene	ND	ug/kg	2270	505	5	04/13/20 17:09	04/15/20 21:09	91-58-7	
2-Chlorophenol	ND	ug/kg	2270	528	5	04/13/20 17:09	04/15/20 21:09	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	2270	589	5	04/13/20 17:09	04/15/20 21:09	7005-72-3	
Chrysene	ND	ug/kg	2270	659	5	04/13/20 17:09	04/15/20 21:09	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	2270	908	5	04/13/20 17:09	04/15/20 21:09	53-70-3	
Dibenzofuran	ND	ug/kg	2270	567	5	04/13/20 17:09	04/15/20 21:09	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	2270	491	5	04/13/20 17:09	04/15/20 21:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	2270	511	5	04/13/20 17:09	04/15/20 21:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	2270	499	5	04/13/20 17:09	04/15/20 21:09	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	4540	1580	5	04/13/20 17:09	04/15/20 21:09	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	2270	749	5	04/13/20 17:09	04/15/20 21:09	120-83-2	
Diethylphthalate	ND	ug/kg	2270	492	5	04/13/20 17:09	04/15/20 21:09	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	2270	565	5	04/13/20 17:09	04/15/20 21:09	105-67-9	
Dimethylphthalate	ND	ug/kg	2270	513	5	04/13/20 17:09	04/15/20 21:09	131-11-3	
Di-n-butylphthalate	ND	ug/kg	2270	560	5	04/13/20 17:09	04/15/20 21:09	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	4540	3660	5	04/13/20 17:09	04/15/20 21:09	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	11300	7250	5	04/13/20 17:09	04/15/20 21:09	51-28-5	v2
2,4-Dinitrotoluene	ND	ug/kg	2270	601	5	04/13/20 17:09	04/15/20 21:09	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	2270	593	5	04/13/20 17:09	04/15/20 21:09	606-20-2	
Di-n-octylphthalate	ND	ug/kg	2270	1290	5	04/13/20 17:09	04/15/20 21:09	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	2270	743	5	04/13/20 17:09	04/15/20 21:09	117-81-7	v2
Fluoranthene	ND	ug/kg	2270	686	5	04/13/20 17:09	04/15/20 21:09	206-44-0	
Fluorene	ND	ug/kg	2270	607	5	04/13/20 17:09	04/15/20 21:09	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	2270	551	5	04/13/20 17:09	04/15/20 21:09	87-68-3	
Hexachlorobenzene	ND	ug/kg	2270	576	5	04/13/20 17:09	04/15/20 21:09	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	2270	908	5	04/13/20 17:09	04/15/20 21:09	77-47-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (0.5-1.0) **Lab ID:** 92473288002 **Collected:** 04/10/20 10:20 **Received:** 04/10/20 11:55 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546 Pace Analytical Services - Charlotte									
Hexachloroethane	ND	ug/kg	2270	517	5	04/13/20 17:09	04/15/20 21:09	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	2270	1040	5	04/13/20 17:09	04/15/20 21:09	193-39-5	
Isophorone	ND	ug/kg	2270	493	5	04/13/20 17:09	04/15/20 21:09	78-59-1	
1-Methylnaphthalene	ND	ug/kg	2270	604	5	04/13/20 17:09	04/15/20 21:09	90-12-0	
2-Methylnaphthalene	ND	ug/kg	2270	578	5	04/13/20 17:09	04/15/20 21:09	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	2270	503	5	04/13/20 17:09	04/15/20 21:09	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	2270	571	5	04/13/20 17:09	04/15/20 21:09	15831-10-4	v2
Naphthalene	ND	ug/kg	2270	543	5	04/13/20 17:09	04/15/20 21:09	91-20-3	
2-Nitroaniline	ND	ug/kg	11300	1140	5	04/13/20 17:09	04/15/20 21:09	88-74-4	
3-Nitroaniline	ND	ug/kg	11300	1200	5	04/13/20 17:09	04/15/20 21:09	99-09-2	
4-Nitroaniline	ND	ug/kg	4540	1120	5	04/13/20 17:09	04/15/20 21:09	100-01-6	
Nitrobenzene	ND	ug/kg	2270	542	5	04/13/20 17:09	04/15/20 21:09	98-95-3	
2-Nitrophenol	ND	ug/kg	2270	701	5	04/13/20 17:09	04/15/20 21:09	88-75-5	
4-Nitrophenol	ND	ug/kg	11300	3620	5	04/13/20 17:09	04/15/20 21:09	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	2270	638	5	04/13/20 17:09	04/15/20 21:09	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	2270	635	5	04/13/20 17:09	04/15/20 21:09	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	2270	579	5	04/13/20 17:09	04/15/20 21:09	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	2270	631	5	04/13/20 17:09	04/15/20 21:09	108-60-1	
Pentachlorophenol	ND	ug/kg	4540	1040	5	04/13/20 17:09	04/15/20 21:09	87-86-5	
Phenanthrene	ND	ug/kg	2270	571	5	04/13/20 17:09	04/15/20 21:09	85-01-8	
Phenol	ND	ug/kg	2270	542	5	04/13/20 17:09	04/15/20 21:09	108-95-2	
Pyrene	ND	ug/kg	2270	624	5	04/13/20 17:09	04/15/20 21:09	129-00-0	
Pyridine	ND	ug/kg	2270	574	5	04/13/20 17:09	04/15/20 21:09	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	2270	520	5	04/13/20 17:09	04/15/20 21:09	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	2270	589	5	04/13/20 17:09	04/15/20 21:09	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	2270	570	5	04/13/20 17:09	04/15/20 21:09	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	69	%	23-110		5	04/13/20 17:09	04/15/20 21:09	4165-60-0	D3
2-Fluorobiphenyl (S)	54	%	30-110		5	04/13/20 17:09	04/15/20 21:09	321-60-8	
Terphenyl-d14 (S)	68	%	28-110		5	04/13/20 17:09	04/15/20 21:09	1718-51-0	
Phenol-d6 (S)	46	%	22-110		5	04/13/20 17:09	04/15/20 21:09	13127-88-3	
2-Fluorophenol (S)	39	%	13-110		5	04/13/20 17:09	04/15/20 21:09	367-12-4	
2,4,6-Tribromophenol (S)	63	%	27-110		5	04/13/20 17:09	04/15/20 21:09	118-79-6	
8260/5035A SC Volatile Org Analytical Method: EPA 8260D Preparation Method: EPA 5035A Pace Analytical Services - Charlotte									
Acetone	23.6J	ug/kg	94.0	8.9	1	04/13/20 16:44	04/13/20 23:07	67-64-1	M1
Benzene	ND	ug/kg	4.7	0.84	1	04/13/20 16:44	04/13/20 23:07	71-43-2	
Bromobenzene	ND	ug/kg	4.7	1.3	1	04/13/20 16:44	04/13/20 23:07	108-86-1	M1
Bromochloromethane	ND	ug/kg	4.7	1.2	1	04/13/20 16:44	04/13/20 23:07	74-97-5	
Bromodichloromethane	ND	ug/kg	4.7	0.92	1	04/13/20 16:44	04/13/20 23:07	75-27-4	
Bromoform	ND	ug/kg	4.7	2.3	1	04/13/20 16:44	04/13/20 23:07	75-25-2	M1
Bromomethane	ND	ug/kg	9.4	2.2	1	04/13/20 16:44	04/13/20 23:07	74-83-9	IH,L1, v1

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (0.5-1.0) **Lab ID:** 92473288002 **Collected:** 04/10/20 10:20 **Received:** 04/10/20 11:55 **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 8260D Preparation Method: EPA 5035A Pace Analytical Services - Charlotte									
2-Butanone (MEK)	ND	ug/kg	94.0	11.2	1	04/13/20 16:44	04/13/20 23:07	78-93-3	
n-Butylbenzene	ND	ug/kg	4.7	2.7	1	04/13/20 16:44	04/13/20 23:07	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.7	2.0	1	04/13/20 16:44	04/13/20 23:07	135-98-8	M1
tert-Butylbenzene	ND	ug/kg	4.7	1.6	1	04/13/20 16:44	04/13/20 23:07	98-06-6	M1
Carbon tetrachloride	ND	ug/kg	4.7	0.90	1	04/13/20 16:44	04/13/20 23:07	56-23-5	M1
Chlorobenzene	ND	ug/kg	4.7	0.91	1	04/13/20 16:44	04/13/20 23:07	108-90-7	M1
Chloroethane	ND	ug/kg	9.4	2.0	1	04/13/20 16:44	04/13/20 23:07	75-00-3	
Chloroform	ND	ug/kg	4.7	1.0	1	04/13/20 16:44	04/13/20 23:07	67-66-3	
Chloromethane	ND	ug/kg	9.4	3.1	1	04/13/20 16:44	04/13/20 23:07	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.7	1.4	1	04/13/20 16:44	04/13/20 23:07	95-49-8	M1
4-Chlorotoluene	ND	ug/kg	4.7	1.4	1	04/13/20 16:44	04/13/20 23:07	106-43-4	M1
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.7	2.4	1	04/13/20 16:44	04/13/20 23:07	96-12-8	M1
Dibromochloromethane	ND	ug/kg	4.7	2.4	1	04/13/20 16:44	04/13/20 23:07	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.7	1.1	1	04/13/20 16:44	04/13/20 23:07	106-93-4	
Dibromomethane	ND	ug/kg	4.7	1.4	1	04/13/20 16:44	04/13/20 23:07	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.7	1.7	1	04/13/20 16:44	04/13/20 23:07	95-50-1	M1
1,3-Dichlorobenzene	ND	ug/kg	4.7	1.7	1	04/13/20 16:44	04/13/20 23:07	541-73-1	M1
1,4-Dichlorobenzene	ND	ug/kg	4.7	1.6	1	04/13/20 16:44	04/13/20 23:07	106-46-7	M1
Dichlorodifluoromethane	ND	ug/kg	9.4	3.9	1	04/13/20 16:44	04/13/20 23:07	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.7	0.69	1	04/13/20 16:44	04/13/20 23:07	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.7	0.94	1	04/13/20 16:44	04/13/20 23:07	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.7	1.1	1	04/13/20 16:44	04/13/20 23:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.7	0.82	1	04/13/20 16:44	04/13/20 23:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.7	0.92	1	04/13/20 16:44	04/13/20 23:07	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.7	1.8	1	04/13/20 16:44	04/13/20 23:07	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.7	1.8	1	04/13/20 16:44	04/13/20 23:07	142-28-9	M1
2,2-Dichloropropane	ND	ug/kg	4.7	0.46	1	04/13/20 16:44	04/13/20 23:07	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.7	2.0	1	04/13/20 16:44	04/13/20 23:07	563-58-6	M1
cis-1,3-Dichloropropene	ND	ug/kg	4.7	2.1	1	04/13/20 16:44	04/13/20 23:07	10061-01-5	M1
trans-1,3-Dichloropropene	ND	ug/kg	4.7	0.82	1	04/13/20 16:44	04/13/20 23:07	10061-02-6	
Diisopropyl ether	ND	ug/kg	4.7	2.7	1	04/13/20 16:44	04/13/20 23:07	108-20-3	
Ethylbenzene	ND	ug/kg	4.7	1.0	1	04/13/20 16:44	04/13/20 23:07	100-41-4	M1
Hexachloro-1,3-butadiene	ND	ug/kg	4.7	2.3	1	04/13/20 16:44	04/13/20 23:07	87-68-3	
2-Hexanone	ND	ug/kg	47.0	4.9	1	04/13/20 16:44	04/13/20 23:07	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	4.7	1.4	1	04/13/20 16:44	04/13/20 23:07	98-82-8	M1
p-Isopropyltoluene	ND	ug/kg	4.7	2.3	1	04/13/20 16:44	04/13/20 23:07	99-87-6	M1
Methylene Chloride	ND	ug/kg	18.8	5.6	1	04/13/20 16:44	04/13/20 23:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	47.0	3.5	1	04/13/20 16:44	04/13/20 23:07	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.7	2.7	1	04/13/20 16:44	04/13/20 23:07	1634-04-4	
Naphthalene	ND	ug/kg	4.7	4.0	1	04/13/20 16:44	04/13/20 23:07	91-20-3	
n-Propylbenzene	ND	ug/kg	4.7	1.6	1	04/13/20 16:44	04/13/20 23:07	103-65-1	M1
Styrene	ND	ug/kg	4.7	1.4	1	04/13/20 16:44	04/13/20 23:07	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.7	1.2	1	04/13/20 16:44	04/13/20 23:07	630-20-6	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (0.5-1.0) **Lab ID:** 92473288002 **Collected:** 04/10/20 10:20 **Received:** 04/10/20 11:55 **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 8260D Preparation Method: EPA 5035A Pace Analytical Services - Charlotte									
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.7	1.6	1	04/13/20 16:44	04/13/20 23:07	79-34-5	M1
Tetrachloroethene	ND	ug/kg	4.7	1.5	1	04/13/20 16:44	04/13/20 23:07	127-18-4	
Toluene	ND	ug/kg	4.7	1.5	1	04/13/20 16:44	04/13/20 23:07	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.7	3.4	1	04/13/20 16:44	04/13/20 23:07	87-61-6	M1
1,2,4-Trichlorobenzene	ND	ug/kg	4.7	2.5	1	04/13/20 16:44	04/13/20 23:07	120-82-1	M1
1,1,1-Trichloroethane	ND	ug/kg	4.7	0.82	1	04/13/20 16:44	04/13/20 23:07	71-55-6	M1
1,1,2-Trichloroethane	ND	ug/kg	4.7	1.1	1	04/13/20 16:44	04/13/20 23:07	79-00-5	M1
Trichloroethene	ND	ug/kg	4.7	1.2	1	04/13/20 16:44	04/13/20 23:07	79-01-6	
Trichlorofluoromethane	ND	ug/kg	4.7	1.1	1	04/13/20 16:44	04/13/20 23:07	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.7	1.6	1	04/13/20 16:44	04/13/20 23:07	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	4.7	1.8	1	04/13/20 16:44	04/13/20 23:07	95-63-6	M1
1,3,5-Trimethylbenzene	ND	ug/kg	4.7	1.6	1	04/13/20 16:44	04/13/20 23:07	108-67-8	M1
Vinyl acetate	ND	ug/kg	47.0	15.3	1	04/13/20 16:44	04/13/20 23:07	108-05-4	M1
Vinyl chloride	ND	ug/kg	9.4	1.8	1	04/13/20 16:44	04/13/20 23:07	75-01-4	
Xylene (Total)	ND	ug/kg	9.4	3.3	1	04/13/20 16:44	04/13/20 23:07	1330-20-7	MS
m&p-Xylene	ND	ug/kg	9.4	2.2	1	04/13/20 16:44	04/13/20 23:07	179601-23-1	M1
o-Xylene	ND	ug/kg	4.7	1.1	1	04/13/20 16:44	04/13/20 23:07	95-47-6	M1
Surrogates									
Toluene-d8 (S)	102	%	70-130		1	04/13/20 16:44	04/13/20 23:07	2037-26-5	
4-Bromofluorobenzene (S)	92	%	70-130		1	04/13/20 16:44	04/13/20 23:07	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-132		1	04/13/20 16:44	04/13/20 23:07	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974-87

Pace Analytical Services - Charlotte

Percent Moisture	26.5	%	0.10	0.10	1		04/13/20 14:16		
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (1.0-2.0) **Lab ID:** 92473288003 **Collected:** 04/10/20 10:40 **Received:** 04/10/20 11:55 **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
8270E MSSV Microwave Analytical Method: EPA 8270E Preparation Method: EPA 3546 Pace Analytical Services - Charlotte									
Acenaphthene	ND	ug/kg	462	119	1	04/13/20 17:09	04/15/20 18:06	83-32-9	
Acenaphthylene	ND	ug/kg	462	109	1	04/13/20 17:09	04/15/20 18:06	208-96-8	
Aniline	ND	ug/kg	462	104	1	04/13/20 17:09	04/15/20 18:06	62-53-3	
Anthracene	ND	ug/kg	462	120	1	04/13/20 17:09	04/15/20 18:06	120-12-7	
Benzo(a)anthracene	ND	ug/kg	462	147	1	04/13/20 17:09	04/15/20 18:06	56-55-3	
Benzo(a)pyrene	ND	ug/kg	462	200	1	04/13/20 17:09	04/15/20 18:06	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	462	186	1	04/13/20 17:09	04/15/20 18:06	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	462	181	1	04/13/20 17:09	04/15/20 18:06	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	462	195	1	04/13/20 17:09	04/15/20 18:06	207-08-9	
Benzoic Acid	ND	ug/kg	2310	498	1	04/13/20 17:09	04/15/20 18:06	65-85-0	
Benzyl alcohol	ND	ug/kg	924	245	1	04/13/20 17:09	04/15/20 18:06	100-51-6	
4-Bromophenylphenyl ether	ND	ug/kg	462	121	1	04/13/20 17:09	04/15/20 18:06	101-55-3	
Butylbenzylphthalate	ND	ug/kg	462	123	1	04/13/20 17:09	04/15/20 18:06	85-68-7	
4-Chloro-3-methylphenol	ND	ug/kg	924	281	1	04/13/20 17:09	04/15/20 18:06	59-50-7	
4-Chloroaniline	ND	ug/kg	924	283	1	04/13/20 17:09	04/15/20 18:06	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	462	123	1	04/13/20 17:09	04/15/20 18:06	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	462	98.1	1	04/13/20 17:09	04/15/20 18:06	111-44-4	
2-Chloronaphthalene	ND	ug/kg	462	103	1	04/13/20 17:09	04/15/20 18:06	91-58-7	
2-Chlorophenol	ND	ug/kg	462	107	1	04/13/20 17:09	04/15/20 18:06	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	462	120	1	04/13/20 17:09	04/15/20 18:06	7005-72-3	
Chrysene	ND	ug/kg	462	134	1	04/13/20 17:09	04/15/20 18:06	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	462	185	1	04/13/20 17:09	04/15/20 18:06	53-70-3	
Dibenzofuran	ND	ug/kg	462	115	1	04/13/20 17:09	04/15/20 18:06	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	462	99.9	1	04/13/20 17:09	04/15/20 18:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	462	104	1	04/13/20 17:09	04/15/20 18:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	462	102	1	04/13/20 17:09	04/15/20 18:06	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	924	322	1	04/13/20 17:09	04/15/20 18:06	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	462	153	1	04/13/20 17:09	04/15/20 18:06	120-83-2	
Diethylphthalate	ND	ug/kg	462	100	1	04/13/20 17:09	04/15/20 18:06	84-66-2	
2,4-Dimethylphenol	ND	ug/kg	462	115	1	04/13/20 17:09	04/15/20 18:06	105-67-9	
Dimethylphthalate	ND	ug/kg	462	104	1	04/13/20 17:09	04/15/20 18:06	131-11-3	
Di-n-butylphthalate	ND	ug/kg	462	114	1	04/13/20 17:09	04/15/20 18:06	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	924	745	1	04/13/20 17:09	04/15/20 18:06	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	2310	1480	1	04/13/20 17:09	04/15/20 18:06	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	462	122	1	04/13/20 17:09	04/15/20 18:06	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	462	121	1	04/13/20 17:09	04/15/20 18:06	606-20-2	
Di-n-octylphthalate	ND	ug/kg	462	263	1	04/13/20 17:09	04/15/20 18:06	117-84-0	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	462	151	1	04/13/20 17:09	04/15/20 18:06	117-81-7	
Fluoranthene	ND	ug/kg	462	140	1	04/13/20 17:09	04/15/20 18:06	206-44-0	
Fluorene	ND	ug/kg	462	124	1	04/13/20 17:09	04/15/20 18:06	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	462	112	1	04/13/20 17:09	04/15/20 18:06	87-68-3	
Hexachlorobenzene	ND	ug/kg	462	117	1	04/13/20 17:09	04/15/20 18:06	118-74-1	
Hexachlorocyclopentadiene	ND	ug/kg	462	185	1	04/13/20 17:09	04/15/20 18:06	77-47-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (1.0-2.0) **Lab ID:** 92473288003 **Collected:** 04/10/20 10:40 **Received:** 04/10/20 11:55 **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
8270E MSSV Microwave									
Analytical Method: EPA 8270E Preparation Method: EPA 3546									
Pace Analytical Services - Charlotte									
Hexachloroethane	ND	ug/kg	462	105	1	04/13/20 17:09	04/15/20 18:06	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	462	211	1	04/13/20 17:09	04/15/20 18:06	193-39-5	
Isophorone	ND	ug/kg	462	100	1	04/13/20 17:09	04/15/20 18:06	78-59-1	
1-Methylnaphthalene	ND	ug/kg	462	123	1	04/13/20 17:09	04/15/20 18:06	90-12-0	
2-Methylnaphthalene	ND	ug/kg	462	118	1	04/13/20 17:09	04/15/20 18:06	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	462	102	1	04/13/20 17:09	04/15/20 18:06	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/kg	462	116	1	04/13/20 17:09	04/15/20 18:06	15831-10-4	
Naphthalene	ND	ug/kg	462	111	1	04/13/20 17:09	04/15/20 18:06	91-20-3	
2-Nitroaniline	ND	ug/kg	2310	232	1	04/13/20 17:09	04/15/20 18:06	88-74-4	
3-Nitroaniline	ND	ug/kg	2310	245	1	04/13/20 17:09	04/15/20 18:06	99-09-2	
4-Nitroaniline	ND	ug/kg	924	228	1	04/13/20 17:09	04/15/20 18:06	100-01-6	
Nitrobenzene	ND	ug/kg	462	110	1	04/13/20 17:09	04/15/20 18:06	98-95-3	
2-Nitrophenol	ND	ug/kg	462	143	1	04/13/20 17:09	04/15/20 18:06	88-75-5	
4-Nitrophenol	ND	ug/kg	2310	736	1	04/13/20 17:09	04/15/20 18:06	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	462	130	1	04/13/20 17:09	04/15/20 18:06	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	462	129	1	04/13/20 17:09	04/15/20 18:06	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	462	118	1	04/13/20 17:09	04/15/20 18:06	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/kg	462	128	1	04/13/20 17:09	04/15/20 18:06	108-60-1	
Pentachlorophenol	ND	ug/kg	924	211	1	04/13/20 17:09	04/15/20 18:06	87-86-5	
Phenanthrene	ND	ug/kg	462	116	1	04/13/20 17:09	04/15/20 18:06	85-01-8	
Phenol	ND	ug/kg	462	110	1	04/13/20 17:09	04/15/20 18:06	108-95-2	
Pyrene	ND	ug/kg	462	127	1	04/13/20 17:09	04/15/20 18:06	129-00-0	
Pyridine	ND	ug/kg	462	117	1	04/13/20 17:09	04/15/20 18:06	110-86-1	
1,2,4-Trichlorobenzene	ND	ug/kg	462	106	1	04/13/20 17:09	04/15/20 18:06	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	462	120	1	04/13/20 17:09	04/15/20 18:06	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	462	116	1	04/13/20 17:09	04/15/20 18:06	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	48	%	23-110		1	04/13/20 17:09	04/15/20 18:06	4165-60-0	
2-Fluorobiphenyl (S)	50	%	30-110		1	04/13/20 17:09	04/15/20 18:06	321-60-8	
Terphenyl-d14 (S)	63	%	28-110		1	04/13/20 17:09	04/15/20 18:06	1718-51-0	
Phenol-d6 (S)	37	%	22-110		1	04/13/20 17:09	04/15/20 18:06	13127-88-3	
2-Fluorophenol (S)	34	%	13-110		1	04/13/20 17:09	04/15/20 18:06	367-12-4	
2,4,6-Tribromophenol (S)	46	%	27-110		1	04/13/20 17:09	04/15/20 18:06	118-79-6	
8260/5035A SC Volatile Org									
Analytical Method: EPA 8260D Preparation Method: EPA 5035A									
Pace Analytical Services - Charlotte									
Acetone	37.6J	ug/kg	103	9.7	1	04/13/20 16:44	04/13/20 23:31	67-64-1	
Benzene	ND	ug/kg	5.1	0.92	1	04/13/20 16:44	04/13/20 23:31	71-43-2	
Bromobenzene	ND	ug/kg	5.1	1.4	1	04/13/20 16:44	04/13/20 23:31	108-86-1	
Bromochloromethane	ND	ug/kg	5.1	1.3	1	04/13/20 16:44	04/13/20 23:31	74-97-5	
Bromodichloromethane	ND	ug/kg	5.1	1.0	1	04/13/20 16:44	04/13/20 23:31	75-27-4	
Bromoform	ND	ug/kg	5.1	2.5	1	04/13/20 16:44	04/13/20 23:31	75-25-2	
Bromomethane	ND	ug/kg	10.3	2.4	1	04/13/20 16:44	04/13/20 23:31	74-83-9	IH,L1, v1

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (1.0-2.0) **Lab ID:** 92473288003 **Collected:** 04/10/20 10:40 **Received:** 04/10/20 11:55 **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 8260D Preparation Method: EPA 5035A Pace Analytical Services - Charlotte									
2-Butanone (MEK)	ND	ug/kg	103	12.2	1	04/13/20 16:44	04/13/20 23:31	78-93-3	
n-Butylbenzene	ND	ug/kg	5.1	2.9	1	04/13/20 16:44	04/13/20 23:31	104-51-8	
sec-Butylbenzene	ND	ug/kg	5.1	2.2	1	04/13/20 16:44	04/13/20 23:31	135-98-8	
tert-Butylbenzene	ND	ug/kg	5.1	1.7	1	04/13/20 16:44	04/13/20 23:31	98-06-6	
Carbon tetrachloride	ND	ug/kg	5.1	0.98	1	04/13/20 16:44	04/13/20 23:31	56-23-5	
Chlorobenzene	ND	ug/kg	5.1	0.99	1	04/13/20 16:44	04/13/20 23:31	108-90-7	
Chloroethane	ND	ug/kg	10.3	2.1	1	04/13/20 16:44	04/13/20 23:31	75-00-3	
Chloroform	ND	ug/kg	5.1	1.1	1	04/13/20 16:44	04/13/20 23:31	67-66-3	
Chloromethane	ND	ug/kg	10.3	3.4	1	04/13/20 16:44	04/13/20 23:31	74-87-3	
2-Chlorotoluene	ND	ug/kg	5.1	1.6	1	04/13/20 16:44	04/13/20 23:31	95-49-8	
4-Chlorotoluene	ND	ug/kg	5.1	1.5	1	04/13/20 16:44	04/13/20 23:31	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.1	2.6	1	04/13/20 16:44	04/13/20 23:31	96-12-8	
Dibromochloromethane	ND	ug/kg	5.1	2.6	1	04/13/20 16:44	04/13/20 23:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	5.1	1.2	1	04/13/20 16:44	04/13/20 23:31	106-93-4	
Dibromomethane	ND	ug/kg	5.1	1.5	1	04/13/20 16:44	04/13/20 23:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	5.1	1.8	1	04/13/20 16:44	04/13/20 23:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	5.1	1.8	1	04/13/20 16:44	04/13/20 23:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	5.1	1.8	1	04/13/20 16:44	04/13/20 23:31	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.3	4.2	1	04/13/20 16:44	04/13/20 23:31	75-71-8	
1,1-Dichloroethane	ND	ug/kg	5.1	0.76	1	04/13/20 16:44	04/13/20 23:31	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.1	1.0	1	04/13/20 16:44	04/13/20 23:31	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.1	1.2	1	04/13/20 16:44	04/13/20 23:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.1	0.89	1	04/13/20 16:44	04/13/20 23:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.1	1.0	1	04/13/20 16:44	04/13/20 23:31	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.1	1.9	1	04/13/20 16:44	04/13/20 23:31	78-87-5	
1,3-Dichloropropane	ND	ug/kg	5.1	1.9	1	04/13/20 16:44	04/13/20 23:31	142-28-9	
2,2-Dichloropropane	ND	ug/kg	5.1	0.51	1	04/13/20 16:44	04/13/20 23:31	594-20-7	
1,1-Dichloropropene	ND	ug/kg	5.1	2.2	1	04/13/20 16:44	04/13/20 23:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	5.1	2.3	1	04/13/20 16:44	04/13/20 23:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.1	0.90	1	04/13/20 16:44	04/13/20 23:31	10061-02-6	
Diisopropyl ether	ND	ug/kg	5.1	2.9	1	04/13/20 16:44	04/13/20 23:31	108-20-3	
Ethylbenzene	ND	ug/kg	5.1	1.1	1	04/13/20 16:44	04/13/20 23:31	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	5.1	2.5	1	04/13/20 16:44	04/13/20 23:31	87-68-3	
2-Hexanone	ND	ug/kg	51.4	5.3	1	04/13/20 16:44	04/13/20 23:31	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	5.1	1.5	1	04/13/20 16:44	04/13/20 23:31	98-82-8	
p-Isopropyltoluene	ND	ug/kg	5.1	2.5	1	04/13/20 16:44	04/13/20 23:31	99-87-6	
Methylene Chloride	ND	ug/kg	20.6	6.1	1	04/13/20 16:44	04/13/20 23:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	51.4	3.8	1	04/13/20 16:44	04/13/20 23:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	5.1	2.9	1	04/13/20 16:44	04/13/20 23:31	1634-04-4	
Naphthalene	ND	ug/kg	5.1	4.4	1	04/13/20 16:44	04/13/20 23:31	91-20-3	
n-Propylbenzene	ND	ug/kg	5.1	1.7	1	04/13/20 16:44	04/13/20 23:31	103-65-1	
Styrene	2.7J	ug/kg	5.1	1.5	1	04/13/20 16:44	04/13/20 23:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	5.1	1.3	1	04/13/20 16:44	04/13/20 23:31	630-20-6	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: SW-17-SE-20200410 (1.0-2.0) **Lab ID:** 92473288003 **Collected:** 04/10/20 10:40 **Received:** 04/10/20 11:55 **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 8260D Preparation Method: EPA 5035A Pace Analytical Services - Charlotte									
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.1	1.8	1	04/13/20 16:44	04/13/20 23:31	79-34-5	
Tetrachloroethene	ND	ug/kg	5.1	1.6	1	04/13/20 16:44	04/13/20 23:31	127-18-4	
Toluene	ND	ug/kg	5.1	1.7	1	04/13/20 16:44	04/13/20 23:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	5.1	3.7	1	04/13/20 16:44	04/13/20 23:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	5.1	2.7	1	04/13/20 16:44	04/13/20 23:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	5.1	0.89	1	04/13/20 16:44	04/13/20 23:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.1	1.2	1	04/13/20 16:44	04/13/20 23:31	79-00-5	
Trichloroethene	ND	ug/kg	5.1	1.3	1	04/13/20 16:44	04/13/20 23:31	79-01-6	
Trichlorofluoromethane	ND	ug/kg	5.1	1.2	1	04/13/20 16:44	04/13/20 23:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	5.1	1.7	1	04/13/20 16:44	04/13/20 23:31	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	5.1	2.0	1	04/13/20 16:44	04/13/20 23:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	5.1	1.7	1	04/13/20 16:44	04/13/20 23:31	108-67-8	
Vinyl acetate	ND	ug/kg	51.4	16.8	1	04/13/20 16:44	04/13/20 23:31	108-05-4	
Vinyl chloride	ND	ug/kg	10.3	2.0	1	04/13/20 16:44	04/13/20 23:31	75-01-4	
Xylene (Total)	ND	ug/kg	10.3	3.6	1	04/13/20 16:44	04/13/20 23:31	1330-20-7	
m&p-Xylene	ND	ug/kg	10.3	2.4	1	04/13/20 16:44	04/13/20 23:31	179601-23-1	
o-Xylene	ND	ug/kg	5.1	1.2	1	04/13/20 16:44	04/13/20 23:31	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	70-130		1	04/13/20 16:44	04/13/20 23:31	2037-26-5	
4-Bromofluorobenzene (S)	93	%	70-130		1	04/13/20 16:44	04/13/20 23:31	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-132		1	04/13/20 16:44	04/13/20 23:31	17060-07-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Charlotte									
Percent Moisture	27.8	%	0.10	0.10	1		04/13/20 14:16		

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: EB-WQ-20200410 **Lab ID: 92473288004** Collected: 04/10/20 11:30 Received: 04/10/20 11:55 Matrix: Water

Parameters	Results	Units	Report		MDL	DF	Prepared	Analyzed	CAS No.	Qual
			Limit							
8270E RVE	Analytical Method: EPA 8270E Preparation Method: EPA 3510C Pace Analytical Services - Charlotte									
Acenaphthene	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	83-32-9		
Acenaphthylene	ND	ug/L	10.0	1.5	1	04/15/20 16:33	04/16/20 15:37	208-96-8		
Aniline	ND	ug/L	10.0	1.6	1	04/15/20 16:33	04/16/20 15:37	62-53-3		
Anthracene	ND	ug/L	10.0	1.6	1	04/15/20 16:33	04/16/20 15:37	120-12-7		
Benzo(a)anthracene	ND	ug/L	10.0	1.5	1	04/15/20 16:33	04/16/20 15:37	56-55-3		
Benzo(a)pyrene	ND	ug/L	10.0	1.8	1	04/15/20 16:33	04/16/20 15:37	50-32-8		
Benzo(b)fluoranthene	ND	ug/L	10.0	1.7	1	04/15/20 16:33	04/16/20 15:37	205-99-2		
Benzo(g,h,i)perylene	ND	ug/L	10.0	1.6	1	04/15/20 16:33	04/16/20 15:37	191-24-2		
Benzo(k)fluoranthene	ND	ug/L	10.0	1.5	1	04/15/20 16:33	04/16/20 15:37	207-08-9		
Benzoic Acid	ND	ug/L	50.0	19.5	1	04/15/20 16:33	04/16/20 15:37	65-85-0		
Benzyl alcohol	ND	ug/L	20.0	2.6	1	04/15/20 16:33	04/16/20 15:37	100-51-6		
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.2	1	04/15/20 16:33	04/16/20 15:37	101-55-3		
Butylbenzylphthalate	ND	ug/L	10.0	1.9	1	04/15/20 16:33	04/16/20 15:37	85-68-7		
4-Chloro-3-methylphenol	ND	ug/L	10.0	2.8	1	04/15/20 16:33	04/16/20 15:37	59-50-7		
4-Chloroaniline	ND	ug/L	20.0	2.8	1	04/15/20 16:33	04/16/20 15:37	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.3	1	04/15/20 16:33	04/16/20 15:37	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.7	1	04/15/20 16:33	04/16/20 15:37	111-44-4		
2-Chloronaphthalene	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	91-58-7		
2-Chlorophenol	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.5	1	04/15/20 16:33	04/16/20 15:37	7005-72-3		
Chrysene	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	218-01-9		
Dibenz(a,h)anthracene	ND	ug/L	10.0	1.6	1	04/15/20 16:33	04/16/20 15:37	53-70-3		
Dibenzofuran	ND	ug/L	10.0	1.3	1	04/15/20 16:33	04/16/20 15:37	132-64-9		
1,2-Dichlorobenzene	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	95-50-1		
1,3-Dichlorobenzene	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	541-73-1		
1,4-Dichlorobenzene	ND	ug/L	10.0	1.5	1	04/15/20 16:33	04/16/20 15:37	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/L	20.0	2.7	1	04/15/20 16:33	04/16/20 15:37	91-94-1		
2,4-Dichlorophenol	ND	ug/L	10.0	1.5	1	04/15/20 16:33	04/16/20 15:37	120-83-2		
Diethylphthalate	ND	ug/L	10.0	1.6	1	04/15/20 16:33	04/16/20 15:37	84-66-2		
2,4-Dimethylphenol	ND	ug/L	10.0	1.5	1	04/15/20 16:33	04/16/20 15:37	105-67-9		
Dimethylphthalate	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	131-11-3		
Di-n-butylphthalate	ND	ug/L	10.0	1.6	1	04/15/20 16:33	04/16/20 15:37	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	4.5	1	04/15/20 16:33	04/16/20 15:37	534-52-1		
2,4-Dinitrophenol	ND	ug/L	50.0	7.3	1	04/15/20 16:33	04/16/20 15:37	51-28-5		
2,4-Dinitrotoluene	ND	ug/L	10.0	1.7	1	04/15/20 16:33	04/16/20 15:37	121-14-2		
2,6-Dinitrotoluene	ND	ug/L	10.0	1.7	1	04/15/20 16:33	04/16/20 15:37	606-20-2		
Di-n-octylphthalate	ND	ug/L	10.0	2.2	1	04/15/20 16:33	04/16/20 15:37	117-84-0		
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.0	1	04/15/20 16:33	04/16/20 15:37	117-81-7		
Fluoranthene	ND	ug/L	10.0	1.6	1	04/15/20 16:33	04/16/20 15:37	206-44-0		
Fluorene	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1.6	1	04/15/20 16:33	04/16/20 15:37	87-68-3		
Hexachlorobenzene	ND	ug/L	10.0	1.3	1	04/15/20 16:33	04/16/20 15:37	118-74-1		
Hexachlorocyclopentadiene	ND	ug/L	10.0	2.4	1	04/15/20 16:33	04/16/20 15:37	77-47-4		
Hexachloroethane	ND	ug/L	10.0	1.3	1	04/15/20 16:33	04/16/20 15:37	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1.7	1	04/15/20 16:33	04/16/20 15:37	193-39-5		

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: EB-WQ-20200410 Lab ID: 92473288004 Collected: 04/10/20 11:30 Received: 04/10/20 11:55 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E RVE Analytical Method: EPA 8270E Preparation Method: EPA 3510C Pace Analytical Services - Charlotte									
Isophorone	ND	ug/L	10.0	1.3	1	04/15/20 16:33	04/16/20 15:37	78-59-1	
1-Methylnaphthalene	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	90-12-0	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.2	1	04/15/20 16:33	04/16/20 15:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.2	1	04/15/20 16:33	04/16/20 15:37	15831-10-4	
Naphthalene	ND	ug/L	10.0	1.6	1	04/15/20 16:33	04/16/20 15:37	91-20-3	
2-Nitroaniline	ND	ug/L	20.0	3.0	1	04/15/20 16:33	04/16/20 15:37	88-74-4	
3-Nitroaniline	ND	ug/L	20.0	2.8	1	04/15/20 16:33	04/16/20 15:37	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	3.1	1	04/15/20 16:33	04/16/20 15:37	100-01-6	
Nitrobenzene	ND	ug/L	10.0	1.5	1	04/15/20 16:33	04/16/20 15:37	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.7	1	04/15/20 16:33	04/16/20 15:37	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	9.4	1	04/15/20 16:33	04/16/20 15:37	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.8	1	04/15/20 16:33	04/16/20 15:37	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1.3	1	04/15/20 16:33	04/16/20 15:37	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	86-30-6	
2,2'-Oxybis(1-chloropropane)	ND	ug/L	10.0	1.3	1	04/15/20 16:33	04/16/20 15:37	108-60-1	
Pentachlorophenol	ND	ug/L	20.0	2.8	1	04/15/20 16:33	04/16/20 15:37	87-86-5	v2
Phenanthrene	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	85-01-8	
Phenol	ND	ug/L	10.0	1.5	1	04/15/20 16:33	04/16/20 15:37	108-95-2	
Pyrene	ND	ug/L	10.0	1.5	1	04/15/20 16:33	04/16/20 15:37	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1.6	1	04/15/20 16:33	04/16/20 15:37	120-82-1	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.5	1	04/15/20 16:33	04/16/20 15:37	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.4	1	04/15/20 16:33	04/16/20 15:37	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	99	%	13-130		1	04/15/20 16:33	04/16/20 15:37	4165-60-0	
2-Fluorobiphenyl (S)	96	%	13-130		1	04/15/20 16:33	04/16/20 15:37	321-60-8	
Terphenyl-d14 (S)	113	%	25-130		1	04/15/20 16:33	04/16/20 15:37	1718-51-0	
Phenol-d6 (S)	52	%	10-130		1	04/15/20 16:33	04/16/20 15:37	13127-88-3	
2-Fluorophenol (S)	73	%	10-130		1	04/15/20 16:33	04/16/20 15:37	367-12-4	
2,4,6-Tribromophenol (S)	109	%	10-137		1	04/15/20 16:33	04/16/20 15:37	118-79-6	
8260 MSV Low Level SC Analytical Method: EPA 8260D Pace Analytical Services - Charlotte									
Acetone	ND	ug/L	25.0	6.2	1		04/16/20 14:37	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		04/16/20 14:37	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		04/16/20 14:37	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		04/16/20 14:37	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		04/16/20 14:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		04/16/20 14:37	75-25-2	
Bromomethane	ND	ug/L	2.0	0.62	1		04/16/20 14:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		04/16/20 14:37	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		04/16/20 14:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		04/16/20 14:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		04/16/20 14:37	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		04/16/20 14:37	67-66-3	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: EB-WQ-20200410 Lab ID: 92473288004 Collected: 04/10/20 11:30 Received: 04/10/20 11:55 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC Analytical Method: EPA 8260D Pace Analytical Services - Charlotte									
Chloromethane	ND	ug/L	1.0	0.39	1		04/16/20 14:37	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		04/16/20 14:37	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		04/16/20 14:37	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		04/16/20 14:37	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		04/16/20 14:37	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		04/16/20 14:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		04/16/20 14:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		04/16/20 14:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		04/16/20 14:37	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		04/16/20 14:37	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		04/16/20 14:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		04/16/20 14:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		04/16/20 14:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		04/16/20 14:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		04/16/20 14:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		04/16/20 14:37	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		04/16/20 14:37	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		04/16/20 14:37	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		04/16/20 14:37	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		04/16/20 14:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		04/16/20 14:37	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		04/16/20 14:37	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		04/16/20 14:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		04/16/20 14:37	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		04/16/20 14:37	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		04/16/20 14:37	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		04/16/20 14:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		04/16/20 14:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		04/16/20 14:37	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		04/16/20 14:37	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		04/16/20 14:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		04/16/20 14:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		04/16/20 14:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.16	1		04/16/20 14:37	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		04/16/20 14:37	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		04/16/20 14:37	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		04/16/20 14:37	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		04/16/20 14:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		04/16/20 14:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		04/16/20 14:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		04/16/20 14:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		04/16/20 14:37	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		04/16/20 14:37	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		04/16/20 14:37	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		04/16/20 14:37	1330-20-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: EB-WQ-20200410		Lab ID: 92473288004		Collected: 04/10/20 11:30		Received: 04/10/20 11:55		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
m&p-Xylene	ND	ug/L	2.0	0.41	1		04/16/20 14:37	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		04/16/20 14:37	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		04/16/20 14:37	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130		1		04/16/20 14:37	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		04/16/20 14:37	2037-26-5	

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: TB-WQ-20200410		Lab ID: 92473288005		Collected: 04/10/20 00:00		Received: 04/10/20 11:55		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Acetone	ND	ug/L	25.0	6.2	1		04/16/20 14:55	67-64-1	
Benzene	ND	ug/L	1.0	0.15	1		04/16/20 14:55	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.22	1		04/16/20 14:55	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.34	1		04/16/20 14:55	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.26	1		04/16/20 14:55	75-27-4	
Bromoform	ND	ug/L	1.0	0.62	1		04/16/20 14:55	75-25-2	
Bromomethane	ND	ug/L	2.0	0.62	1		04/16/20 14:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	3.3	1		04/16/20 14:55	78-93-3	
Carbon tetrachloride	ND	ug/L	1.0	0.22	1		04/16/20 14:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		04/16/20 14:55	108-90-7	
Chloroethane	ND	ug/L	1.0	0.49	1		04/16/20 14:55	75-00-3	
Chloroform	ND	ug/L	5.0	2.3	1		04/16/20 14:55	67-66-3	
Chloromethane	ND	ug/L	1.0	0.39	1		04/16/20 14:55	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.20	1		04/16/20 14:55	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.20	1		04/16/20 14:55	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.0	0.26	1		04/16/20 14:55	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.41	1		04/16/20 14:55	124-48-1	
Dibromomethane	ND	ug/L	1.0	0.46	1		04/16/20 14:55	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.29	1		04/16/20 14:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.22	1		04/16/20 14:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.26	1		04/16/20 14:55	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.23	1		04/16/20 14:55	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.27	1		04/16/20 14:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.34	1		04/16/20 14:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.24	1		04/16/20 14:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.29	1		04/16/20 14:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.25	1		04/16/20 14:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.19	1		04/16/20 14:55	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.16	1		04/16/20 14:55	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.27	1		04/16/20 14:55	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.21	1		04/16/20 14:55	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.30	1		04/16/20 14:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.31	1		04/16/20 14:55	10061-02-6	
Diisopropyl ether	ND	ug/L	1.0	0.22	1		04/16/20 14:55	108-20-3	
Ethylbenzene	ND	ug/L	1.0	0.26	1		04/16/20 14:55	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.44	1		04/16/20 14:55	87-68-3	
2-Hexanone	ND	ug/L	5.0	0.57	1		04/16/20 14:55	591-78-6	
p-Isopropyltoluene	ND	ug/L	1.0	0.21	1		04/16/20 14:55	99-87-6	
Methylene Chloride	ND	ug/L	5.0	3.7	1		04/16/20 14:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	4.5	1		04/16/20 14:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.28	1		04/16/20 14:55	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.35	1		04/16/20 14:55	91-20-3	
Styrene	ND	ug/L	1.0	0.27	1		04/16/20 14:55	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.34	1		04/16/20 14:55	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.22	1		04/16/20 14:55	79-34-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Sample: TB-WQ-20200410		Lab ID: 92473288005		Collected: 04/10/20 00:00		Received: 04/10/20 11:55		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC		Analytical Method: EPA 8260D Pace Analytical Services - Charlotte							
Tetrachloroethene	ND	ug/L	1.0	0.16	1		04/16/20 14:55	127-18-4	
Toluene	ND	ug/L	1.0	0.24	1		04/16/20 14:55	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.34	1		04/16/20 14:55	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.22	1		04/16/20 14:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.18	1		04/16/20 14:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.24	1		04/16/20 14:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.22	1		04/16/20 14:55	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.31	1		04/16/20 14:55	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.35	1		04/16/20 14:55	96-18-4	
Vinyl acetate	ND	ug/L	2.0	1.4	1		04/16/20 14:55	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.24	1		04/16/20 14:55	75-01-4	
Xylene (Total)	ND	ug/L	1.0	0.63	1		04/16/20 14:55	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.41	1		04/16/20 14:55	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.22	1		04/16/20 14:55	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		04/16/20 14:55	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		04/16/20 14:55	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		04/16/20 14:55	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

QC Batch:	536573	Analysis Method:	EPA 8260D
QC Batch Method:	EPA 8260D	Analysis Description:	8260 MSV Low Level SC
		Laboratory:	Pace Analytical Services - Charlotte

Associated Lab Samples: 92473288004, 92473288005

METHOD BLANK: 2862132 Matrix: Water

Associated Lab Samples: 92473288004, 92473288005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.34	04/16/20 14:01	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.18	04/16/20 14:01	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.22	04/16/20 14:01	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.24	04/16/20 14:01	
1,1-Dichloroethane	ug/L	ND	1.0	0.27	04/16/20 14:01	
1,1-Dichloroethene	ug/L	ND	1.0	0.24	04/16/20 14:01	
1,1-Dichloropropene	ug/L	ND	1.0	0.21	04/16/20 14:01	
1,2,3-Trichlorobenzene	ug/L	0.51J	1.0	0.34	04/16/20 14:01	
1,2,3-Trichloropropane	ug/L	ND	1.0	0.35	04/16/20 14:01	
1,2,4-Trichlorobenzene	ug/L	0.46J	1.0	0.22	04/16/20 14:01	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.0	0.26	04/16/20 14:01	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.29	04/16/20 14:01	
1,2-Dichloroethane	ug/L	ND	1.0	0.34	04/16/20 14:01	
1,2-Dichloropropane	ug/L	ND	1.0	0.19	04/16/20 14:01	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.22	04/16/20 14:01	
1,3-Dichloropropane	ug/L	ND	1.0	0.16	04/16/20 14:01	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.26	04/16/20 14:01	
2,2-Dichloropropane	ug/L	ND	1.0	0.27	04/16/20 14:01	
2-Butanone (MEK)	ug/L	ND	5.0	3.3	04/16/20 14:01	
2-Chlorotoluene	ug/L	ND	1.0	0.20	04/16/20 14:01	
2-Hexanone	ug/L	ND	5.0	0.57	04/16/20 14:01	
4-Chlorotoluene	ug/L	ND	1.0	0.20	04/16/20 14:01	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	4.5	04/16/20 14:01	
Acetone	ug/L	ND	25.0	6.2	04/16/20 14:01	
Benzene	ug/L	ND	1.0	0.15	04/16/20 14:01	
Bromobenzene	ug/L	ND	1.0	0.22	04/16/20 14:01	
Bromochloromethane	ug/L	ND	1.0	0.34	04/16/20 14:01	
Bromodichloromethane	ug/L	ND	1.0	0.26	04/16/20 14:01	
Bromoform	ug/L	ND	1.0	0.62	04/16/20 14:01	
Bromomethane	ug/L	ND	2.0	0.62	04/16/20 14:01	
Carbon tetrachloride	ug/L	ND	1.0	0.22	04/16/20 14:01	
Chlorobenzene	ug/L	ND	1.0	0.23	04/16/20 14:01	
Chloroethane	ug/L	ND	1.0	0.49	04/16/20 14:01	
Chloroform	ug/L	ND	5.0	2.3	04/16/20 14:01	
Chloromethane	ug/L	ND	1.0	0.39	04/16/20 14:01	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.29	04/16/20 14:01	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.30	04/16/20 14:01	
Dibromochloromethane	ug/L	ND	1.0	0.41	04/16/20 14:01	
Dibromomethane	ug/L	ND	1.0	0.46	04/16/20 14:01	
Dichlorodifluoromethane	ug/L	ND	1.0	0.23	04/16/20 14:01	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

METHOD BLANK: 2862132

Matrix: Water

Associated Lab Samples: 92473288004, 92473288005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Diisopropyl ether	ug/L	ND	1.0	0.22	04/16/20 14:01	
Ethylbenzene	ug/L	ND	1.0	0.26	04/16/20 14:01	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.44	04/16/20 14:01	
m&p-Xylene	ug/L	ND	2.0	0.41	04/16/20 14:01	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.28	04/16/20 14:01	
Methylene Chloride	ug/L	ND	5.0	3.7	04/16/20 14:01	
Naphthalene	ug/L	0.63J	1.0	0.35	04/16/20 14:01	
o-Xylene	ug/L	ND	1.0	0.22	04/16/20 14:01	
p-Isopropyltoluene	ug/L	ND	1.0	0.21	04/16/20 14:01	
Styrene	ug/L	ND	1.0	0.27	04/16/20 14:01	
Tetrachloroethene	ug/L	ND	1.0	0.16	04/16/20 14:01	
Toluene	ug/L	ND	1.0	0.24	04/16/20 14:01	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.25	04/16/20 14:01	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.31	04/16/20 14:01	
Trichloroethene	ug/L	ND	1.0	0.22	04/16/20 14:01	
Trichlorofluoromethane	ug/L	ND	1.0	0.31	04/16/20 14:01	
Vinyl acetate	ug/L	ND	2.0	1.4	04/16/20 14:01	
Vinyl chloride	ug/L	ND	1.0	0.24	04/16/20 14:01	
Xylene (Total)	ug/L	ND	1.0	0.63	04/16/20 14:01	
1,2-Dichloroethane-d4 (S)	%	103	70-130		04/16/20 14:01	
4-Bromofluorobenzene (S)	%	99	70-130		04/16/20 14:01	
Toluene-d8 (S)	%	102	70-130		04/16/20 14:01	

LABORATORY CONTROL SAMPLE: 2862133

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	56.7	113	70-130	
1,1,1-Trichloroethane	ug/L	50	57.4	115	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	50.7	101	70-130	
1,1,2-Trichloroethane	ug/L	50	57.3	115	70-130	
1,1-Dichloroethane	ug/L	50	53.1	106	70-130	
1,1-Dichloroethene	ug/L	50	54.2	108	70-130	
1,1-Dichloropropene	ug/L	50	56.8	114	70-130	
1,2,3-Trichlorobenzene	ug/L	50	60.2	120	70-130	
1,2,3-Trichloropropane	ug/L	50	52.8	106	70-130	
1,2,4-Trichlorobenzene	ug/L	50	57.0	114	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	53.9	108	70-130	
1,2-Dichlorobenzene	ug/L	50	53.6	107	70-130	
1,2-Dichloroethane	ug/L	50	55.8	112	70-130	
1,2-Dichloropropane	ug/L	50	51.9	104	70-130	
1,3-Dichlorobenzene	ug/L	50	54.7	109	70-130	
1,3-Dichloropropane	ug/L	50	51.2	102	70-130	
1,4-Dichlorobenzene	ug/L	50	53.3	107	70-130	
2,2-Dichloropropane	ug/L	50	58.2	116	70-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

LABORATORY CONTROL SAMPLE: 2862133

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Butanone (MEK)	ug/L	100	101	101	70-130	
2-Chlorotoluene	ug/L	50	52.4	105	70-130	
2-Hexanone	ug/L	100	99.5	99	70-130	
4-Chlorotoluene	ug/L	50	54.1	108	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	97.5	98	70-130	
Acetone	ug/L	100	123	123	70-130	
Benzene	ug/L	50	54.3	109	70-130	
Bromobenzene	ug/L	50	54.1	108	70-130	
Bromochloromethane	ug/L	50	55.6	111	70-130	
Bromodichloromethane	ug/L	50	56.1	112	70-130	
Bromoform	ug/L	50	55.6	111	70-130	
Bromomethane	ug/L	50	66.8	134	70-130	L1
Carbon tetrachloride	ug/L	50	61.3	123	70-130	
Chlorobenzene	ug/L	50	53.7	107	70-130	
Chloroethane	ug/L	50	48.1	96	70-130	
Chloroform	ug/L	50	57.0	114	70-130	
Chloromethane	ug/L	50	45.4	91	70-130	
cis-1,2-Dichloroethene	ug/L	50	52.6	105	70-130	
cis-1,3-Dichloropropene	ug/L	50	55.1	110	70-130	
Dibromochloromethane	ug/L	50	58.0	116	70-130	
Dibromomethane	ug/L	50	55.2	110	70-130	
Dichlorodifluoromethane	ug/L	50	50.6	101	70-130	
Diisopropyl ether	ug/L	50	52.1	104	70-130	
Ethylbenzene	ug/L	50	52.9	106	70-130	
Hexachloro-1,3-butadiene	ug/L	50	57.6	115	70-130	
m&p-Xylene	ug/L	100	107	107	70-130	
Methyl-tert-butyl ether	ug/L	50	53.9	108	70-130	
Methylene Chloride	ug/L	50	52.0	104	70-130	
Naphthalene	ug/L	50	53.1	106	70-130	
o-Xylene	ug/L	50	52.4	105	70-130	
p-Isopropyltoluene	ug/L	50	52.4	105	70-130	
Styrene	ug/L	50	53.3	107	70-130	
Tetrachloroethene	ug/L	50	54.3	109	70-130	
Toluene	ug/L	50	52.4	105	70-130	
trans-1,2-Dichloroethene	ug/L	50	53.3	107	70-130	
trans-1,3-Dichloropropene	ug/L	50	57.5	115	70-130	
Trichloroethene	ug/L	50	56.5	113	70-130	
Trichlorofluoromethane	ug/L	50	50.7	101	70-130	
Vinyl acetate	ug/L	100	111	111	70-130	
Vinyl chloride	ug/L	50	55.8	112	70-130	
Xylene (Total)	ug/L	150	159	106	70-130	
1,2-Dichloroethane-d4 (S)	%			103	70-130	
4-Bromofluorobenzene (S)	%			104	70-130	
Toluene-d8 (S)	%			96	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2862134 2862135											
Parameter	Units	2630887029		MS	MSD	MS	MSD	MS	MSD	% Rec	Max
		Result	Spike	Spike	Result						
			Conc.	Conc.						Limits	RPD
1,1,1,2-Tetrachloroethane	ug/L	ND	5000	5000	5570	5750	111	115	73-134	3	30
1,1,1-Trichloroethane	ug/L	ND	5000	5000	5690	5630	114	113	82-143	1	30
1,1,2,2-Tetrachloroethane	ug/L	ND	5000	5000	4980	5240	100	105	70-136	5	30
1,1,2-Trichloroethane	ug/L	ND	5000	5000	5750	6060	115	121	70-135	5	30
1,1-Dichloroethane	ug/L	ND	5000	5000	5170	5260	103	105	70-139	2	30
1,1-Dichloroethene	ug/L	ND	5000	5000	5360	5200	107	104	70-154	3	30
1,1-Dichloropropene	ug/L	ND	5000	5000	5580	5360	112	107	70-149	4	30
1,2,3-Trichlorobenzene	ug/L	ND	5000	5000	5550	6350	111	127	70-135	13	30
1,2,3-Trichloropropane	ug/L	ND	5000	5000	4970	5340	99	107	71-137	7	30
1,2,4-Trichlorobenzene	ug/L	ND	5000	5000	5460	6160	109	123	73-140	12	30
1,2-Dibromo-3-chloropropane	ug/L	ND	5000	5000	4950	5320	99	106	65-134	7	30
1,2-Dichlorobenzene	ug/L	ND	5000	5000	5300	5450	106	109	70-133	3	30
1,2-Dichloroethane	ug/L	ND	5000	5000	5500	5480	110	110	70-137	0	30
1,2-Dichloropropane	ug/L	ND	5000	5000	5230	5670	105	113	70-140	8	30
1,3-Dichlorobenzene	ug/L	ND	5000	5000	5380	5530	108	111	70-135	3	30
1,3-Dichloropropane	ug/L	ND	5000	5000	4990	5130	100	103	70-143	3	30
1,4-Dichlorobenzene	ug/L	ND	5000	5000	5130	5470	103	109	70-133	6	30
2,2-Dichloropropane	ug/L	ND	5000	5000	4840	4980	97	100	61-148	3	30
2-Butanone (MEK)	ug/L	1010J	10000	10000	10100	10900	91	99	60-139	8	30
2-Chlorotoluene	ug/L	ND	5000	5000	5200	5490	104	110	70-144	5	30
2-Hexanone	ug/L	ND	10000	10000	10100	11000	101	110	65-138	8	30
4-Chlorotoluene	ug/L	ND	5000	5000	5240	5450	105	109	70-137	4	30
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10000	10000	10500	11300	105	113	65-135	7	30
Acetone	ug/L	ND	10000	10000	12600	12800	126	128	60-148	1	30
Benzene	ug/L	6390	5000	5000	11300	11900	98	111	70-151	5	30
Bromobenzene	ug/L	ND	5000	5000	5140	5590	103	112	70-136	8	30
Bromochloromethane	ug/L	ND	5000	5000	5230	5560	105	111	70-141	6	30
Bromodichloromethane	ug/L	ND	5000	5000	5370	5860	107	117	70-138	9	30
Bromoform	ug/L	ND	5000	5000	4960	5310	99	106	63-130	7	30
Bromomethane	ug/L	ND	5000	5000	5010	5980	100	120	15-152	18	30
Carbon tetrachloride	ug/L	ND	5000	5000	5960	6610	119	132	70-143	10	30
Chlorobenzene	ug/L	ND	5000	5000	5290	5440	106	109	70-138	3	30
Chloroethane	ug/L	ND	5000	5000	4450	4750	89	95	52-163	7	30
Chloroform	ug/L	ND	5000	5000	5360	5550	107	111	70-139	4	30
Chloromethane	ug/L	ND	5000	5000	3620	3930	72	79	41-139	8	30
cis-1,2-Dichloroethene	ug/L	ND	5000	5000	5130	5380	103	108	70-141	5	30
cis-1,3-Dichloropropene	ug/L	ND	5000	5000	5080	5420	102	108	70-137	7	30
Dibromochloromethane	ug/L	ND	5000	5000	5500	5660	110	113	70-134	3	30
Dibromomethane	ug/L	ND	5000	5000	5380	5680	108	114	70-138	6	30
Dichlorodifluoromethane	ug/L	ND	5000	5000	3310	3360	66	67	47-155	2	30
Diisopropyl ether	ug/L	905J	5000	5000	6530	6360	113	109	63-144	3	30
Ethylbenzene	ug/L	816J	5000	5000	5980	6130	103	106	66-153	2	30
Hexachloro-1,3-butadiene	ug/L	ND	5000	5000	5700	6200	114	124	65-149	8	30
m&p-Xylene	ug/L	5910	10000	10000	15800	16200	99	103	69-152	2	30

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2862134 2862135											
Parameter	Units	2630887029		MS		MSD		MS		MSD	
		Result	Conc.	Spike	Conc.	Result	Conc.	% Rec	% Rec	Limits	Max
											RPD
Methyl-tert-butyl ether	ug/L	32300	5000	5000	5000	39100	38500	135	123	54-156	2 30
Methylene Chloride	ug/L	ND	5000	5000	5000	5190	5310	104	106	42-159	2 30
Naphthalene	ug/L	883J	5000	5000	5000	5330	5760	89	98	61-148	8 30
o-Xylene	ug/L	3080	5000	5000	5000	7980	8180	98	102	70-148	2 30
p-Isopropyltoluene	ug/L	ND	5000	5000	5000	5190	5360	104	107	70-146	3 30
Styrene	ug/L	ND	5000	5000	5000	4820	5160	96	103	70-135	7 30
Tetrachloroethene	ug/L	ND	5000	5000	5000	5180	5080	104	102	59-143	2 30
Toluene	ug/L	9540	5000	5000	5000	13800	14400	85	98	59-148	4 30
trans-1,2-Dichloroethene	ug/L	ND	5000	5000	5000	5220	5180	104	104	70-146	1 30
trans-1,3-Dichloropropene	ug/L	ND	5000	5000	5000	5250	5600	105	112	70-135	6 30
Trichloroethene	ug/L	ND	5000	5000	5000	5490	5890	110	118	70-147	7 30
Trichlorofluoromethane	ug/L	ND	5000	5000	5000	4960	4970	99	99	70-148	0 30
Vinyl acetate	ug/L	ND	10000	10000	10000	10400	10500	104	105	49-151	1 30
Vinyl chloride	ug/L	ND	5000	5000	5000	4830	4970	97	99	70-156	3 30
Xylene (Total)	ug/L	8990	15000	15000	15000	23800	24400	99	102	63-158	2 30
1,2-Dichloroethane-d4 (S)	%							108	102	70-130	
4-Bromofluorobenzene (S)	%							100	101	70-130	
Toluene-d8 (S)	%							97	102	70-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

QC Batch:	535927	Analysis Method:	EPA 8260D
QC Batch Method:	EPA 5035A	Analysis Description:	8260 MSV 5035A Volatile Organics
		Laboratory:	Pace Analytical Services - Charlotte

Associated Lab Samples: 92473288001, 92473288002, 92473288003

METHOD BLANK: 2859351 Matrix: Solid

Associated Lab Samples: 92473288001, 92473288002, 92473288003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	1.2	04/13/20 13:52	
1,1,1-Trichloroethane	ug/kg	ND	5.0	0.87	04/13/20 13:52	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	1.7	04/13/20 13:52	
1,1,2-Trichloroethane	ug/kg	ND	5.0	1.1	04/13/20 13:52	
1,1-Dichloroethane	ug/kg	ND	5.0	0.74	04/13/20 13:52	
1,1-Dichloroethene	ug/kg	ND	5.0	1.2	04/13/20 13:52	
1,1-Dichloropropene	ug/kg	ND	5.0	2.1	04/13/20 13:52	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	3.6	04/13/20 13:52	
1,2,3-Trichloropropane	ug/kg	ND	5.0	1.7	04/13/20 13:52	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	2.6	04/13/20 13:52	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	2.0	04/13/20 13:52	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.0	2.5	04/13/20 13:52	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	1.1	04/13/20 13:52	
1,2-Dichlorobenzene	ug/kg	ND	5.0	1.8	04/13/20 13:52	
1,2-Dichloroethane	ug/kg	ND	5.0	1.0	04/13/20 13:52	
1,2-Dichloropropane	ug/kg	ND	5.0	1.9	04/13/20 13:52	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	1.7	04/13/20 13:52	
1,3-Dichlorobenzene	ug/kg	ND	5.0	1.8	04/13/20 13:52	
1,3-Dichloropropane	ug/kg	ND	5.0	1.9	04/13/20 13:52	
1,4-Dichlorobenzene	ug/kg	ND	5.0	1.7	04/13/20 13:52	
2,2-Dichloropropane	ug/kg	ND	5.0	0.49	04/13/20 13:52	
2-Butanone (MEK)	ug/kg	ND	100	11.9	04/13/20 13:52	
2-Chlorotoluene	ug/kg	ND	5.0	1.5	04/13/20 13:52	
2-Hexanone	ug/kg	ND	50.0	5.2	04/13/20 13:52	
4-Chlorotoluene	ug/kg	ND	5.0	1.5	04/13/20 13:52	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	50.0	3.7	04/13/20 13:52	
Acetone	ug/kg	ND	100	9.4	04/13/20 13:52	
Benzene	ug/kg	ND	5.0	0.90	04/13/20 13:52	
Bromobenzene	ug/kg	ND	5.0	1.4	04/13/20 13:52	
Bromochloromethane	ug/kg	ND	5.0	1.2	04/13/20 13:52	
Bromodichloromethane	ug/kg	ND	5.0	0.98	04/13/20 13:52	
Bromoform	ug/kg	ND	5.0	2.4	04/13/20 13:52	
Bromomethane	ug/kg	ND	10.0	2.4	04/13/20 13:52	IH,v1
Carbon tetrachloride	ug/kg	ND	5.0	0.96	04/13/20 13:52	
Chlorobenzene	ug/kg	ND	5.0	0.97	04/13/20 13:52	
Chloroethane	ug/kg	ND	10.0	2.1	04/13/20 13:52	
Chloroform	ug/kg	ND	5.0	1.1	04/13/20 13:52	
Chloromethane	ug/kg	ND	10.0	3.3	04/13/20 13:52	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	0.87	04/13/20 13:52	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	2.3	04/13/20 13:52	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

METHOD BLANK: 2859351

Matrix: Solid

Associated Lab Samples: 92473288001, 92473288002, 92473288003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	ND	5.0	2.5	04/13/20 13:52	
Dibromomethane	ug/kg	ND	5.0	1.5	04/13/20 13:52	
Dichlorodifluoromethane	ug/kg	ND	10.0	4.1	04/13/20 13:52	
Diisopropyl ether	ug/kg	ND	5.0	2.9	04/13/20 13:52	
Ethylbenzene	ug/kg	ND	5.0	1.1	04/13/20 13:52	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	2.5	04/13/20 13:52	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	1.4	04/13/20 13:52	
m&p-Xylene	ug/kg	ND	10.0	2.4	04/13/20 13:52	
Methyl-tert-butyl ether	ug/kg	ND	5.0	2.9	04/13/20 13:52	
Methylene Chloride	ug/kg	ND	20.0	5.9	04/13/20 13:52	
n-Butylbenzene	ug/kg	ND	5.0	2.8	04/13/20 13:52	
n-Propylbenzene	ug/kg	ND	5.0	1.7	04/13/20 13:52	
Naphthalene	ug/kg	ND	5.0	4.2	04/13/20 13:52	
o-Xylene	ug/kg	ND	5.0	1.2	04/13/20 13:52	
p-Isopropyltoluene	ug/kg	ND	5.0	2.4	04/13/20 13:52	
sec-Butylbenzene	ug/kg	ND	5.0	2.1	04/13/20 13:52	
Styrene	ug/kg	ND	5.0	1.5	04/13/20 13:52	
tert-Butylbenzene	ug/kg	ND	5.0	1.7	04/13/20 13:52	
Tetrachloroethene	ug/kg	ND	5.0	1.6	04/13/20 13:52	
Toluene	ug/kg	ND	5.0	1.6	04/13/20 13:52	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	0.98	04/13/20 13:52	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	0.88	04/13/20 13:52	
Trichloroethene	ug/kg	ND	5.0	1.3	04/13/20 13:52	
Trichlorofluoromethane	ug/kg	ND	5.0	1.2	04/13/20 13:52	
Vinyl acetate	ug/kg	ND	50.0	16.3	04/13/20 13:52	
Vinyl chloride	ug/kg	ND	10.0	1.9	04/13/20 13:52	
Xylene (Total)	ug/kg	ND	10.0	3.5	04/13/20 13:52	
1,2-Dichloroethane-d4 (S)	%	103	70-132		04/13/20 13:52	
4-Bromofluorobenzene (S)	%	97	70-130		04/13/20 13:52	
Toluene-d8 (S)	%	102	70-130		04/13/20 13:52	

LABORATORY CONTROL SAMPLE: 2859352

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	56.2	112	70-130	
1,1,1-Trichloroethane	ug/kg	50	54.1	108	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	50	53.6	107	55-130	
1,1,2-Trichloroethane	ug/kg	50	53.0	106	70-130	
1,1-Dichloroethane	ug/kg	50	53.0	106	68-130	
1,1-Dichloroethene	ug/kg	50	56.0	112	70-130	
1,1-Dichloropropene	ug/kg	50	58.0	116	70-130	
1,2,3-Trichlorobenzene	ug/kg	50	60.2	120	70-130	
1,2,3-Trichloropropane	ug/kg	50	56.2	112	70-130	
1,2,4-Trichlorobenzene	ug/kg	50	61.6	123	70-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

LABORATORY CONTROL SAMPLE: 2859352

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	50	61.0	122	69-130	
1,2-Dibromo-3-chloropropane	ug/kg	50	63.6	127	57-141	
1,2-Dibromoethane (EDB)	ug/kg	50	57.1	114	70-130	
1,2-Dichlorobenzene	ug/kg	50	60.1	120	70-130	
1,2-Dichloroethane	ug/kg	50	52.4	105	70-130	
1,2-Dichloropropane	ug/kg	50	55.0	110	70-130	
1,3,5-Trimethylbenzene	ug/kg	50	61.2	122	70-130	
1,3-Dichlorobenzene	ug/kg	50	59.8	120	70-130	
1,3-Dichloropropane	ug/kg	50	55.1	110	70-130	
1,4-Dichlorobenzene	ug/kg	50	59.6	119	70-130	
2,2-Dichloropropane	ug/kg	50	55.2	110	70-130	
2-Butanone (MEK)	ug/kg	100	118	118	60-130	
2-Chlorotoluene	ug/kg	50	59.5	119	70-130	
2-Hexanone	ug/kg	100	118	118	70-132	
4-Chlorotoluene	ug/kg	50	60.5	121	70-130	
4-Methyl-2-pentanone (MIBK)	ug/kg	100	114	114	69-130	
Acetone	ug/kg	100	126	126	49-148	
Benzene	ug/kg	50	56.7	113	70-130	
Bromobenzene	ug/kg	50	59.3	119	70-130	
Bromochloromethane	ug/kg	50	53.0	106	70-130	
Bromodichloromethane	ug/kg	50	58.0	116	70-130	
Bromoform	ug/kg	50	56.1	112	68-136	
Bromomethane	ug/kg	50	84.0	168	60-140	IH,L1,v1
Carbon tetrachloride	ug/kg	50	59.1	118	70-130	
Chlorobenzene	ug/kg	50	56.5	113	70-130	
Chloroethane	ug/kg	50	64.3	129	51-147	
Chloroform	ug/kg	50	55.4	111	70-130	
Chloromethane	ug/kg	50	49.1	98	48-130	
cis-1,2-Dichloroethene	ug/kg	50	53.0	106	70-130	
cis-1,3-Dichloropropene	ug/kg	50	54.0	108	70-130	
Dibromochloromethane	ug/kg	50	56.7	113	70-130	
Dibromomethane	ug/kg	50	52.4	105	70-130	
Dichlorodifluoromethane	ug/kg	50	56.9	114	49-130	
Diisopropyl ether	ug/kg	50	54.7	109	66-130	
Ethylbenzene	ug/kg	50	54.9	110	70-130	
Hexachloro-1,3-butadiene	ug/kg	50	63.0	126	70-130	
Isopropylbenzene (Cumene)	ug/kg	50	57.6	115	70-130	
m&p-Xylene	ug/kg	100	111	111	70-130	
Methyl-tert-butyl ether	ug/kg	50	54.3	109	70-130	
Methylene Chloride	ug/kg	50	55.8	112	50-137	
n-Butylbenzene	ug/kg	50	63.9	128	70-130	
n-Propylbenzene	ug/kg	50	60.2	120	70-130	
Naphthalene	ug/kg	50	61.6	123	70-131	
o-Xylene	ug/kg	50	55.2	110	70-130	
p-Isopropyltoluene	ug/kg	50	61.3	123	70-130	
sec-Butylbenzene	ug/kg	50	61.0	122	70-130	
Styrene	ug/kg	50	56.8	114	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

LABORATORY CONTROL SAMPLE: 2859352

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Butylbenzene	ug/kg	50	53.1	106	69-130	
Tetrachloroethene	ug/kg	50	53.6	107	56-130	
Toluene	ug/kg	50	52.4	105	70-130	
trans-1,2-Dichloroethene	ug/kg	50	54.8	110	70-130	
trans-1,3-Dichloropropene	ug/kg	50	54.0	108	70-130	
Trichloroethene	ug/kg	50	59.0	118	70-141	
Trichlorofluoromethane	ug/kg	50	59.7	119	67-130	
Vinyl acetate	ug/kg	100	116	116	10-136	
Vinyl chloride	ug/kg	50	59.2	118	67-130	
Xylene (Total)	ug/kg	150	166	111	70-130	
1,2-Dichloroethane-d4 (S)	%			107	70-132	
4-Bromofluorobenzene (S)	%			95	70-130	
Toluene-d8 (S)	%			97	70-130	

MATRIX SPIKE SAMPLE: 2859633

Parameter	Units	92473288002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	53.8	18.4	34	52-133	M1
1,1,1-Trichloroethane	ug/kg	ND	53.8	24.9	46	49-137	M1
1,1,2,2-Tetrachloroethane	ug/kg	ND	53.8	16.7	31	39-150	M1
1,1,2-Trichloroethane	ug/kg	ND	53.8	25.0	46	48-140	M1
1,1-Dichloroethane	ug/kg	ND	53.8	31.7	59	46-135	
1,1-Dichloroethene	ug/kg	ND	53.8	29.6	55	38-149	
1,1-Dichloropropene	ug/kg	ND	53.8	16.7	31	41-140	M1
1,2,3-Trichlorobenzene	ug/kg	ND	53.8	ND	9	10-158	M1
1,2,3-Trichloropropane	ug/kg	ND	53.8	20.6	38	33-157	
1,2,4-Trichlorobenzene	ug/kg	ND	53.8	ND	8	10-155	M1
1,2,4-Trimethylbenzene	ug/kg	ND	53.8	12.2J	23	24-154	M1
1,2-Dibromo-3-chloropropane	ug/kg	ND	53.8	17.1	32	33-158	M1,v1
1,2-Dibromoethane (EDB)	ug/kg	ND	53.8	21.4	40	40-136	
1,2-Dichlorobenzene	ug/kg	ND	53.8	7.4J	14	27-146	M1
1,2-Dichloroethane	ug/kg	ND	53.8	30.4	56	49-140	
1,2-Dichloropropane	ug/kg	ND	53.8	29.1	54	44-143	
1,3,5-Trimethylbenzene	ug/kg	ND	53.8	13.5	25	40-144	M1
1,3-Dichlorobenzene	ug/kg	ND	53.8	7.2J	13	33-140	M1
1,3-Dichloropropane	ug/kg	ND	53.8	23.2	43	47-147	M1
1,4-Dichlorobenzene	ug/kg	ND	53.8	7.2J	13	35-139	M1
2,2-Dichloropropane	ug/kg	ND	53.8	24.9	46	41-140	
2-Butanone (MEK)	ug/kg	ND	108	65.5J	61	10-181	
2-Chlorotoluene	ug/kg	ND	53.8	8.2J	15	38-147	M1
2-Hexanone	ug/kg	ND	108	38.3J	36	18-169	
4-Chlorotoluene	ug/kg	ND	53.8	8.4J	16	36-145	M1
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	108	60.7J	56	16-175	
Acetone	ug/kg	23.6J	108	324	279	10-200	M1
Benzene	ug/kg	ND	53.8	26.3	49	46-136	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

MATRIX SPIKE SAMPLE:		2859633					
Parameter	Units	92473288002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromobenzene	ug/kg	ND	53.8	11.8J	22	38-149	M1
Bromochloromethane	ug/kg	ND	53.8	30.5	57	44-142	
Bromodichloromethane	ug/kg	ND	53.8	24.6	46	41-140	
Bromoform	ug/kg	ND	53.8	16.2	30	34-145	M1
Bromomethane	ug/kg	ND	53.8	41.3	77	14-162	v1
Carbon tetrachloride	ug/kg	ND	53.8	22.2	41	44-141	M1
Chlorobenzene	ug/kg	ND	53.8	13.6	25	39-141	M1
Chloroethane	ug/kg	ND	53.8	46.9	87	10-182	
Chloroform	ug/kg	ND	53.8	28.8	54	45-140	
Chloromethane	ug/kg	ND	53.8	39.6	70	19-149	
cis-1,2-Dichloroethene	ug/kg	ND	53.8	28.6	53	38-150	
cis-1,3-Dichloropropene	ug/kg	ND	53.8	14.9	28	30-144	M1
Dibromochloromethane	ug/kg	ND	53.8	19.5	36	36-145	
Dibromomethane	ug/kg	ND	53.8	29.4	55	41-145	
Dichlorodifluoromethane	ug/kg	ND	53.8	21.1J	39	16-146	
Diisopropyl ether	ug/kg	ND	53.8	30.0	56	41-143	
Ethylbenzene	ug/kg	ND	53.8	12.5J	23	35-144	M1
Hexachloro-1,3-butadiene	ug/kg	ND	53.8	ND	11	10-160	v1
Isopropylbenzene (Cumene)	ug/kg	ND	53.8	10.1J	19	30-152	M1
m&p-Xylene	ug/kg	ND	108	22.5J	21	33-145	M1
Methyl-tert-butyl ether	ug/kg	ND	53.8	27.7	51	49-140	
Methylene Chloride	ug/kg	ND	53.8	26.8J	50	10-174	
n-Butylbenzene	ug/kg	ND	53.8	8.6J	16	10-160	
n-Propylbenzene	ug/kg	ND	53.8	9.1J	17	24-159	M1
Naphthalene	ug/kg	ND	53.8	ND	15	10-171	
o-Xylene	ug/kg	ND	53.8	12.1J	22	31-150	M1
p-Isopropyltoluene	ug/kg	ND	53.8	9.2J	17	21-154	M1
sec-Butylbenzene	ug/kg	ND	53.8	8.8J	16	19-159	M1
Styrene	ug/kg	ND	53.8	8.5J	16	15-152	
tert-Butylbenzene	ug/kg	ND	53.8	9.2J	17	31-141	M1
Tetrachloroethene	ug/kg	ND	53.8	10.4J	19	19-141	
Toluene	ug/kg	ND	53.8	18.9	35	31-146	
trans-1,2-Dichloroethene	ug/kg	ND	53.8	26.6	49	28-157	
trans-1,3-Dichloropropene	ug/kg	ND	53.8	14.3	27	25-146	
Trichloroethene	ug/kg	ND	53.8	19.2	36	34-149	
Trichlorofluoromethane	ug/kg	ND	53.8	25.7	48	10-167	
Vinyl acetate	ug/kg	ND	108	ND	8	10-200	M1
Vinyl chloride	ug/kg	ND	53.8	39.2	73	36-155	
Xylene (Total)	ug/kg	ND	162	ND	0	29-148	MS
1,2-Dichloroethane-d4 (S)	%				109	70-132	
4-Bromofluorobenzene (S)	%				90	70-130	
Toluene-d8 (S)	%				98	70-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

SAMPLE DUPLICATE: 2859632

Parameter	Units	92473288001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,1-Trichloroethane	ug/kg	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,2-Trichloroethane	ug/kg	ND	ND		30	
1,1-Dichloroethane	ug/kg	ND	ND		30	
1,1-Dichloroethene	ug/kg	ND	ND		30	
1,1-Dichloropropene	ug/kg	ND	ND		30	
1,2,3-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,3-Trichloropropane	ug/kg	ND	ND		30	
1,2,4-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,4-Trimethylbenzene	ug/kg	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND		30	v1
1,2-Dibromoethane (EDB)	ug/kg	ND	ND		30	
1,2-Dichlorobenzene	ug/kg	ND	ND		30	
1,2-Dichloroethane	ug/kg	ND	ND		30	
1,2-Dichloropropane	ug/kg	ND	ND		30	
1,3,5-Trimethylbenzene	ug/kg	ND	ND		30	
1,3-Dichlorobenzene	ug/kg	ND	ND		30	
1,3-Dichloropropane	ug/kg	ND	ND		30	
1,4-Dichlorobenzene	ug/kg	ND	ND		30	
2,2-Dichloropropane	ug/kg	ND	ND		30	
2-Butanone (MEK)	ug/kg	ND	ND		30	
2-Chlorotoluene	ug/kg	ND	ND		30	
2-Hexanone	ug/kg	ND	ND		30	
4-Chlorotoluene	ug/kg	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND		30	
Acetone	ug/kg	ND	ND		30	
Benzene	ug/kg	ND	ND		30	
Bromobenzene	ug/kg	ND	ND		30	
Bromochloromethane	ug/kg	ND	ND		30	
Bromodichloromethane	ug/kg	ND	ND		30	
Bromoform	ug/kg	ND	ND		30	
Bromomethane	ug/kg	ND	ND		30	v1
Carbon tetrachloride	ug/kg	ND	ND		30	
Chlorobenzene	ug/kg	ND	ND		30	
Chloroethane	ug/kg	ND	ND		30	
Chloroform	ug/kg	ND	ND		30	
Chloromethane	ug/kg	ND	ND		30	
cis-1,2-Dichloroethene	ug/kg	ND	ND		30	
cis-1,3-Dichloropropene	ug/kg	ND	ND		30	
Dibromochloromethane	ug/kg	ND	ND		30	
Dibromomethane	ug/kg	ND	ND		30	
Dichlorodifluoromethane	ug/kg	ND	ND		30	
Diisopropyl ether	ug/kg	ND	ND		30	
Ethylbenzene	ug/kg	ND	ND		30	
Hexachloro-1,3-butadiene	ug/kg	ND	ND		30	v1
Isopropylbenzene (Cumene)	ug/kg	ND	ND		30	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

SAMPLE DUPLICATE: 2859632

Parameter	Units	92473288001 Result	Dup Result	RPD	Max RPD	Qualifiers
m&p-Xylene	ug/kg	ND	ND		30	
Methyl-tert-butyl ether	ug/kg	ND	ND		30	
Methylene Chloride	ug/kg	ND	ND		30	
n-Butylbenzene	ug/kg	ND	ND		30	
n-Propylbenzene	ug/kg	ND	ND		30	
Naphthalene	ug/kg	ND	ND		30	
o-Xylene	ug/kg	ND	ND		30	
p-Isopropyltoluene	ug/kg	ND	ND		30	
sec-Butylbenzene	ug/kg	ND	ND		30	
Styrene	ug/kg	ND	3.5J		30	
tert-Butylbenzene	ug/kg	ND	ND		30	
Tetrachloroethene	ug/kg	ND	ND		30	
Toluene	ug/kg	ND	ND		30	
trans-1,2-Dichloroethene	ug/kg	ND	ND		30	
trans-1,3-Dichloropropene	ug/kg	ND	ND		30	
Trichloroethene	ug/kg	ND	ND		30	
Trichlorofluoromethane	ug/kg	ND	ND		30	
Vinyl acetate	ug/kg	ND	ND		30	
Vinyl chloride	ug/kg	ND	ND		30	
Xylene (Total)	ug/kg	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	106	141			S3
4-Bromofluorobenzene (S)	%	94	97			
Toluene-d8 (S)	%	99	112			

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

QC Batch:	536397	Analysis Method:	EPA 8270E
QC Batch Method:	EPA 3510C	Analysis Description:	8270E Water MSSV RVE
		Laboratory:	Pace Analytical Services - Charlotte

Associated Lab Samples: 92473288004

METHOD BLANK: 2861271

Matrix: Water

Associated Lab Samples: 92473288004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	10.0	1.6	04/16/20 18:59	
1,2-Dichlorobenzene	ug/L	ND	10.0	1.4	04/16/20 18:59	
1,3-Dichlorobenzene	ug/L	ND	10.0	1.4	04/16/20 18:59	
1,4-Dichlorobenzene	ug/L	ND	10.0	1.5	04/16/20 18:59	
1-Methylnaphthalene	ug/L	ND	10.0	1.4	04/16/20 18:59	
2,2'-Oxybis(1-chloropropane)	ug/L	ND	10.0	1.3	04/16/20 18:59	
2,4,5-Trichlorophenol	ug/L	ND	10.0	1.5	04/16/20 18:59	
2,4,6-Trichlorophenol	ug/L	ND	10.0	1.4	04/16/20 18:59	
2,4-Dichlorophenol	ug/L	ND	10.0	1.5	04/16/20 18:59	
2,4-Dimethylphenol	ug/L	ND	10.0	1.5	04/16/20 18:59	
2,4-Dinitrophenol	ug/L	ND	50.0	7.3	04/16/20 18:59	
2,4-Dinitrotoluene	ug/L	ND	10.0	1.7	04/16/20 18:59	
2,6-Dinitrotoluene	ug/L	ND	10.0	1.7	04/16/20 18:59	
2-Chloronaphthalene	ug/L	ND	10.0	1.4	04/16/20 18:59	
2-Chlorophenol	ug/L	ND	10.0	1.4	04/16/20 18:59	
2-Methylnaphthalene	ug/L	ND	10.0	1.4	04/16/20 18:59	
2-Methylphenol(o-Cresol)	ug/L	ND	10.0	1.2	04/16/20 18:59	
2-Nitroaniline	ug/L	ND	20.0	3.0	04/16/20 18:59	
2-Nitrophenol	ug/L	ND	10.0	1.7	04/16/20 18:59	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	10.0	1.2	04/16/20 18:59	
3,3'-Dichlorobenzidine	ug/L	ND	20.0	2.7	04/16/20 18:59	
3-Nitroaniline	ug/L	ND	20.0	2.8	04/16/20 18:59	
4,6-Dinitro-2-methylphenol	ug/L	ND	20.0	4.5	04/16/20 18:59	
4-Bromophenylphenyl ether	ug/L	ND	10.0	1.2	04/16/20 18:59	
4-Chloro-3-methylphenol	ug/L	ND	10.0	2.8	04/16/20 18:59	
4-Chloroaniline	ug/L	ND	20.0	2.8	04/16/20 18:59	
4-Chlorophenylphenyl ether	ug/L	ND	10.0	1.5	04/16/20 18:59	
4-Nitroaniline	ug/L	ND	20.0	3.1	04/16/20 18:59	
4-Nitrophenol	ug/L	ND	50.0	9.4	04/16/20 18:59	
Acenaphthene	ug/L	ND	10.0	1.4	04/16/20 18:59	
Acenaphthylene	ug/L	ND	10.0	1.5	04/16/20 18:59	
Aniline	ug/L	ND	10.0	1.6	04/16/20 18:59	
Anthracene	ug/L	ND	10.0	1.6	04/16/20 18:59	
Benzo(a)anthracene	ug/L	ND	10.0	1.5	04/16/20 18:59	
Benzo(a)pyrene	ug/L	ND	10.0	1.8	04/16/20 18:59	
Benzo(b)fluoranthene	ug/L	ND	10.0	1.7	04/16/20 18:59	
Benzo(g,h,i)perylene	ug/L	ND	10.0	1.6	04/16/20 18:59	
Benzo(k)fluoranthene	ug/L	ND	10.0	1.5	04/16/20 18:59	
Benzoic Acid	ug/L	ND	50.0	19.5	04/16/20 18:59	
Benzyl alcohol	ug/L	ND	20.0	2.6	04/16/20 18:59	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

METHOD BLANK: 2861271

Matrix: Water

Associated Lab Samples: 92473288004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	1.3	04/16/20 18:59	
bis(2-Chloroethyl) ether	ug/L	ND	10.0	1.7	04/16/20 18:59	
bis(2-Ethylhexyl)phthalate	ug/L	ND	6.0	2.0	04/16/20 18:59	
Butylbenzylphthalate	ug/L	ND	10.0	1.9	04/16/20 18:59	
Chrysene	ug/L	ND	10.0	1.4	04/16/20 18:59	
Di-n-butylphthalate	ug/L	ND	10.0	1.6	04/16/20 18:59	
Di-n-octylphthalate	ug/L	ND	10.0	2.2	04/16/20 18:59	
Dibenz(a,h)anthracene	ug/L	ND	10.0	1.6	04/16/20 18:59	
Dibenzofuran	ug/L	ND	10.0	1.3	04/16/20 18:59	
Diethylphthalate	ug/L	ND	10.0	1.6	04/16/20 18:59	
Dimethylphthalate	ug/L	ND	10.0	1.4	04/16/20 18:59	
Fluoranthene	ug/L	ND	10.0	1.6	04/16/20 18:59	
Fluorene	ug/L	ND	10.0	1.4	04/16/20 18:59	
Hexachloro-1,3-butadiene	ug/L	ND	10.0	1.6	04/16/20 18:59	
Hexachlorobenzene	ug/L	ND	10.0	1.3	04/16/20 18:59	
Hexachlorocyclopentadiene	ug/L	ND	10.0	2.4	04/16/20 18:59	
Hexachloroethane	ug/L	ND	10.0	1.3	04/16/20 18:59	
Indeno(1,2,3-cd)pyrene	ug/L	ND	10.0	1.7	04/16/20 18:59	
Isophorone	ug/L	ND	10.0	1.3	04/16/20 18:59	
N-Nitroso-di-n-propylamine	ug/L	ND	10.0	1.3	04/16/20 18:59	
N-Nitrosodimethylamine	ug/L	ND	10.0	1.8	04/16/20 18:59	
N-Nitrosodiphenylamine	ug/L	ND	10.0	1.4	04/16/20 18:59	
Naphthalene	ug/L	ND	10.0	1.6	04/16/20 18:59	
Nitrobenzene	ug/L	ND	10.0	1.5	04/16/20 18:59	
Pentachlorophenol	ug/L	ND	20.0	2.8	04/16/20 18:59	v2
Phenanthrene	ug/L	ND	10.0	1.4	04/16/20 18:59	
Phenol	ug/L	ND	10.0	1.5	04/16/20 18:59	
Pyrene	ug/L	ND	10.0	1.5	04/16/20 18:59	
2,4,6-Tribromophenol (S)	%	68	10-137		04/16/20 18:59	
2-Fluorobiphenyl (S)	%	75	13-130		04/16/20 18:59	
2-Fluorophenol (S)	%	51	10-130		04/16/20 18:59	
Nitrobenzene-d5 (S)	%	83	13-130		04/16/20 18:59	
Phenol-d6 (S)	%	42	10-130		04/16/20 18:59	
Terphenyl-d14 (S)	%	90	25-130		04/16/20 18:59	

LABORATORY CONTROL SAMPLE: 2861272

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	29.1	58	30-130	
1,2-Dichlorobenzene	ug/L	50	29.1	58	30-130	
1,3-Dichlorobenzene	ug/L	50	27.8	56	20-130	
1,4-Dichlorobenzene	ug/L	50	29.0	58	30-130	
1-Methylnaphthalene	ug/L	50	31.8	64	30-130	
2,2'-Oxybis(1-chloropropane)	ug/L	50	39.8	80	20-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

LABORATORY CONTROL SAMPLE: 2861272

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-Trichlorophenol	ug/L	50	41.6	83	40-130	
2,4,6-Trichlorophenol	ug/L	50	37.9	76	40-130	
2,4-Dichlorophenol	ug/L	50	40.6	81	31-130	
2,4-Dimethylphenol	ug/L	50	42.4	85	30-130	
2,4-Dinitrophenol	ug/L	250	106	42	30-130	
2,4-Dinitrotoluene	ug/L	50	47.9	96	49-130	
2,6-Dinitrotoluene	ug/L	50	47.4	95	50-130	
2-Chloronaphthalene	ug/L	50	34.2	68	30-130	
2-Chlorophenol	ug/L	50	37.4	75	30-130	
2-Methylnaphthalene	ug/L	50	32.8	66	30-130	
2-Methylphenol(o-Cresol)	ug/L	50	36.3	73	30-130	
2-Nitroaniline	ug/L	100	95.5	95	40-130	
2-Nitrophenol	ug/L	50	44.0	88	20-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	35.4	71	20-130	
3,3'-Dichlorobenzidine	ug/L	100	94.1	94	10-150	
3-Nitroaniline	ug/L	100	94.3	94	40-130	
4,6-Dinitro-2-methylphenol	ug/L	100	54.2	54	40-130	
4-Bromophenylphenyl ether	ug/L	50	39.7	79	30-130	
4-Chloro-3-methylphenol	ug/L	100	87.8	88	30-130	
4-Chloroaniline	ug/L	100	83.3	83	20-130	
4-Chlorophenylphenyl ether	ug/L	50	39.1	78	20-130	
4-Nitroaniline	ug/L	100	99.5	100	40-130	
4-Nitrophenol	ug/L	250	81.1	32	10-130	
Acenaphthene	ug/L	50	37.6	75	30-130	
Acenaphthylene	ug/L	50	38.2	76	30-130	
Aniline	ug/L	50	34.7	69	20-130	
Anthracene	ug/L	50	42.9	86	50-130	
Benzo(a)anthracene	ug/L	50	45.7	91	50-130	
Benzo(a)pyrene	ug/L	50	47.5	95	50-130	
Benzo(b)fluoranthene	ug/L	50	47.0	94	50-130	
Benzo(g,h,i)perylene	ug/L	50	46.8	94	50-130	
Benzo(k)fluoranthene	ug/L	50	47.6	95	50-130	
Benzoic Acid	ug/L	250	48.1J	19	10-130	
Benzyl alcohol	ug/L	100	78.3	78	20-130	
bis(2-Chloroethoxy)methane	ug/L	50	40.5	81	30-130	
bis(2-Chloroethyl) ether	ug/L	50	39.5	79	30-130	
bis(2-Ethylhexyl)phthalate	ug/L	50	44.2	88	50-130	
Butylbenzylphthalate	ug/L	50	49.8	100	50-150	
Chrysene	ug/L	50	45.3	91	50-130	
Di-n-butylphthalate	ug/L	50	48.9	98	50-130	
Di-n-octylphthalate	ug/L	50	46.6	93	50-130	
Dibenz(a,h)anthracene	ug/L	50	47.8	96	40-130	
Dibenzofuran	ug/L	50	39.7	79	40-130	
Diethylphthalate	ug/L	50	44.7	89	40-130	
Dimethylphthalate	ug/L	50	44.2	88	40-130	
Fluoranthene	ug/L	50	43.8	88	30-130	
Fluorene	ug/L	50	40.7	81	20-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

LABORATORY CONTROL SAMPLE: 2861272

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hexachloro-1,3-butadiene	ug/L	50	27.2	54	10-130	
Hexachlorobenzene	ug/L	50	41.5	83	30-130	
Hexachlorocyclopentadiene	ug/L	50	27.0	54	10-150	
Hexachloroethane	ug/L	50	27.5	55	10-130	
Indeno(1,2,3-cd)pyrene	ug/L	50	46.9	94	40-130	
Isophorone	ug/L	50	42.1	84	30-130	
N-Nitroso-di-n-propylamine	ug/L	50	40.0	80	30-130	
N-Nitrosodimethylamine	ug/L	50	35.0	70	10-130	
N-Nitrosodiphenylamine	ug/L	50	42.9	86	30-130	
Naphthalene	ug/L	50	32.2	64	20-130	
Nitrobenzene	ug/L	50	42.2	84	20-130	
Pentachlorophenol	ug/L	100	35.0	35	10-140 v3	
Phenanthrene	ug/L	50	42.2	84	50-130	
Phenol	ug/L	50	26.8	54	10-130	
Pyrene	ug/L	50	45.0	90	50-130	
2,4,6-Tribromophenol (S)	%			84	10-137	
2-Fluorobiphenyl (S)	%			74	13-130	
2-Fluorophenol (S)	%			56	10-130	
Nitrobenzene-d5 (S)	%			83	13-130	
Phenol-d6 (S)	%			46	10-130	
Terphenyl-d14 (S)	%			87	25-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861273 2861274

Parameter	Units	92473288004 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	39.3	33.7	79	67	30-130	15	30	
1,2-Dichlorobenzene	ug/L	ND	50	50	36.7	31.3	73	63	30-130	16	30	
1,3-Dichlorobenzene	ug/L	ND	50	50	34.7	30.4	69	61	20-130	13	30	
1,4-Dichlorobenzene	ug/L	ND	50	50	36.9	32.6	74	65	30-130	12	30	
1-Methylnaphthalene	ug/L	ND	50	50	43.2	38.4	86	77	30-130	12	30	
2,2'-Oxybis(1-chloropropane)	ug/L	ND	50	50	45.1	41.6	90	83	20-130	8	30	
2,4,5-Trichlorophenol	ug/L	ND	50	50	50.7	46.0	101	92	40-130	10	30	
2,4,6-Trichlorophenol	ug/L	ND	50	50	50.6	44.9	101	90	40-130	12	30	
2,4-Dichlorophenol	ug/L	ND	50	50	46.9	43.5	94	87	31-130	7	30	
2,4-Dimethylphenol	ug/L	ND	50	50	46.9	43.3	94	87	30-130	8	30	
2,4-Dinitrophenol	ug/L	ND	250	250	229	231	92	92	30-130	1	30	
2,4-Dinitrotoluene	ug/L	ND	50	50	55.4	51.7	111	103	49-130	7	30	
2,6-Dinitrotoluene	ug/L	ND	50	50	52.3	48.0	105	96	50-130	9	30	
2-Chloronaphthalene	ug/L	ND	50	50	44.4	39.1	89	78	30-130	13	30	
2-Chlorophenol	ug/L	ND	50	50	41.9	39.0	84	78	30-130	7	30	
2-Methylnaphthalene	ug/L	ND	50	50	43.8	39.5	88	79	30-130	10	30	
2-Methylphenol(o-Cresol)	ug/L	ND	50	50	38.0	35.3	76	71	30-130	7	30	
2-Nitroaniline	ug/L	ND	100	100	107	97.6	107	98	40-130	9	30	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861273 2861274												
Parameter	Units	92473288004 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	50	50	52.6	48.7	105	97	20-130	8	30	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	50	50	38.1	35.5	76	71	20-130	7	30	
3,3'-Dichlorobenzidine	ug/L	ND	100	100	113	106	113	106	10-150	7	30	
3-Nitroaniline	ug/L	ND	100	100	107	99.6	107	100	40-130	7	30	
4,6-Dinitro-2-methylphenol	ug/L	ND	100	100	100	95.1	100	95	40-130	5	30	
4-Bromophenylphenyl ether	ug/L	ND	50	50	45.6	41.6	91	83	30-130	9	30	
4-Chloro-3-methylphenol	ug/L	ND	100	100	96.9	90.6	97	91	30-130	7	30	
4-Chloroaniline	ug/L	ND	100	100	91.5	83.0	92	83	20-130	10	30	
4-Chlorophenylphenyl ether	ug/L	ND	50	50	44.6	40.0	89	80	20-130	11	30	
4-Nitroaniline	ug/L	ND	100	100	115	106	115	106	40-130	9	30	
4-Nitrophenol	ug/L	ND	250	250	144	141	57	57	10-130	2	30	
Acenaphthene	ug/L	ND	50	50	45.8	40.7	92	81	30-130	12	30	
Acenaphthylene	ug/L	ND	50	50	46.1	41.0	92	82	30-130	12	30	
Aniline	ug/L	ND	50	50	37.6	34.8	75	70	20-130	8	30	
Anthracene	ug/L	ND	50	50	50.0	46.6	100	93	50-130	7	30	
Benzo(a)anthracene	ug/L	ND	50	50	52.9	50.2	106	100	50-130	5	30	
Benzo(a)pyrene	ug/L	ND	50	50	53.9	50.1	108	100	50-130	7	30	
Benzo(b)fluoranthene	ug/L	ND	50	50	52.9	49.7	106	99	50-130	6	30	
Benzo(g,h,i)perylene	ug/L	ND	50	50	53.5	49.7	107	99	50-130	7	30	
Benzo(k)fluoranthene	ug/L	ND	50	50	54.0	49.1	108	98	50-130	9	30	
Benzoic Acid	ug/L	ND	250	250	114	130	45	52	10-130	13	30	
Benzyl alcohol	ug/L	ND	100	100	83.2	77.6	83	78	20-130	7	30	
bis(2-Chloroethoxy)methane	ug/L	ND	50	50	44.1	40.6	88	81	30-130	8	30	
bis(2-Chloroethyl) ether	ug/L	ND	50	50	41.8	38.4	84	77	30-130	9	30	
bis(2-Ethylhexyl)phthalate	ug/L	ND	50	50	54.5	52.0	109	104	50-130	5	30	
Butylbenzylphthalate	ug/L	ND	50	50	62.2	57.8	124	116	50-150	7	30	
Chrysene	ug/L	ND	50	50	52.1	49.3	104	99	50-130	6	30	
Di-n-butylphthalate	ug/L	ND	50	50	58.7	56.7	115	111	50-130	3	30	
Di-n-octylphthalate	ug/L	ND	50	50	60.7	56.3	121	113	50-130	8	30	
Dibenz(a,h)anthracene	ug/L	ND	50	50	56.1	51.3	112	103	40-130	9	30	
Dibenzofuran	ug/L	ND	50	50	45.7	40.6	91	81	40-130	12	30	
Diethylphthalate	ug/L	ND	50	50	50.1	46.8	100	94	40-130	7	30	
Dimethylphthalate	ug/L	ND	50	50	47.8	43.6	96	87	40-130	9	30	
Fluoranthene	ug/L	ND	50	50	52.2	48.3	104	97	30-130	8	30	
Fluorene	ug/L	ND	50	50	46.3	41.6	93	83	20-130	11	30	
Hexachloro-1,3-butadiene	ug/L	ND	50	50	37.1	31.1	74	62	10-130	17	30	
Hexachlorobenzene	ug/L	ND	50	50	47.4	43.6	95	87	30-130	8	30	
Hexachlorocyclopentadiene	ug/L	ND	50	50	39.4	33.5	79	67	10-150	16	30	
Hexachloroethane	ug/L	ND	50	50	35.4	31.4	71	63	10-130	12	30	
Indeno(1,2,3-cd)pyrene	ug/L	ND	50	50	55.2	50.4	110	101	40-130	9	30	
Isophorone	ug/L	ND	50	50	45.4	42.0	91	84	30-130	8	30	
N-Nitroso-di-n-propylamine	ug/L	ND	50	50	43.5	39.7	87	79	30-130	9	30	
N-Nitrosodimethylamine	ug/L	ND	50	50	38.1	34.6	76	69	10-130	10	30	
N-Nitrosodiphenylamine	ug/L	ND	50	50	48.9	45.6	98	91	30-130	7	30	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2861273 2861274												
Parameter	Units	92473288004		MS		MSD		MS		MSD		Qual
		Result	Conc.	Spike	Conc.	Result	Conc.	% Rec	% Rec	% Rec	% Rec	
Naphthalene	ug/L	ND	50	50	50	41.5	36.0	83	72	20-130	14	30
Nitrobenzene	ug/L	ND	50	50	50	45.4	41.7	91	83	20-130	8	30
Pentachlorophenol	ug/L	ND	100	100	100	88.9	83.3	89	83	10-140	6	30 v3
Phenanthrene	ug/L	ND	50	50	50	49.5	45.8	99	92	50-130	8	30
Phenol	ug/L	ND	50	50	50	27.4	25.7	55	51	10-130	6	30
Pyrene	ug/L	ND	50	50	50	53.1	49.6	106	99	50-130	7	30
2,4,6-Tribromophenol (S)	%							116	107	10-137		
2-Fluorobiphenyl (S)	%							91	80	13-130		
2-Fluorophenol (S)	%							66	60	10-130		
Nitrobenzene-d5 (S)	%							97	86	13-130		
Phenol-d6 (S)	%							47	44	10-130		
Terphenyl-d14 (S)	%							107	100	25-130		

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

QC Batch:	535895	Analysis Method:	EPA 8270E
QC Batch Method:	EPA 3546	Analysis Description:	8270E Solid MSSV Microwave
		Laboratory:	Pace Analytical Services - Charlotte

Associated Lab Samples: 92473288001, 92473288002, 92473288003

METHOD BLANK: 2859153 Matrix: Solid

Associated Lab Samples: 92473288001, 92473288002, 92473288003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	326	74.6	04/15/20 13:27	
1,2-Dichlorobenzene	ug/kg	ND	326	70.5	04/15/20 13:27	
1,3-Dichlorobenzene	ug/kg	ND	326	73.3	04/15/20 13:27	
1,4-Dichlorobenzene	ug/kg	ND	326	71.6	04/15/20 13:27	
1-Methylnaphthalene	ug/kg	ND	326	86.7	04/15/20 13:27	
2,2'-Oxybis(1-chloropropane)	ug/kg	ND	326	90.5	04/15/20 13:27	
2,4,5-Trichlorophenol	ug/kg	ND	326	84.6	04/15/20 13:27	
2,4,6-Trichlorophenol	ug/kg	ND	326	81.8	04/15/20 13:27	
2,4-Dichlorophenol	ug/kg	ND	326	108	04/15/20 13:27	
2,4-Dimethylphenol	ug/kg	ND	326	81.1	04/15/20 13:27	
2,4-Dinitrophenol	ug/kg	ND	1630	1040	04/15/20 13:27	
2,4-Dinitrotoluene	ug/kg	ND	326	86.2	04/15/20 13:27	
2,6-Dinitrotoluene	ug/kg	ND	326	85.2	04/15/20 13:27	
2-Chloronaphthalene	ug/kg	ND	326	72.5	04/15/20 13:27	
2-Chlorophenol	ug/kg	ND	326	75.8	04/15/20 13:27	
2-Methylnaphthalene	ug/kg	ND	326	82.9	04/15/20 13:27	
2-Methylphenol(o-Cresol)	ug/kg	ND	326	72.1	04/15/20 13:27	
2-Nitroaniline	ug/kg	ND	1630	164	04/15/20 13:27	
2-Nitrophenol	ug/kg	ND	326	101	04/15/20 13:27	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	326	81.9	04/15/20 13:27	
3,3'-Dichlorobenzidine	ug/kg	ND	651	227	04/15/20 13:27	
3-Nitroaniline	ug/kg	ND	1630	173	04/15/20 13:27	
4,6-Dinitro-2-methylphenol	ug/kg	ND	651	525	04/15/20 13:27	
4-Bromophenylphenyl ether	ug/kg	ND	326	85.5	04/15/20 13:27	
4-Chloro-3-methylphenol	ug/kg	ND	651	198	04/15/20 13:27	
4-Chloroaniline	ug/kg	ND	651	199	04/15/20 13:27	
4-Chlorophenylphenyl ether	ug/kg	ND	326	84.6	04/15/20 13:27	
4-Nitroaniline	ug/kg	ND	651	161	04/15/20 13:27	
4-Nitrophenol	ug/kg	ND	1630	519	04/15/20 13:27	
Acenaphthene	ug/kg	ND	326	83.8	04/15/20 13:27	
Acenaphthylene	ug/kg	ND	326	77.1	04/15/20 13:27	
Aniline	ug/kg	ND	326	73.1	04/15/20 13:27	
Anthracene	ug/kg	ND	326	84.5	04/15/20 13:27	
Benzo(a)anthracene	ug/kg	ND	326	104	04/15/20 13:27	
Benzo(a)pyrene	ug/kg	ND	326	141	04/15/20 13:27	
Benzo(b)fluoranthene	ug/kg	ND	326	131	04/15/20 13:27	
Benzo(g,h,i)perylene	ug/kg	ND	326	127	04/15/20 13:27	
Benzo(k)fluoranthene	ug/kg	ND	326	137	04/15/20 13:27	
Benzoic Acid	ug/kg	ND	1630	351	04/15/20 13:27	
Benzyl alcohol	ug/kg	ND	651	173	04/15/20 13:27	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

METHOD BLANK: 2859153

Matrix: Solid

Associated Lab Samples: 92473288001, 92473288002, 92473288003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
bis(2-Chloroethoxy)methane	ug/kg	ND	326	86.9	04/15/20 13:27	
bis(2-Chloroethyl) ether	ug/kg	ND	326	69.2	04/15/20 13:27	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	326	107	04/15/20 13:27	
Butylbenzylphthalate	ug/kg	ND	326	86.7	04/15/20 13:27	
Chrysene	ug/kg	ND	326	94.5	04/15/20 13:27	
Di-n-butylphthalate	ug/kg	ND	326	80.3	04/15/20 13:27	
Di-n-octylphthalate	ug/kg	ND	326	186	04/15/20 13:27	
Dibenz(a,h)anthracene	ug/kg	ND	326	130	04/15/20 13:27	
Dibenzofuran	ug/kg	ND	326	81.4	04/15/20 13:27	
Diethylphthalate	ug/kg	ND	326	70.7	04/15/20 13:27	
Dimethylphthalate	ug/kg	ND	326	73.6	04/15/20 13:27	
Fluoranthene	ug/kg	ND	326	98.4	04/15/20 13:27	
Fluorene	ug/kg	ND	326	87.1	04/15/20 13:27	
Hexachloro-1,3-butadiene	ug/kg	ND	326	79.1	04/15/20 13:27	
Hexachlorobenzene	ug/kg	ND	326	82.7	04/15/20 13:27	
Hexachlorocyclopentadiene	ug/kg	ND	326	130	04/15/20 13:27	
Hexachloroethane	ug/kg	ND	326	74.2	04/15/20 13:27	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	326	149	04/15/20 13:27	
Isophorone	ug/kg	ND	326	70.8	04/15/20 13:27	
N-Nitroso-di-n-propylamine	ug/kg	ND	326	91.2	04/15/20 13:27	
N-Nitrosodimethylamine	ug/kg	ND	326	91.6	04/15/20 13:27	
N-Nitrosodiphenylamine	ug/kg	ND	326	83.1	04/15/20 13:27	
Naphthalene	ug/kg	ND	326	78.0	04/15/20 13:27	
Nitrobenzene	ug/kg	ND	326	77.8	04/15/20 13:27	
Pentachlorophenol	ug/kg	ND	651	149	04/15/20 13:27	
Phenanthrene	ug/kg	ND	326	82.0	04/15/20 13:27	
Phenol	ug/kg	ND	326	77.8	04/15/20 13:27	
Pyrene	ug/kg	ND	326	89.6	04/15/20 13:27	
Pyridine	ug/kg	ND	326	82.4	04/15/20 13:27	
2,4,6-Tribromophenol (S)	%	67	27-110		04/15/20 13:27	
2-Fluorobiphenyl (S)	%	69	30-110		04/15/20 13:27	
2-Fluorophenol (S)	%	66	13-110		04/15/20 13:27	
Nitrobenzene-d5 (S)	%	66	23-110		04/15/20 13:27	
Phenol-d6 (S)	%	68	22-110		04/15/20 13:27	
Terphenyl-d14 (S)	%	91	28-110		04/15/20 13:27	

LABORATORY CONTROL SAMPLE: 2859154

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1660	1310	79	52-130	
1,2-Dichlorobenzene	ug/kg	1660	1330	81	51-130	
1,3-Dichlorobenzene	ug/kg	1660	1280	78	50-130	
1,4-Dichlorobenzene	ug/kg	1660	1390	84	49-130	
1-Methylnaphthalene	ug/kg	1660	1290	78	55-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

LABORATORY CONTROL SAMPLE: 2859154

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,2'-Oxybis(1-chloropropane)	ug/kg	1660	1300	78	30-130	
2,4,5-Trichlorophenol	ug/kg	1660	1340	81	55-130	
2,4,6-Trichlorophenol	ug/kg	1660	1320	79	57-130	
2,4-Dichlorophenol	ug/kg	1660	1380	83	56-130	
2,4-Dimethylphenol	ug/kg	1660	1330	81	51-130	
2,4-Dinitrophenol	ug/kg	8280	6150	74	27-133	
2,4-Dinitrotoluene	ug/kg	1660	1350	82	61-130	
2,6-Dinitrotoluene	ug/kg	1660	1360	82	60-130	
2-Chloronaphthalene	ug/kg	1660	1310	79	52-130	
2-Chlorophenol	ug/kg	1660	1380	83	54-130	
2-Methylnaphthalene	ug/kg	1660	1340	81	54-130	
2-Methylphenol(o-Cresol)	ug/kg	1660	1380	83	51-130	
2-Nitroaniline	ug/kg	3310	2550	77	51-130	
2-Nitrophenol	ug/kg	1660	1300	79	49-130	
3&4-Methylphenol(m&p Cresol)	ug/kg	1660	1420	86	11-163	
3,3'-Dichlorobenzidine	ug/kg	3310	2390	72	10-132	
3-Nitroaniline	ug/kg	3310	2480	75	55-130	
4,6-Dinitro-2-methylphenol	ug/kg	3310	2560	77	47-142	
4-Bromophenylphenyl ether	ug/kg	1660	1280	77	59-130	
4-Chloro-3-methylphenol	ug/kg	3310	2820	85	55-130	
4-Chloroaniline	ug/kg	3310	2630	79	54-130	
4-Chlorophenylphenyl ether	ug/kg	1660	1280	77	58-130	
4-Nitroaniline	ug/kg	3310	2610	79	54-130	
4-Nitrophenol	ug/kg	8280	6590	80	48-130	
Acenaphthene	ug/kg	1660	1310	79	60-130	
Acenaphthylene	ug/kg	1660	1330	81	60-130	
Aniline	ug/kg	1660	1310	79	43-130	
Anthracene	ug/kg	1660	1320	80	63-130	
Benzo(a)anthracene	ug/kg	1660	1320	80	59-130	
Benzo(a)pyrene	ug/kg	1660	1340	81	57-130	
Benzo(b)fluoranthene	ug/kg	1660	1390	84	54-130	
Benzo(g,h,i)perylene	ug/kg	1660	1230	74	59-130	
Benzo(k)fluoranthene	ug/kg	1660	1400	84	54-130	
Benzoic Acid	ug/kg	8280	4900	59	19-130	
Benzyl alcohol	ug/kg	3310	2780	84	50-130	
bis(2-Chloroethoxy)methane	ug/kg	1660	1270	77	54-130	
bis(2-Chloroethyl) ether	ug/kg	1660	1300	79	48-130	
bis(2-Ethylhexyl)phthalate	ug/kg	1660	1450	88	45-134	
Butylbenzylphthalate	ug/kg	1660	1430	87	46-138	
Chrysene	ug/kg	1660	1320	80	58-130	
Di-n-butylphthalate	ug/kg	1660	1320	80	60-130	
Di-n-octylphthalate	ug/kg	1660	1420	86	53-130	
Dibenz(a,h)anthracene	ug/kg	1660	1320	80	59-130	
Dibenzofuran	ug/kg	1660	1300	79	60-130	
Diethylphthalate	ug/kg	1660	1350	81	60-130	
Dimethylphthalate	ug/kg	1660	1330	81	60-130	
Fluoranthene	ug/kg	1660	1290	78	65-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

LABORATORY CONTROL SAMPLE: 2859154

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluorene	ug/kg	1660	1310	79	63-130	
Hexachloro-1,3-butadiene	ug/kg	1660	1240	75	46-130	
Hexachlorobenzene	ug/kg	1660	1310	79	58-130	
Hexachlorocyclopentadiene	ug/kg	1660	1120	67	23-130	
Hexachloroethane	ug/kg	1660	1310	79	47-130	
Indeno(1,2,3-cd)pyrene	ug/kg	1660	1230	74	60-130	
Isophorone	ug/kg	1660	1310	79	49-130	
N-Nitroso-di-n-propylamine	ug/kg	1660	1400	84	47-130	
N-Nitrosodimethylamine	ug/kg	1660	1280	77	45-130	
N-Nitrosodiphenylamine	ug/kg	1660	1330	80	59-130	
Naphthalene	ug/kg	1660	1320	80	55-130	
Nitrobenzene	ug/kg	1660	1310	79	49-130	
Pentachlorophenol	ug/kg	3310	2660	80	10-132	
Phenanthrene	ug/kg	1660	1330	80	62-130	
Phenol	ug/kg	1660	1430	86	46-130	
Pyrene	ug/kg	1660	1420	86	53-130	
Pyridine	ug/kg	1660	1060	64	37-130	
2,4,6-Tribromophenol (S)	%			77	27-110	
2-Fluorobiphenyl (S)	%			73	30-110	
2-Fluorophenol (S)	%			78	13-110	
Nitrobenzene-d5 (S)	%			72	23-110	
Phenol-d6 (S)	%			81	22-110	
Terphenyl-d14 (S)	%			86	28-110	

MATRIX SPIKE SAMPLE: 2859155

Parameter	Units	92473309004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	2170	1160	54	18-130	
1,2-Dichlorobenzene	ug/kg	ND	2170	1180	54	14-130	
1,3-Dichlorobenzene	ug/kg	ND	2170	1160	53	12-130	
1,4-Dichlorobenzene	ug/kg	ND	2170	1220	56	10-130	
1-Methylnaphthalene	ug/kg	ND	2170	1270	50	12-130	
2,2'-Oxybis(1-chloropropane)	ug/kg	ND	2170	1150	53	10-130	
2,4,5-Trichlorophenol	ug/kg	ND	2170	1260	58	13-130	
2,4,6-Trichlorophenol	ug/kg	ND	2170	1190	55	17-130	
2,4-Dichlorophenol	ug/kg	ND	2170	1220	56	10-130	
2,4-Dimethylphenol	ug/kg	ND	2170	900	41	10-130	
2,4-Dinitrophenol	ug/kg	ND	10900	5910	54	10-130	
2,4-Dinitrotoluene	ug/kg	ND	2170	1270	58	24-130	
2,6-Dinitrotoluene	ug/kg	ND	2170	1230	57	23-130	
2-Chloronaphthalene	ug/kg	ND	2170	1170	54	19-130	
2-Chlorophenol	ug/kg	ND	2170	1210	55	10-130	
2-Methylnaphthalene	ug/kg	ND	2170	1440	53	18-130	
2-Methylphenol(o-Cresol)	ug/kg	ND	2170	1140	52	10-130	
2-Nitroaniline	ug/kg	ND	4350	2550	59	17-130	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

MATRIX SPIKE SAMPLE:		2859155	92473309004	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers	
2-Nitrophenol	ug/kg	ND	2170	1180	54	10-130		
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	2170	1150	53	10-130		
3,3'-Dichlorobenzidine	ug/kg	ND	4350	1330	31	10-130		
3-Nitroaniline	ug/kg	ND	4350	2320	53	24-130		
4,6-Dinitro-2-methylphenol	ug/kg	ND	4350	2480	57	10-152		
4-Bromophenylphenyl ether	ug/kg	ND	2170	1100	50	29-130		
4-Chloro-3-methylphenol	ug/kg	ND	4350	2300	53	17-130		
4-Chloroaniline	ug/kg	ND	4350	2290	53	14-130		
4-Chlorophenylphenyl ether	ug/kg	ND	2170	1090	50	25-130		
4-Nitroaniline	ug/kg	ND	4350	2230	51	22-130		
4-Nitrophenol	ug/kg	ND	10900	6900	63	10-130		
Acenaphthene	ug/kg	ND	2170	1190	54	20-130		
Acenaphthylene	ug/kg	ND	2170	1170	54	25-130		
Aniline	ug/kg	ND	2170	501	23	10-130		
Anthracene	ug/kg	ND	2170	1250	57	29-130		
Benzo(a)anthracene	ug/kg	ND	2170	1160	53	19-130		
Benzo(a)pyrene	ug/kg	ND	2170	1160	53	12-130		
Benzo(b)fluoranthene	ug/kg	ND	2170	1170	54	14-130		
Benzo(g,h,i)perylene	ug/kg	ND	2170	1150	53	10-130		
Benzo(k)fluoranthene	ug/kg	ND	2170	1200	55	14-130		
Benzoic Acid	ug/kg	ND	10900	3940	36	10-130		
Benzyl alcohol	ug/kg	ND	4350	2450	56	13-130		
bis(2-Chloroethoxy)methane	ug/kg	ND	2170	1130	52	16-130		
bis(2-Chloroethyl) ether	ug/kg	ND	2170	1150	53	11-130		
bis(2-Ethylhexyl)phthalate	ug/kg	ND	2170	1320	61	21-130		
Butylbenzylphthalate	ug/kg	ND	2170	1220	56	23-130		
Chrysene	ug/kg	ND	2170	1210	56	22-130		
Di-n-butylphthalate	ug/kg	ND	2170	1210	55	30-130		
Di-n-octylphthalate	ug/kg	ND	2170	1330	61	23-142		
Dibenz(a,h)anthracene	ug/kg	ND	2170	1140	53	10-130		
Dibenzofuran	ug/kg	ND	2170	1170	54	24-130		
Diethylphthalate	ug/kg	ND	2170	1240	57	26-130		
Dimethylphthalate	ug/kg	ND	2170	1240	57	22-130		
Fluoranthene	ug/kg	ND	2170	1130	52	33-130		
Fluorene	ug/kg	ND	2170	1170	54	22-130		
Hexachloro-1,3-butadiene	ug/kg	ND	2170	1080	50	13-130		
Hexachlorobenzene	ug/kg	ND	2170	1140	52	29-130		
Hexachlorocyclopentadiene	ug/kg	ND	2170	949	44	10-130		
Hexachloroethane	ug/kg	ND	2170	1120	52	10-130		
Indeno(1,2,3-cd)pyrene	ug/kg	ND	2170	1100	51	10-130		
Isophorone	ug/kg	ND	2170	1190	55	13-130		
N-Nitroso-di-n-propylamine	ug/kg	ND	2170	1210	55	12-130		
N-Nitrosodimethylamine	ug/kg	ND	2170	1110	51	11-130		
N-Nitrosodiphenylamine	ug/kg	ND	2170	1260	58	15-130		
Naphthalene	ug/kg	ND	2170	1240	54	15-130		
Nitrobenzene	ug/kg	ND	2170	1200	55	12-130		
Pentachlorophenol	ug/kg	ND	4350	2250	52	10-130		

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

MATRIX SPIKE SAMPLE: 2859155		92473309004	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Phenanthrene	ug/kg	ND	2170	1390	59	27-130	
Phenol	ug/kg	ND	2170	1130	52	10-130	
Pyrene	ug/kg	ND	2170	1200	55	19-130	
Pyridine	ug/kg	ND	2170	568	26	10-130	
2,4,6-Tribromophenol (S)	%				55	27-110	
2-Fluorobiphenyl (S)	%				50	30-110	
2-Fluorophenol (S)	%				50	13-110	
Nitrobenzene-d5 (S)	%				51	23-110	
Phenol-d6 (S)	%				51	22-110	
Terphenyl-d14 (S)	%				52	28-110	

SAMPLE DUPLICATE: 2859156

Parameter	Units	92473309005	Dup	RPD	Max	
		Result	Result		RPD	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	ND		30	
1,2-Dichlorobenzene	ug/kg	ND	ND		30	
1,3-Dichlorobenzene	ug/kg	ND	ND		30	
1,4-Dichlorobenzene	ug/kg	ND	ND		30	
1-Methylnaphthalene	ug/kg	ND	240J		30	
2,2'-Oxybis(1-chloropropane)	ug/kg	ND	ND		30	
2,4,5-Trichlorophenol	ug/kg	ND	ND		30	
2,4,6-Trichlorophenol	ug/kg	ND	ND		30	
2,4-Dichlorophenol	ug/kg	ND	ND		30	
2,4-Dimethylphenol	ug/kg	ND	ND		30	
2,4-Dinitrophenol	ug/kg	ND	ND		30	
2,4-Dinitrotoluene	ug/kg	ND	ND		30	
2,6-Dinitrotoluene	ug/kg	ND	ND		30	
2-Chloronaphthalene	ug/kg	ND	ND		30	
2-Chlorophenol	ug/kg	ND	ND		30	
2-Methylnaphthalene	ug/kg	477	329J		30	
2-Methylphenol(o-Cresol)	ug/kg	ND	ND		30	
2-Nitroaniline	ug/kg	ND	ND		30	
2-Nitrophenol	ug/kg	ND	ND		30	
3&4-Methylphenol(m&p Cresol)	ug/kg	ND	ND		30	
3,3'-Dichlorobenzidine	ug/kg	ND	ND		30	
3-Nitroaniline	ug/kg	ND	ND		30	
4,6-Dinitro-2-methylphenol	ug/kg	ND	ND		30	
4-Bromophenylphenyl ether	ug/kg	ND	ND		30	
4-Chloro-3-methylphenol	ug/kg	ND	ND		30	
4-Chloroaniline	ug/kg	ND	ND		30	
4-Chlorophenylphenyl ether	ug/kg	ND	ND		30	
4-Nitroaniline	ug/kg	ND	ND		30	
4-Nitrophenol	ug/kg	ND	ND		30	
Acenaphthene	ug/kg	ND	ND		30	
Acenaphthylene	ug/kg	ND	ND		30	

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

SAMPLE DUPLICATE: 2859156

Parameter	Units	92473309005 Result	Dup Result	RPD	Max RPD	Qualifiers
Aniline	ug/kg	ND	ND		30	
Anthracene	ug/kg	ND	ND		30	
Benzo(a)anthracene	ug/kg	ND	ND		30	
Benzo(a)pyrene	ug/kg	ND	ND		30	
Benzo(b)fluoranthene	ug/kg	ND	ND		30	
Benzo(g,h,i)perylene	ug/kg	ND	ND		30	
Benzo(k)fluoranthene	ug/kg	ND	ND		30	
Benzoic Acid	ug/kg	ND	ND		30	
Benzyl alcohol	ug/kg	ND	ND		30	
bis(2-Chloroethoxy)methane	ug/kg	ND	ND		30	
bis(2-Chloroethyl) ether	ug/kg	ND	ND		30	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	ND		30	
Butylbenzylphthalate	ug/kg	ND	ND		30	
Chrysene	ug/kg	ND	ND		30	
Di-n-butylphthalate	ug/kg	ND	ND		30	
Di-n-octylphthalate	ug/kg	ND	ND		30	
Dibenz(a,h)anthracene	ug/kg	ND	ND		30	
Dibenzofuran	ug/kg	ND	ND		30	
Diethylphthalate	ug/kg	ND	ND		30	
Dimethylphthalate	ug/kg	ND	ND		30	
Fluoranthene	ug/kg	ND	ND		30	
Fluorene	ug/kg	ND	ND		30	
Hexachloro-1,3-butadiene	ug/kg	ND	ND		30	
Hexachlorobenzene	ug/kg	ND	ND		30	
Hexachlorocyclopentadiene	ug/kg	ND	ND		30	
Hexachloroethane	ug/kg	ND	ND		30	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	ND		30	
Isophorone	ug/kg	ND	ND		30	
N-Nitroso-di-n-propylamine	ug/kg	ND	ND		30	
N-Nitrosodimethylamine	ug/kg	ND	ND		30	
N-Nitrosodiphenylamine	ug/kg	ND	ND		30	
Naphthalene	ug/kg	ND	ND		30	
Nitrobenzene	ug/kg	ND	ND		30	
Pentachlorophenol	ug/kg	ND	ND		30	
Phenanthrene	ug/kg	ND	141J		30	
Phenol	ug/kg	ND	ND		30	
Pyrene	ug/kg	ND	ND		30	
Pyridine	ug/kg	ND	ND		30	
2,4,6-Tribromophenol (S)	%	62	56			
2-Fluorobiphenyl (S)	%	58	55			
2-Fluorophenol (S)	%	55	52			
Nitrobenzene-d5 (S)	%	58	56			
Phenol-d6 (S)	%	57	54			
Terphenyl-d14 (S)	%	66	62			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

QC Batch: 535878

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92473288001, 92473288002, 92473288003

SAMPLE DUPLICATE: 2859108

Parameter	Units	92473309001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.6	19.0	8	25	

SAMPLE DUPLICATE: 2859109

Parameter	Units	92473346009 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	22.3	23.8	7	25	

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QUALIFIERS

Project: FORMER BRAMLETTE MGP J20040272
Pace Project No.: 92473288

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.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
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.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
v2	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORMER BRAMLETTE MGP J20040272

Pace Project No.: 92473288

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92473288004	EB-WQ-20200410	EPA 3510C	536397	EPA 8270E	536529
92473288001	SW-17-SE-20200410 (0-.0.5)	EPA 3546	535895	EPA 8270E	536244
92473288002	SW-17-SE-20200410 (0.5-1.0)	EPA 3546	535895	EPA 8270E	536244
92473288003	SW-17-SE-20200410 (1.0-2.0)	EPA 3546	535895	EPA 8270E	536244
92473288004	EB-WQ-20200410	EPA 8260D	536573		
92473288005	TB-WQ-20200410	EPA 8260D	536573		
92473288001	SW-17-SE-20200410 (0-.0.5)	EPA 5035A	535927	EPA 8260D	536009
92473288002	SW-17-SE-20200410 (0.5-1.0)	EPA 5035A	535927	EPA 8260D	536009
92473288003	SW-17-SE-20200410 (1.0-2.0)	EPA 5035A	535927	EPA 8260D	536009
92473288001	SW-17-SE-20200410 (0-.0.5)	ASTM D2974-87	535878		
92473288002	SW-17-SE-20200410 (0.5-1.0)	ASTM D2974-87	535878		
92473288003	SW-17-SE-20200410 (1.0-2.0)	ASTM D2974-87	535878		

REPORT OF LABORATORY ANALYSIS

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	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
Client Name:
Project #:
WO# : 92473288


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

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

Date/Initials Person Examining Contents:

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

Thermometer: ☒ IR Gun ID: 937061 **Type of Ice:** ☒ Wet ☐ Blue ☐ None

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

Cooler Temp (°C): 2.2 **Correction Factor: Add/Subtract (°C)** 0.0

Cooler Temp Corrected (°C): 2.2

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.	5 Day
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?	☒ Yes ☐ No ☐ N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>WT</u>			
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: _____

	Document Name:	Document Revised: February 7, 2018
	Sample Condition Upon Receipt(SCUR)	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# : 92473288

PM: KLH1

Due Date: 04/17/20

CLIENT: 92-Duke Ener

SL
SL
SL
WT
WT

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)	V5GU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1									—											1								
2									—											1								
3									—											1								
4										2						3												
5																2												
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.

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 1 of 1	
Company: SYNTERRA		Report To: TOM KING		Attention:		REGULATORY AGENCY ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER _____	
Address: 148 RIVER ST, STE 220 GREENVILLE, SC 29601		Copy To:		Company Name:			
Email To: TKING@SYNTERRA.COM		Purchase Order No.:		Address:		Site Location STATE: SC	
Phone: 864-421-9997 Fax:		Project Name: FORMER BRAMLETTE MGP		Place Quote Reference:			
Requested Due Date/TAT: 5-DAY		Project Number:		Place Profile #:			

[illegible]

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	TIM GRANT STBull	4-10-20	1155	STBull	9-10-20	1155	
		4-10-20	1310	Jon Enayon Gre PAK	4-10-20	1310	2r2 y n y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER: <i>TIM GRANT</i>	SIGNATURE of SAMPLER: <i>[Signature]</i>				
DATE Signed (MM/DD/YY): <i>4-10-20</i>					

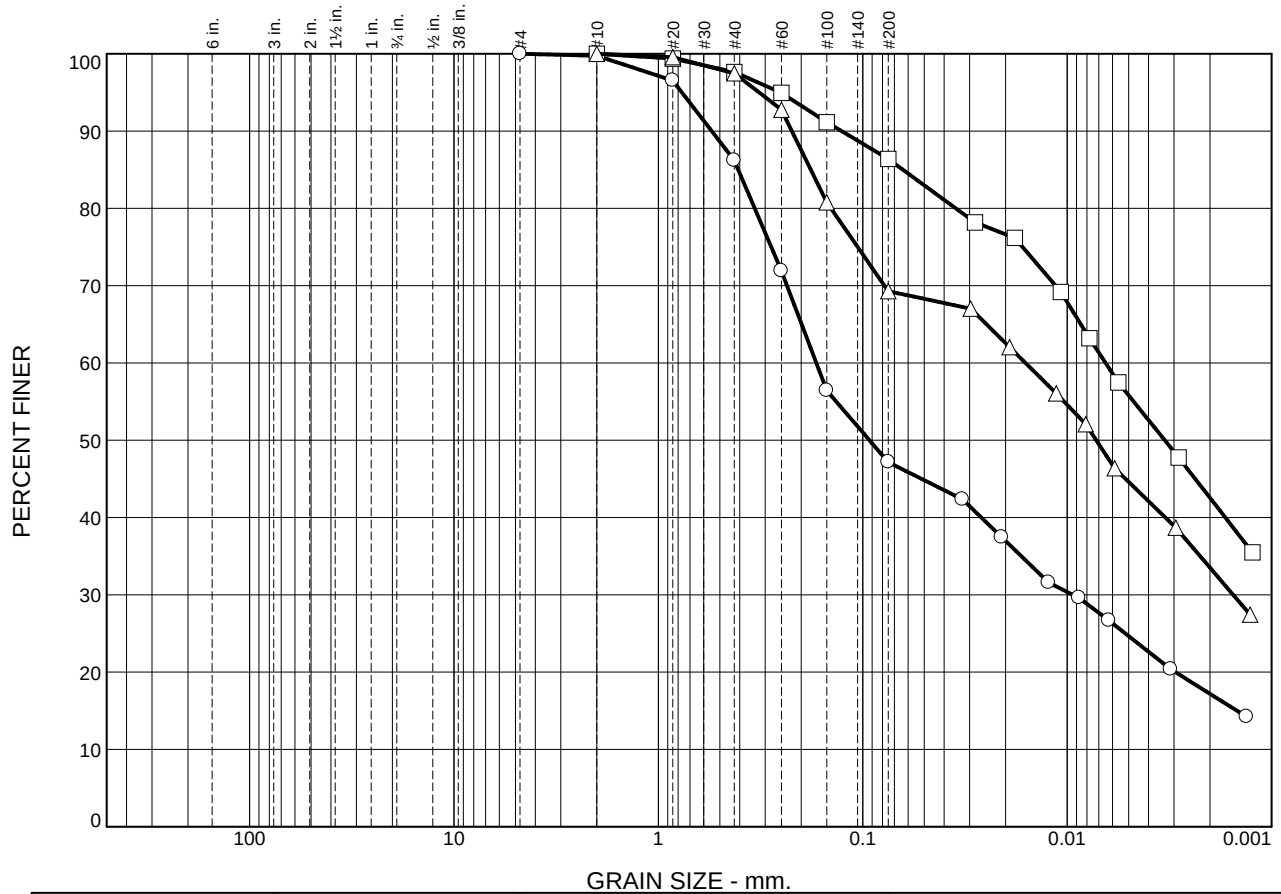
*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

APPENDIX C

Geotechnical Results

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	0.3	13.5	39.0	30.0	17.2
□	0.0	0.0	0.0	0.0	2.4	11.2	43.9	42.5
△	0.0	0.0	0.0	0.0	2.5	28.2	35.8	33.5

SOIL DATA					
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	Boring	SW-14	0.5-1.0	Black silty fi.-med. SAND w/org. (SE-2020-0302)	
□	Boring	SW-16	0.2-1.0	Grey fi. sandy elastic SILT w/org. (SE-2020-0301)	
△	Boring	SW-17	1.0-2.0	Grey fi. sandy elastic SILT (SE-2020-0410)	

Bunnell Lammons Engineering, Inc.

Greenville, SC

Client: Synterra

Project: Bramlette MGP Sediment
1026.801.02

Project No.: J18-5612-03

Figure

APPENDIX L

BASELINE HUMAN HEALTH AND SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT



HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT

**FORMER BRAMLETTE ROAD MGP SITE
GREENVILLE, SOUTH CAROLINA**

JUNE 2020

PREPARED FOR



DUKE ENERGY CAROLINAS, LLC

A handwritten signature in blue ink, reading "Matt Huddleston", written over a horizontal line.

Matt Huddleston, Ph.D.
Senior Scientist

A handwritten signature in blue ink, reading "Heather H. Smith", written over a horizontal line.

Heather Smith
Environmental Scientist

EXECUTIVE SUMMARY

Duke Energy Carolinas, LLC (Duke Energy) entered a Responsible Party Voluntary Cleanup Contract (VCC 16-5857-RP) with the South Carolina Department of Health and Environmental Control (SCDHEC) on July 29, 2016. The VCC pertains to the former Bramlette Road manufactured gas plant (MGP) property (Parcel 1) and four contiguous parcels of property (Parcels 2 through 5), collectively referred to as the Site. Terms of the contract require that a groundwater remedial investigation (RI) with the following objectives be conducted:

- Determine the source, nature, and extent of constituents of interest (COIs) in groundwater resulting from past operation of the MGP.
- Submit a baseline risk assessment or other evaluation of human health and the environment.
- If requested by SCDHEC, submit a feasibility study (FS) or other evaluation of remedial alternatives.

Since the VCC was signed in 2016, Duke Energy has performed extensive assessment activities.

This report provides results from a human health risk assessment (HHRA) and screening level ecological risk assessment (SLERA) of the former Bramlette MGP Site. A baseline HHRA was performed for a construction worker exposure scenario using constituent concentrations in historical and current groundwater samples. A phased, screening level approach was also taken to assess potential human health risk from exposure to surface water and soil/sediment. In addition, a SLERA was performed to assess potential effects on wildlife receptors.

Several constituents of potential concern (COPCs) associated with human exposure were identified in groundwater, soil, and sediment samples. In accordance with the typical risk assessment framework, a scientific/management decision is warranted. Next steps could focus on whether to refine the baseline risk assessment for current and future human receptors or whether to implement risk management/remedial measures.

The following conclusions were made for the construction worker exposure scenario:

- Risks associated with incidental ingestion of groundwater, were not identified.
- Non-cancer risks associated with dermal exposure were not identified

- Dermal cancer risks were identified.
- Inhalation cancer risks and non-cancer risks were identified.
- Cumulative risks to a construction worker associate with incidental ingestion, dermal contact, and inhalation of vapors from groundwater exposure are indicated by a cancer risk value of 1.92×10^{-4} and a non-cancer hazard index of 121. Potential cancer risks are indicated by values greater than 1×10^{-4} . Potential non-cancer risks are indicated by hazardous quotients (HQs) greater than 1.0.

Surface and sub-surface soil samples collected in the previously excavated area, Parcels 1 and 2, were evaluated to determine whether additional remediation is warranted. Analytes detected in soil samples were compared to USEPA RSLs per the methods outlined in this human health risk assessment. Analytes greater than the screening values were retained for a baseline assessment for construction worker and potential residential exposure scenarios. Output from the risk model was used to calculate Site Specific Remediation Goals (SSRGs).

There is no evidence of risks to a construction worker exposed to soils remaining in the previously excavated area, Parcels 1 and 2. Cumulative cancer risk values do not exceed 1×10^{-6} , and non-cancer HQs do not exceed 0.1. For the residential scenario to surface soils, the cumulative cancer risk is 8.7×10^{-6} , indicating a potential cancer risk in excess of the ELCR. There is no indication of non-cancer risk for the residential exposure scenario ($HQ = 4.3 \times 10^{-2}$). Focused remediation of surface soil in areas of elevated PAH concentrations may be warranted for protection of human health in a residential exposure setting.

The SLERA included a comparison of constituents to published ecological screening levels. Constituents detected at concentrations greater than ecological screening levels are recommended for further evaluation. The following conclusions were made:

- **Surface water.** On-Site and off-Site surface water analytical results for all constituents were less than corresponding ecological screening values.
- **Surface soil.** Sixty-four (64) percent of constituents evaluated were less than corresponding ecological screening values, with 11 constituents identified as COPCs.
- **Sub-surface soil.** Forty-nine (49) percent of constituents evaluated were less than corresponding ecological screening values, with 16 constituents identified as COPCs.

- **Sediment.** Twenty-six (26) percent of constituents analyzed in on-Site sediments were less than corresponding screening levels, with 20 identified as COPCs. Sixteen (16) percent of constituents analyzed in off-Site sediments were less than corresponding screening levels, with , 10 constituents identified as COPCs.

Several COPCs associated with ecological exposure were identified in soil and sediment samples. In accordance with the typical risk assessment framework, a scientific/management decision is warranted. Next steps could focus on whether to refine the baseline ecological risk assessment to evaluate whether COPCs pose potential risks to wildlife or whether to implement risk management/remedial measures.

Based on risk assessment findings, evaluation of remedial alternatives is recommended to manage affected groundwater at the Site. Additional evaluation of ecological COPCs in soil and sediment is recommended.

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- Attachment 1 Data Sets (Provided Electronically)
- Attachment 2 Human Health Screening
- Attachment 3 Human Health EPC Summary
- Attachment 4 Human Health Risk Calculations
- Attachment 5 Ecological Checklists
- Attachment 6 Ecological Screening

LIST OF ACRONYMS AND ABBREVIATIONS

µg/L	micrograms per liter
ADD	average daily dose
ASTDR	Agency for Toxic Substances and Disease Registry
CSF	carcinogenic slope factor
CSM	conceptual site model
COPC	constituent of potential concern
Duke Energy	Duke Energy Carolinas, LLC
ELCR	excess lifetime cancer risk
EPC	exposure point concentration
ESV	ecological screening values
FS	feasibility study
HEAST	health effects assessment summary tables
HHRA	human health risk assessment
HI	hazard index
HQ	hazard quotient
IRIS	integrated risk information systems
Kg	kilogram
MCL	maximum contaminant level
Mg	milligram
MGP	manufactured gas plant
NAPL	non-aqueous phase liquid
ORNL	Oak Ridge National Laboratory
PAHs	polycyclic aromatic hydrocarbons
POG	Protection of Groundwater
RAGS	risk assessment guidance for Superfund
RfC	reference concentration
RI	remedial investigation
RIWP	remedial investigation work plan
RWIP-A	remedial investigation work plan addendum
RME	reasonable maximum exposure
RSL	regional screening level
SCDHEC	South Carolina Department of Health and Environmental Control
Site	Former Bramlette Road MGP Site (refers to entire property)
SSLs	Soil Screening Levels
SLERA	Screening Level Ecological Risk Assessment
UCL	upper confidence limit
USEPA	U.S. Environmental Protection Agency

LIST OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

USGS	United States Geological Survey
VCC	Voluntary Cleanup Contract
VOA	volatile organic aromatic compound
VOC	volatile organic compounds

1.0 INTRODUCTION

Duke Energy Carolinas, LLC (Duke Energy) is conducting a remedial investigation (RI) at the site of the former Bramlette manufactured gas plant (MGP) located at 400 East Bramlette Road in Greenville, South Carolina (Figure 1-1). The RI is being conducted under a Responsible Party Voluntary Cleanup Contract (VCC 16-5857-RP) with the South Carolina Department of Environmental Control (SCDHEC) dated July 29, 2016.

Human health and ecological risk evaluations were conducted as a component of the RI. This baseline human health risk assessment (HHRA) was performed to evaluate historical and new groundwater data as described in Section 4.5 of the RI workplan (ERM 2018). A phased, screening level approach was performed to assess potential human health risks from exposure to surface water and soil/sediment. In addition, surface and sub-surface soil samples collected in the previously excavated area, Parcels 1 and 2, were evaluated to assess remedy effectiveness. A screening level ecological risk assessment (SLERA) was performed to assess potential effects on wildlife at and near the Site. The screening level assessments will assist in determining whether additional sampling is necessary and whether further risk analyses are warranted.

An overview of the methodology and procedures that were used to estimate potential human health and ecological risks posed by constituents detected at the Site are presented in the Groundwater Remedial Investigation Work Plan Addendum (ERM, 2016).

The Site is approximately 30 acres and is bounded generally by the CSX Transportation (CSXT) railroad corridor to the north, west, and south and West Washington Street, the Legacy Charter School, and the City of Greenville Sanitation Department to the east. The Reedy River and Swamp Rabbit Trail define the western boundary of the site. The Site is identified by County of Greenville as Tax Map Serial Numbers:

- 0140000300300 - Parcel 1
- 0140000300200 – Parcel 2
- 0138000100100 – Parcel 3
- 0054000300100 – Parcel 4
- 0054000600100 – Parcel 5

Former MGP operations were conducted on Parcel 1. Active railroad operations are conducted in Parcel 2, and a CSXT field office is located in Parcel 3. An unpermitted

landfill (Vaughn Landfill) is contained within Parcel 3. Parcel 1, 4, and 5 are vacant lots. The surrounding area is mixed-use, including industrial, vacant lots, recreation (Swamp Rabbit Trail), residential, and the school.

1.1 Background

The VCC summarizes extensive assessment and remediation activities that have been conducted at the former MGP facility (Parcel 1). The former Vaughn Landfill is unrelated to the former Bramlette MGP facility but was concurrently investigated during previous assessment work. In correspondence dated February 26, 2001, regarding the former Vaughn Landfill parcel, SCDHEC noted that removal of the landfill debris was not recommended and that the only required action was continued groundwater monitoring near the landfill. This determination was supported based on SCDHEC's evaluation of Site risk conditions and recognition of the following facts and conclusions:

- The MGP-related non-aqueous phase liquid (NAPL) is viscous and relatively non-mobile
- The areal extent of constituents in groundwater was stable
- Biological assessments of the area demonstrated that the MGP-related constituents were not significantly affecting flora and fauna
- Surface water or downstream/downgradient effects related to the MGP were not observed
- Drinking water wells within 0.5 miles of the Site were not identified

In a February 2001 letter to the United States Army Corps of Engineers, SCDHEC recommended CSXT perform off-Site mitigation rather than on-Site mitigation to compensate for wetland effects attributed to the unpermitted landfill. CSXT was responsible for and completed the recommended mitigation.

Previous remedial actions performed at the Site included removing the primary areas of MGP-related source material. Monitoring data show an overall trend of stable to decreasing COI concentrations.

Previous investigations have characterized the general extent of the residual NAPL associated with the drainage ditches at the Site. Groundwater monitoring wells, temporary wells, soil borings, and surface water and sediment sampling locations are presented in Figure 3-10 of the RI (SynTerra 2020). Findings from the additional

investigations identified areas where additional focused investigation will achieve requirements of the VCC.

This baseline HHRA and SLERA are components of the RI activities.

1.1.1 Regulatory Framework/ Risk Assessment Process

For evaluating potential human health effects, the baseline and screening level assessments were conducted in accordance with the following United States Environmental Protection Agency (USEPA) guidance:

- Risk Assessment Guidance for Superfund, Volume 1: Human Health Evaluation Manual, Part A (1989)
- Risk Assessment Guidance for Superfund, Volume 1: Human Health Evaluation Manual, Part B - Development of Preliminary Remediation Goals (1991a)
- Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors (1991b)
- Guidelines for Exposure Assessment (1992);
- Guidelines for Cancer Risk Assessment (1996a, 1999, 2003b)
- Soil Screening Guidance: Users Guide and Technical Background Document (1996b)
- Risk Assessment Guidance for Superfund, Volume 1: Human Health Evaluation Manual, Part D - Standardized Planning, Reporting, and Review of Superfund Risk Assessments (2001)
- Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites (2002a)
- Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (2002b)
- Risk Assessment Guidance for Superfund, Volume 1: Human Health Evaluation Manual, Part E - Supplemental Guidance for Dermal Risk Assessment (2004)
- Exposure Factors Handbook 2011 Edition (Final Report) EPA/600/R-09/052F (2011)

- Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors Office of Solid Waste and Emergency Response Directive 9200.1-120 (2014)
- Regional Screening Levels Tables (November 2019 or current version)

1.1.2 Purpose

The purpose of this baseline HHRA and SLERA is to evaluate potential risks associated with COIs that might remain in environmental media on-Site and in the vicinity. This risk assessment, along with the RI, will be used to focus an evaluation of remedial alternatives.

1.1.3 Risk Evaluation Process

The HHRA includes four steps defined by the National Academy of Sciences (1983) in their report, "Risk Assessment in the Federal Government: Managing the Process." These steps include:

1. Hazard Identification
2. Exposure Assessment
3. Toxicity Assessment
4. Risk Characterization

This assessment was prepared consistent with the risk assessment process as outlined in guidance documents listed previously in this report.

1.2 Current Site Conditions

The MGP was constructed in 1917 and operated until 1952. Most of the operational structures were demolished by 1958. However, review of aerial photography indicates gas holders and foundations remained in place through the 1970s. Duke Energy assumed ownership and operation of the MGP in 1939 and sold the property and operations to Piedmont Natural Gas in 1951. Property transactions from 1963 to 1967 transferred ownership of the five parcels to Seaboard Coast Line Railroad Company also known as CSX Transportation, Inc. (CSXT).

Vaughn Construction placed construction and demolition material on Parcel 3 from 1988 to 1993. SCDHEC directed CSXT to evaluate and mitigate damage to wetlands caused by the unpermitted landfill in 1995. During the evaluation of the Vaughn Landfill, NAPL was encountered, resulting in the involvement of Duke Energy with the assessment and remediation of the Bramlette Road properties. Removal of soil and material affected by NAPL from Parcel 1 was planned and implemented in 2000 and

2001. This effort was completed in 2002 with the removal of 61,088 tons of affected soil and debris.

Routine groundwater monitoring occurred from 2003 to 2016, when the VCC was signed. A remedial investigation work plan (RIWP) was developed and implemented in 2016 and 2017. A remedial investigation work plan addendum (RWIP-A) was developed and implemented in 2018 and the first quarter of 2019.

1.3 Site History

The MGP was constructed in 1917 and operated until 1952. Most of the operational structures were demolished by 1958. However, review of aerial photography indicates gas holders and foundations remained in place through the 1970s. Duke Energy assumed ownership and operation of the MGP in 1939 and sold the property and operations to Piedmont Natural Gas in 1951. Property transactions from 1963 to 1967 transferred ownership of the five parcels to Seaboard Coast Line Railroad Company also known as CSX Transportation, Inc. (CSXT).

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Routine groundwater monitoring occurred from 2003 to 2016, when the VCC was signed. A RIWP was developed and implemented in 2016 and 2017. A RWIP-A was developed and implemented in 2018 and the first quarter of 2019.

A detailed accounting of ownership history, previous investigation, and project reporting is included as Appendix A of the RI report (SynTerra 2020).

2.0 HUMAN HEALTH RISK ASSESSMENT

2.1 Methodology

This report has been prepared in a manner consistent with risk assessment guidance available from the USEPA. References to specific guidance documents are provided in the text of the report. The assessment consists of two primary components: 1) a human health risk assessment and 2) an ecological risk assessment.

2.2 Hazard Identification and COPC Selection

The hazard identification process: 1) evaluates the nature and extent of constituents reported at the Site and 2) selects a subset of constituents of potential concern (COPCs). Regarding the hazard identification, all analytical data was compiled (**Attachment A**). From this compilation, the data was analyzed for risk assessment purposes. The components of the hazard identification are described in the following sections.

Based on the results of previous site investigations, the targeted COPCs at the Site are volatile organic compounds (VOCs), primarily benzene, toluene, ethylbenzene, and xylene (BTEX), and polynuclear aromatic hydrocarbons, primarily naphthalene.

2.3 Exposure Assessment

The exposure assessment evaluates the likelihood, magnitude, and frequency of exposure to the COPCs, and identifies pathways and routes by which human receptors may be exposed to these constituents. The physical characteristics of the Site are examined to identify pathways by which human receptors may be exposed to constituents at the Site. Exposure scenarios are developed based on demographics, land use, and general human behavior patterns. Intake factors are subsequently developed for the identified receptor populations under the defined conditions of exposure. The preliminary risk assumptions are presented in the following sections.

2.3.1 Human Health Conceptual Site Model

A human health conceptual site model (CSM) was developed to guide identification of exposure pathways, exposure routes, and potential receptors for evaluation. The CSM describes the sources and potential migration pathways through which groundwater migration from the source area to other environmental media and, in turn, to potential human and ecological receptors. The linkage between a source, the receiving medium, and a point of potential

exposure is called an exposure pathway. For an exposure pathway to be complete, the following conditions must exist (USEPA, 1989):

1. A source and mechanism of chemical release to the environment
2. An environmental transport medium (e.g., air, water, soil)
3. A point of potential contact with the receiving medium by a receptor
4. A receptor exposure route at the point of contact (e.g., inhalation, ingestion, dermal contact)

The CSM is meant to be a “living” model that can be updated and modified as additional data and information become available.

The human health risk assessment CSM for the Site was developed by:

1. Identifying receiving media where COPCs might be present
2. Identifying the exposure setting and current and future land uses, which allowed for identification of receptor populations
3. Identifying the exposure routes applicable to each of the receptor populations and receiving media

The CSM identifies potentially complete exposure pathways for specific land-use populations. **Figure 2** presents the CSM which serves as the basis of this risk evaluation.

2.3.2 Receiving Media

COPCs potentially could migrate from the source area to soil, groundwater, surface water, sediment, and air. Principal migration pathways could include: 1) infiltration and percolation of rainwater through the source area, resulting in leaching of COPCs into soil beneath the source area and subsequently to groundwater, 2) migration of COPCs in groundwater and subsequent discharge of groundwater to the land surface or directly to surface water, and 3) surface run-off and erosion into surface water bodies. Particles eroded into surface water can settle as submerged sediment. COPCs in groundwater discharge to surface water can adsorb to sediment. COPCs in soil and surface water can be potentially taken up by plants, fish, and other aquatic organisms. COPCs in unsaturated

media may be entrained as dust in outdoor air. Potential receiving media include:

- Outdoor air
- Groundwater
- Soil
- Sediment
- Surface water

2.3.3 Identification of Potentially Exposed Populations

The identification of potential human receptors is based on several factors, including current and future anticipated land use and groundwater usage. This information will be the basis to identify individuals working and/or engaging in activities on the Site, both currently and potentially in the future.

The former MGP site is located on property owned by Duke Energy. Land use surrounding the property not under the control of Duke Energy may include undisturbed open space, rural areas, recreational areas, and water bodies. Considering all potential human receptor populations that may frequent the Site and the anticipated pathways of exposure by which the receptors could contact each medium, potential current and future receptors include the following:

Current Land Use

- CSX Site workers
- Trespassers/recreators (adolescent receptors represent the most sensitive age group of this population).

Future Land Use

- Construction/utility workers,
- Site workers
- Trespassers/recreators (adolescent receptors represent the most sensitive age group of this population).

For each of these potentially exposed populations, potential exposure pathways are described in the following sections.

2.3.4 Identification of Potential Exposure Pathways

The initial step is to identify the exposure pathways to be evaluated in the HHRA. As stated in Section 2.3.1, a pathway must include four elements for consideration: source, transport medium, potential point of contact, and exposure route.

Considering each of the required elements, each sampled medium (surface water, sediment, and groundwater) may be considered a potential transport medium for constituent migration in the HHRA. Potential receptors may contact constituents in surface water and sediment through ingestion, dermal contact, and/or inhalation. These media may be contacted directly or through a secondary exposure medium such as the atmosphere.

Thus, considering all potential human receptor populations that may frequent the Site, and the anticipated pathways of exposure by which the receptors could contact each medium, the plausible receptor and exposure pathways include: 1) current land use and 2) plausible future land use. For both, it is anticipated that the land use will remain commercial/industrial, as there are no known plans for redevelopment of this Site.

Current and Plausible Future Land Use

Plausible receptor and exposure pathways include the construction worker scenario. Construction/utility workers may contact affected media while conducting construction/utility maintenance activities, specifically those requiring subsurface disturbance. Construction/utility workers may contact shallow groundwater while conducting subsurface activities (*i.e.*, excavation/trenching activities) via incidental ingestion, dermal contact, and inhalation of vapors. The construction/utility worker route of exposure is included in the HHRA, consistent with the Groundwater RI Work Plan Addendum (ERM, 2016).

Site Worker Scenario

Workers could also be exposed to constituents in surface water and sediment via incidental ingestion, dermal contact, and inhalation of vapors and released particulates while conducting maintenance activities. In addition, Site workers may indirectly contact vapors (via inhalation) that may migrate from subsurface soil and/or groundwater into the railroad field office. This potential route of exposure was evaluated in the screening level assessment.

Trespasser/Recreator Scenario

Trespassers/recreators could be exposed to constituents via incidental ingestion, dermal contact, and inhalation of vapors and particulates released from surface water and sediment. This potential route of exposure was evaluated in the screening level assessment.

Recreators using the Swamp Rabbit Trail could trespass onto the adjacent Site and contact surface water and sediment in the floodplain area. This potential route of exposure was evaluated in the screening level assessment.

2.4 Results of Screening Level Assessment

The human health risk assessment consisted of a screening level approach to assess potential risks from exposure to surface water and soil/sediment and a baseline assessment using historical and new groundwater data.

Surface soil, sub-surface soil, sediment, surface water, and groundwater analytical data were compared to USEPA-recommended screening levels. Screening levels used in the initial phase of the HHRA included:

- Residential and industrial soil regional screening levels (RSLs)
- Risk-based soil screening levels (SSLs)
- Federal maximum contaminant levels (MCLs)
- Tap water RSLs

Due to the conservative methods used to derive screening levels, it can be assumed with reasonable certainty that constituent concentrations less than screening levels will not result in adverse health effects and that further evaluation is not necessary. Concentrations greater than conservative screening levels do not necessarily indicate the existence of a potential risk but rather that further evaluation is warranted.

Constituents with a maximum detected concentration less than screening levels were not carried forward in the groundwater baseline risk assessment. A total of 33 constituents were evaluated, and a summary of the identified COPCs by medial and exposure pathway are summarized below:

- **Surface water.** On-Site and off-Site surface water analytical results for all constituents were less than corresponding screening values.

- **Groundwater.** Eighty-two (82) percent of constituents evaluated were less than corresponding screening values. Six constituents, including three polycyclic aromatic hydrocarbons (PAHs), one volatile organic aromatic compound (VOA), and two additional VOCs, were identified as COPCs.
- **Surface soil.** Ninety-seven (97) percent of constituents evaluated were less than corresponding industrial screening criteria, with only benzo(a)pyrene identified as a COPC. Eighty-five (85) percent of constituents evaluated were less than corresponding residential screening criteria, with five PAHs identified as COPCs.
- **Sub-surface soil.** Eighty-five (85) percent of constituents evaluated were less than corresponding industrial screening values, with five PAHs identified as COPCs. Eighty-two (82) percent of constituents evaluated were less than the corresponding residential screening values, with seven constituents identified as COPCs.
- **Sediment.** Eighty-nine (89) percent of constituents analyzed in on-Site sediments were less than corresponding industrial screening levels, with three COPCs. Seventy-eight (78) percent of constituents analyzed in on-Site sediments were less than corresponding residential screening levels, with six COPCs identified. Off-Site sediment constituent concentrations did not result in a concentration greater than industrial screening criteria. Only one constituent, benzo(a)pyrene was identified as a COPC for off-Site sediment when compared to residential screening levels.

Below is a summary of human health COPCs by media:

Medium/ Screening Levels	COPC
On-Site surface water	None
Off-Site surface water	None
Groundwater	Naphthalene 1-Methylnaphthalene 2-Methylnaphthalene Benzene 2,4-Dinitrotoluene Dibenzofuran
Surface soil (industrial screening levels)	Benzo(a)pyrene
Surface soil (residential screening levels)	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene
Sub-surface soil (industrial screening levels)	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Dibenz(a,h)anthracene Naphthalene
Sub-surface soil (residential screening levels)	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Dibenz(a,h)anthracene Naphthalene
On-Site sediment (industrial screening levels)	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene
On-Site sediment (residential screening levels)	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Naphthalene
Off-Site sediment (industrial screening levels)	None
Off-sediment (residential screening levels)	Benzo(a)pyrene

Several COPCs associated with human exposure were identified in groundwater, soil, and sediment samples. In accordance with the typical risk assessment framework, a scientific/management decision is warranted. Next steps could focus on whether to refine the baseline risk assessment for current and future human receptors or whether to implement risk management/remedial measures.

2.5 Baseline Human Health Risk Characterization

The groundwater COPCs identified in Section 2.4 are further evaluated in the baseline HHRA. Results of the baseline HHRA are presented in the following sections.

2.5.1 Identification of Exposure Scenarios

The exposure scenario for evaluation in the risk assessment, as outlined in the Groundwater RI Work Plan Addendum (ERM, 2016), is a future construction worker exposure scenario.

The baseline HHRA evaluates the hypothetical exposure of a Site construction worker to constituents in groundwater. Exposure may occur through incidental ingestion, dermal contact, and inhalation of vapors. Standard exposure equations and procedures consistent with Risk Assessment Guidance for Superfund (RAGS) Parts A, E, and F (USEPA, 1989; 2004; 2009) were used to quantify risks under the construction worker scenario.

At the former MGP site, construction activities might occur during remedial activities. Remedial activities might result in exposure to potentially affected groundwater because the depth of typical excavations can range from 0-15 feet. While construction workers are not likely to be exposed to groundwater for drinking water purposes, they might be exposed during trenching if groundwater is encountered.

2.5.2 Exposure Point Concentrations

Exposure point concentrations (EPCs) were calculated for each groundwater COPC and are included in **Attachment 3**. USEPA defines the EPC as the representative chemical concentration a receptor might contact in an exposure area over the exposure period (USEPA, 1989).

The typical concept of human exposure within a defined exposure area is that an individual contacts the associated environmental medium on a periodic and random basis. Because of the repeated nature of such contact, human exposure does not really occur at a fixed point; instead, it occurs at a variety of points with equal likelihood that any given point within the exposure area will be the contact

location on any given day. Thus, USEPA states that EPCs should be the arithmetic averages of the chemical concentrations within the exposure area (USEPA, 2002). However, to account for uncertainty in estimating the arithmetic mean concentration that might occur due to matrix heterogeneity, spatial variability, and/or temporal variability, the USEPA recommends that an upper confidence limit (UCL) be used to represent the EPC (USEPA, 2002).

The UCL values were calculated using the software package ProUCL (V. 5.1; USEPA, 2016) based on dataset distribution. In accordance with USEPA guidance, EPCs are based on the lesser of the 95 percent UCL on the arithmetic mean concentration (95 percent UCL value) or the maximum detected concentration in the data set (USEPA, 2002). Summary statistics for all COPCs retained for further evaluation are presented in **Attachment 3**.

Risk levels of COPCs in trench air from shallow groundwater were calculated using a model developed by the Virginia Department of Environmental Quality (VADEQ) for the Virginia Voluntary Remediation Program (**Attachment 4**). This model assumes that the depth to groundwater is less than 15 feet and that a construction worker would encounter groundwater when digging an excavation or a trench. To estimate the migration of volatile COPCs in groundwater to air in a construction or utility trench, the VADEQ trench model uses a combination of a vadose zone model to estimate volatilization of gases from groundwater into a trench and a box model to estimate dispersion of the constituents from the air inside the trench into the aboveground atmosphere. Specific exposure assumptions for this model includes the site groundwater temperature and assumes that the trench dimension is 3 feet wide by 8 feet long and the construction worker is exposed up to 125 days/year (VADEQ's default values).

2.5.3 Quantification of Exposure

To estimate the potential risk to human health that may be posed by the presence of COPCs, it is first necessary to estimate the potential exposure dose of each COPC. The exposure dose is estimated for each constituent via each exposure pathway by which the receptor is assumed to be exposed. Exposure dose equations combine the estimates of constituent concentrations in the environmental medium of interest with assumptions regarding the type and magnitude of each receptor potential exposure to provide a numerical estimate of the exposure dose. The exposure dose is defined as the amount of COPC acquired by the receptor and is expressed in units of milligrams of COPC per kilogram of body weight per day (mg/kg-day).

Exposure doses are defined differently for potential carcinogenic and noncarcinogenic effects. The chronic average daily dose is used to estimate a receptor potential intake from exposure to a COPC with non-carcinogenic effects. According to USEPA (1989a), the chronic average daily dose should be calculated by averaging the dose over the period of time for which the receptor is assumed to be exposed. Therefore, the averaging period is the same as the exposure duration. For COPCs with potential carcinogenic effects, however, the lifetime average daily dose is employed to project potential exposures. In accordance with USEPA guidance (USEPA 1989), the lifetime average daily dose is calculated by averaging exposure over the assumed lifetime of a receptor of 70 years. Therefore, the averaging period is the same as the assumed lifetime of a receptor.

COPC-specific chronic daily intakes (doses) for the receptors and pathways selected for quantitative evaluation in the HHRA were calculated using USEPA equations (USEPA 1989) for all exposure scenarios.

Using the equations below for incidental ingestion, dermal contact, and inhalation, an average daily dose were calculated to compare to a reference dose. The comparison results in a hazard quotient for use in risk characterization. Exposure factors used in the groundwater exposure equations are presented in Attachment 4.

Future Construction Worker Groundwater Intake Equations:

Equation 1: Incidental Ingestion Dose

$$(mg/kg/day) = \frac{EPC_W * IR_W * EF * ED}{BW * AT}$$

Equation 2: Dermal Absorbed Dose

$$(mg/kg/day) = \frac{DA_{event} * EV * ED * EF * SA}{BW * AT}$$

DA_{event} for Organics

If, ($t_{event} \leq t$) then,

$$DA_{event} = 2 * FA * K_p * EPC_W \frac{\sqrt{6\tau * t_{event}}}{\pi}$$

If, ($t_{event} > t^*$) then,

$$DA_{event} = FA * K_p * EPC_W \left\{ \frac{t_{event}}{1 + B} + 2 \tau_{event} \frac{1 + 3B + 3B^2}{(1 + B)^2} \right\}$$

Equation 3: Inhalation Dose

$$(mg/m^3) = \frac{(CA * ET * EF * ED)}{AT}$$

Inhalation risk was calculated as follows:

CA= use VADEQ trench model

2.5.4 Toxicity Assessment

The toxicity assessment incorporates toxicity indices from sources identified in Human Health Toxicity Values in Superfund Risk Assessments (EPA, 2003a). Current toxicological indices (*i.e.*, carcinogenic slope factors and reference doses) were identified for each COPC according to the following hierarchy:

- USEPA Integrated Risk Information System (IRIS), an on-line toxicity database updated monthly by USEPA
- USEPA Provisional Toxicity Values, as provided in the USEPA RSL Table
- Other sources [*e.g.*, the Health Effects Assessment Summary Tables, (HEAST) and other toxicological information sources, such as the California EPA and the Agency for Toxic Substances and Disease Registry (ATSDR)]

Section 4 of the RI contains additional information regarding the nature and extent of constituents in environmental media. VOCs and PAHs are COIs at the Site. Benzene and naphthalene have been selected as representative COIs to evaluate the nature and extent of affected groundwater. The following information is included in **Attachment 4** for each carcinogenic COPC:

- The current carcinogenic slope factor (CSF) from USEPA's Integrated Risk Information System (IRIS) or the other sources as listed in **Attachment 4**
- Weight-of-evidence narrative summary
- Type of cancer for Class A carcinogens

Oral exposures are used to evaluate dermal exposures through route-to-route extrapolation from the oral CSF to a dermal CSF.

The following information is included in **Attachment 4** for each non-carcinogenic COPC:

- Current reference doses and reference concentrations
- Target organ(s) and uncertainty factors

2.6 Risk Characterization

Once non-carcinogenic and carcinogenic daily intake is calculated for incidental ingestion, dermal, and inhalation exposure then a non-carcinogenic hazard quotient (HQ) or carcinogenic excess lifetime cancer risk (ELCR) is calculated according to Equations 4 and 5 (USEPA 1989, 2009).

The incidental ingestion and dermal contact HQ is calculated by dividing the daily intake by a toxicity value (oral or dermal reference dose). The inhalation HQ is calculated by dividing the exposure concentration by the inhalation toxicity value or reference concentration (RfC). Hazard quotients are summed to derive the hazard index (HI) for the construction worker scenario. Any HI greater than 1 may exhibit risk and is recommended for further evaluation.

The ELCR is calculated by multiplying the daily intake of a chemical by the cancer slope factor for ingestion or dermal exposure. For inhalation cancer risk, the inhalation unit risk value is multiplied by the exposure concentration, which was estimated using the VADEQ trench air model. The ELCR is compared to the acceptable range of risk levels. Risk equations are summarized below. Variables for HQ and ELCR equations are listed in **Attachment 4**.

Non-Carcinogenic Constituents

Equation 4: Ingestion & Dermal $HQ = DI / RfD$

Inhalation $HQ = EC / (RfC * 1000 \mu g/m^3)$

Carcinogenic Constituents

Equation 5: Ingestion & Dermal $ELCR = DI * SF$

Inhalation $CR = IUR * EC$

2.7 Human Health Risk Assessment Results

Groundwater exposure by trenching was evaluated under the hypothetical construction worker scenario using conservative exposure assumptions. It is assumed that construction workers would use appropriate personal protective equipment, such as gloves, boots, and safety glasses, to limit exposure to environmental media, thereby limiting risks from chemical exposure.

Attachment 4 contains the details of the risk assessment calculations. Potential cancer risks are indicated by values greater than 1×10^{-4} . Potential non-cancer risks are indicated by HQs greater than 1.0.

- Risks, associated with incidental ingestion exposure, were not identified.
- Non-carcinogenic risks, associated with dermal exposure, were not identified. Dermal cancer risks (4.54×10^{-6}) were identified.
- Inhalation cancer risks (1.87×10^{-4}) and non-cancer risks ($HQ = 121$) were identified.
- Cumulative risks to a construction worker associated with incidental ingestion, dermal contact, and inhalation of vapors from groundwater exposure are indicated by a cancer risk value of 1.92×10^{-4} and a non-cancer hazard index of 121.

USEPA defines an acceptable range of risk levels of 1×10^{-4} to 1×10^{-6} in the National Oil and Hazardous Substances Pollution Contingency Plan (USEPA 1990). Cumulative risks greater than 1×10^{-4} are regarded as those requiring an active response such as removal or other active remedy, along with institutional controls to minimize exposure. Based on these results, active remediation and institutional controls are warranted to minimize exposure to groundwater.

2.8 Uncertainty Analysis

The HHRA presents a qualitative and quantitative discussion of the uncertainties associated with the risk assessment process and an evaluation of the significance of those uncertainties. An uncertainty analysis is an integral part of any risk assessment in that it enhances evaluations, which shape subsequent risk management decisions. This discussion included an evaluation of the uncertainties associated with the risk assessment process itself as well as the specific assumptions used in developing the risk assessment. The risk assessment process involves assumptions that must be made due to a lack of absolute scientific knowledge. Some of the assumptions are supported by considerable scientific evidence, while others have less support. Every assumption introduces some degree of uncertainty into the risk assessment process. Risk assessors often have to make estimates and exercise professional judgment when performing risk calculations. Consequently, all risk estimates have a certain degree of uncertainty. Regulatory risk assessment methodology requires that in the absence of site-specific information conservative assumptions be made throughout the risk assessment to aid in the protection of public health. Therefore, when all of the conservative assumptions are combined, it is more likely that risks are overestimated rather than underestimated.

For some media, a limited number of samples are available for use in the risk assessment. These results might be representative of Site conditions or the results might overestimate or underestimate Site concentrations.

Constituents not detected or constituents without a published screening level were not carried forward in the risk assessment as COPCs, which may underestimate risk.

The risk assessment information provided for the VADEQ trench air model produces calculated hazard / risk values which are site-specific and for human receptors. The model acknowledges that toxicity data and other site related information is usually limited and that only a small sampling of site-representative data is available to make human health risk decisions. Uncertainty is present and inherent throughout the modeling process. Model uncertainty arises from a lack of knowledge about natural processes, simplifying assumptions in mathematical formulations and associated parameters, and/or data coverage and quality.

2.9 Exposure to Soils in Parcels 1 and 2

Surface and sub-surface soil samples collected in the previously excavated area, Parcels 1 and 2, were evaluated to determine whether additional remediation is warranted. Analytes detected in soil samples were compared to USEPA RSLs per the methods outlined in this human health risk assessment. Analytes greater than the screening values were retained for a baseline assessment using the VURAM model for

construction worker and potential residential exposure scenarios. Output from the VURAM model was then used to calculate Site Specific Remediation Goals (SSRGs) per the following equation:

$$\text{SSRG} = \text{EPC} \times (\text{TR}/\text{SR})$$

Where:

EPC is the Site-specific exposure point concentration as determined by the 95 percent upper confidence limit of the data

TR is the target cancer risk or target HQ

SR is the site cancer risk or HQ based on all routes of exposure for the exposure scenario

Risk calculations and SSRGs for a construction worker exposed to surface soils are summarized in the following table.

COPC	Exposure Point Concentration (mg/kg)	Carcinogenic Site Risk (SR)	Non-carcinogenic Site Hazard Quotient (SR)	SSRG for Carcinogenic Risk (mg/kg)			SSRG for Non-carcinogenic Risk (mg/kg)	
				1E-06	1E-05	1E-04	0.1	1
Benzo(a)anthracene	0.8242	2.87E-08	8.27E-03	28.72	287.18	2871.78	9.97	99.66
Benzo(a)pyrene	0.7567	2.87E-08	8.27E-03	26.37	263.66	2636.59	9.15	91.50
Benzo(b)fluoranthene	0.9982	2.87E-08	8.27E-03	34.78	347.80	3478.05	12.07	120.70
Dibenz(a,h)anthracene	0.04535	2.87E-08	8.27E-03	1.58	15.80	158.01	0.55	5.48
Indeno(1,2,3-cd)pyrene	0.1797	2.87E-08	8.27E-03	6.26	62.61	626.13	2.17	21.73

Risk calculations and SSRGs for a construction worker exposed to sub-surface soils are summarized in the following table.

COPC	Exposure Point Concentration (mg/kg)	Carcinogenic Site Risk (SR)	Non-carcinogenic Site Hazard Quotient (SR)	SSRG for Carcinogenic Risk (mg/kg)			SSRG for Non-carcinogenic Risk (mg/kg)	
				1E-06	1E-05	1E-04	0.1	1
Benzo(a)anthracene	4.477	1.03E-07	2.90E-02	43.47	434.66	4346.60	15.44	154.38
Benzo(a)pyrene	2.572	1.03E-07	2.90E-02	24.97	249.71	2497.09	8.87	88.69
Benzo(b)fluoranthene	3.27	1.03E-07	2.90E-02	31.75	317.48	3174.76	11.28	112.76
Benzo(k)fluoranthene	1.448	1.03E-07	2.90E-02	14.06	140.58	1405.83	4.99	49.93
Dibenz(a,h)anthracene	0.04123	1.03E-07	2.90E-02	0.40	4.00	40.03	0.14	1.42
Indeno(1,2,3-cd)pyrene	1.325	1.03E-07	2.90E-02	12.86	128.64	1286.41	4.57	45.69
Naphthalene	4.594	1.03E-07	2.90E-02	44.60	446.02	4460.19	15.84	158.41

Risk calculations and SSRGs for a potential resident exposed to surface soils are summarized in the following table.

COPC	Exposure Point Concentration (mg/kg)	Carcinogenic Site Risk (SR)	Non-carcinogenic Site Hazard Quotient (SR)	SSRG for Carcinogenic Risk (mg/kg)			SSRG for Non-carcinogenic Risk (mg/kg)	
				1E-06	1E-05	1E-04	0.1	1
Benzo(a)anthracene	0.8242	8.74E-06	4.25E-02	0.09	0.94	9.43	1.94	19.39
Benzo(a)pyrene	0.7567	8.74E-06	4.25E-02	0.09	0.87	8.66	1.78	17.80
Benzo(b)fluoranthene	0.9982	8.74E-06	4.25E-02	0.11	1.14	11.42	2.35	23.49
Dibenz(a,h)anthracene	0.04535	8.74E-06	4.25E-02	0.01	0.05	0.52	0.11	1.07
Indeno(1,2,3-cd)pyrene	0.1797	8.74E-06	4.25E-02	0.02	0.21	2.06	0.42	4.23

There is no evidence of risks to a construction worker exposed to soils remaining in the previously excavated area, Parcels 1 and 2. Cumulative cancer risk values do not exceed 1×10^{-6} , and non-cancer HQs do not exceed 0.1. For the residential scenario to surface soils, the cumulative cancer risk is 8.7×10^{-6} , indicating a potential cancer risk in excess of the ELCR. There is no indication of non-cancer risk for the residential exposure scenario ($HQ = 4.3 \times 10^{-2}$). Focused remediation of surface soil in areas of elevated PAH concentrations may be warranted for protection of human health in a residential exposure setting.

3.0 SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT

A SLERA was conducted according to USEPA RAGS: Process for Designing and Conducting Ecological Risk Assessment, Interim Final (EPA, 1997), to evaluate potential ecological risks associated with exposure to environmental media at the Site. As described in USEPA guidance, the SLERA involves the completion of the first two steps in an eight-step process, described as follows:

- Step 1. Screening-level problem formulation and ecological effects evaluation
- Step 2. Screening-level exposure estimate and risk calculation

3.1 Problem Formulation

The problem formulation step defines the objectives and scope establishes the goals and focus of the SLERA. This step identifies, evaluates, and/or quantifies the following:

- **Identifying/Prioritizing COPCs:** COPCs are chosen based on the type of source(s), concentration, background levels, frequency of detection, persistence, bioaccumulation potential, toxicity/potency, fate and transport (*e.g.*, mobility to groundwater), and potential biological effects. Initial screening consists of comparing the maximum concentration of each constituent in the applicable media with conservative environmental screening levels.
- **Identification of Receptors:** Individual organisms, populations, or communities that might be exposed to Site-related constituents in environmental media are identified based on Site location, setting, and available habitat at the Site. Receptors are presented in **Figure 4** (Ecological CSM).
- **Selection of Endpoints:** Assessment and measurement endpoints are used to evaluate the ecological health of a site. Assessment endpoints describe the characteristics of an ecosystem that have an intrinsic environmental value that is to be protected (*i.e.*, protection of warmwater fish community, no potential risk to endangered species). Typically, assessment endpoints and receptors are selected based upon the potential exposure, ecological significance, economic importance, and/or societal relevance of the assessment endpoints and receptors. Because assessment endpoints often cannot be measured directly, a set of surrogate endpoints are selected for ecological risk assessment that relate to the assessment endpoints and have measurable attributes (USEPA, 1997; USEPA, 1998). Those measures of effect provide a quantitative metric for evaluating the potential effects of constituents on the ecosystem components potentially at risk. The endpoints are presented in **Figure 4**.

3.2 Ecological Conceptual Site Model

The ecological CSM was developed in a manner similar to that of the human health CSM described in **Section 2**. The CSM identifies potentially complete exposure pathways for potential wildlife receptors (**Figure 4**). The ecological CSM may be refined if further risk assessment is conducted at the Site.

3.2.1 Receiving Media

The potential receiving media at the Site are the same as those discussed in **Section 2**. Potential receiving media are shown on the CSM (**Figure 4**).

Potential receiving media include:

- Outdoor air
- Groundwater
- Soil
- Sediment
- Surface water

Groundwater and air are not traditionally evaluated in ecological risk assessments, as the exposure pathway is either incomplete (groundwater) or insignificant (air).

3.2.2 Ecological Receptors

Although many types of animals might be exposed to constituents in the exposure areas at the Site, USEPA has categorized only a limited number of receptors in terms of life history and allometric parameters (*e.g.*, body weight, ingestion rate, migration patterns). Therefore, ecological receptors are typically represented by “indicator” or “surrogate” species that represent other animals within their generic class, order, or family. Wildlife selected for this risk assessment serve as indicator receptors and are expected to be ubiquitous in terms of regional habitat. Preliminary receptors area identified in **Figure 4** to represent potentially exposed wildlife. Ecological exposure areas for the Site are shown on **Figure 5**. Exposure areas were determined based on observations made during site reconnaissance and review of aerial photographs depicting potential habitats. **Attachment 5** contains the initial ecological checklists completed during the site reconnaissance. An ecological checklist was completed for each parcel or parcels with similar habitat.

Avian species near the Site can be divided into aquatic or wetland-dependent and terrestrial species. Aquatic species may include raptors (*e.g.*, eagles, ospreys), shorebirds (*e.g.*, herons, plovers, sandpipers), and waterfowl (*e.g.*, ducks). Terrestrial species may include raptors (*e.g.*, red-tailed hawk) and passerines (*e.g.*, perching birds such as robins and sparrows). Aquatic-dependent species may consume macrophytes, invertebrates, fish, and amphibians. Terrestrial species primarily consume plants, invertebrates, reptiles, and small mammals. The primary avian trophic groups include piscivores, omnivores, herbivores, and carnivores. Avian receptors are exposed to constituents largely through ingestion of food and surface water, as well as incidental ingestion of sediment and soil.

Mammals near a site may include aquatic or wetland-dependent species (*e.g.*, river otter, muskrat), terrestrial species (*e.g.*, vole, fox), and species that might use both habitats (*e.g.*, raccoon, mink). Those species with a diet consisting mainly of aquatic organisms often are termed wetland dependent. Depending on the trophic level, mammals also might consume aquatic or terrestrial plants and invertebrates, amphibians, reptiles, birds, or other mammals. They can, in turn, be preyed upon by reptiles, birds, or other mammals. The primary mammalian trophic groups include piscivores, omnivores, herbivores, and carnivores. Mammals are exposed to constituents largely through ingestion of food and surface water, as well as incidental ingestion of sediment and soil.

3.2.3 Potential Exposure Routes

Although there are three exposure routes by which ecological receptors can be potentially exposed (ingestion, dermal contact, and inhalation), ingestion is considered the primary route contributing to exposure for most receptors. Dermal exposure is not a significant pathway as the presence of fur, feathers, or a thick integument prevents any substantial exposure to soils, although, preening might result in the inadvertent ingestion of soils or sediment.

3.2.4 Potential Exposure Pathways

Potential ecological receptor exposure pathways for the receiving media are identified in **Figure 4**.

The problem formulation culminates in an ecological CSM, which identifies the primary and/or secondary source(s), receptors, and exposure pathways that are applicable to a site. The preliminary CSM presented in **Figure 4** is an integral component of the ecological assessment and is amenable to adjustment as additional information is gathered over time. As previously stated, **Attachment 5** contains the initial ecological checklists completed during the site

reconnaissance. Ecological checklist were used to evaluated whether viable ecological habitat was present within each parcel.

3.3 Screening Level Exposure Estimate

This step of the ecological risk assessment process involves refining and interpreting the data screening, and includes analyses of potential ecological exposure and risk.

Laboratory results from sample analyses were compiled and summarized for comparison with USEPA ecological screening values. Summarized data included the number of samples, frequency of detection, minimum and maximum concentrations, location of maximum value for each constituent, range of detection limits, concentration used for screening (*i.e.*, maximum result), established screening values, screening value used, COPC identification, and COPC selection rationale.

3.4 Ecological Screening Levels

Surface water, sediment, and soil data were compared with ecological screening values (ESVs) that are designed to provide a conservative estimate of the concentration to which an ecological receptor can be exposed without experiencing adverse health effects. Due to the conservative methods used to derive screening levels, it can be assumed that concentrations less than screening levels will not result in any adverse effects to receptor survival, growth, and/or reproduction; therefore, further evaluation is not necessary. Concentrations greater than conservative risk-based screening levels do not necessarily indicate that a potential ecological risk exists; however, further evaluation might be warranted.

Attachment 6 presents the ecological screening levels that are used for the initial evaluation of COPCs; the hierarchy for the media-specific screening levels is discussed below. For each medium, the initial screening is conducted by comparing maximum detected concentrations of COPCs with one or more screening values that are applicable to the potentially complete exposure pathways for the medium. This method of evaluation follows USEPA guidance for conducting screening level ecological risk assessments (USEPA, 2015b). Constituents with concentrations that are greater than screening levels are retained as COPCs for further evaluation.

3.4.1 Surface Water

Surface water quality criteria are calculated from controlled laboratory tests on freshwater or marine organisms that are protective of the most sensitive organism (often zooplankton, such as daphnids) for the most sensitive life stage

(typically reproduction). The following criteria are used to evaluate the levels of constituents in off-Site surface water, in the order in which they are to be used:

- USEPA Region 4 Freshwater Chronic Screening Values (USEPA, 2018)
- SCDHEC AWQC Freshwater Chronic (SCDHEC, 2014)

3.4.2 Sediment

Databases or consensus-based studies are frequently used to establish sediment screening values, often called sediment quality values. COPC concentrations in sediment less than those values indicate a low probability for adverse effects on benthic macroinvertebrates. USEPA Region 4 Ecological Screening Values for Sediment (USEPA, 2018c) are used to evaluate levels of metals in both on-Site and off-Site sediments. These ESVs generally represent the lowest value that will be protective of the most sensitive species and/or life stage for sediment-dwelling organisms.

3.4.3 Soils

The screening was performed in accordance with USEPA regulatory guidance documents (USEPA 1998, 2018b) and the RI Workplan (ERM, 2018).

Maximum detected constituent concentrations were compared with applicable ecological screening values (ESVs). Constituents with the screening process, concentrations greater than the ESV are considered COPCs and warrant further evaluation. Samples used for screening ecological receptors were divided into two categories:

- surface soil (samples collected from 0 to 0.5 feet)
- sub-surface soil (burrowing depth interval) (samples collected from 0 to 15 feet).

The surface soil and sub-surface soil were screened separately. Samples were screened against :

- USEPA Region 4 Soil Screening Benchmarks
- USEPA Ecological Soil Screening Levels (ECO-SSLs), and
- Oak Ridge National Laboratory (ORNL) Soil Screening Benchmarks

3.5 SLERA Results

The result of the screening is a list of COPCs for further quantitative evaluation in the baseline ecological risk assessment. Screening levels for ecological receptors

(**Attachment 6**) were employed, using the hierarchy for screening level selection for each medium, as identified in the previous sections, to identify the appropriate screening level for each analyte. COPCs were identified as those constituents having a maximum detected concentration greater than the selected screening level.

The following categories were used to identify COPCs:

1. The constituent was identified as a COPC because the maximum detected concentration is greater than the screening level.
2. The constituent was not identified as a COPC because detected concentrations are less than the applicable screening level.
3. The constituent was not identified as a COPC because it was not detected at a concentration greater than the quantitation limit and the quantitation limit was less than the screening level.
4. The constituent was not identified as a COPC because it was not detected at a concentration greater than the quantitation limit; however, the quantitation limit was greater than the screening level.
5. The constituent was not identified as a COPC because it was not detected at a concentration greater than the quantitation limit and there is no current screening level available.

This screening process is used to create a list of COPCs that might be used by future assessments. **Attachment 6** contains the detailed results of the ecological screening assessment. Up to for each media. A summary of the identified COPCs by media and exposure pathway are summarized below:

- **Surface water.** On-Site and off-Site surface water analytical results for all constituents were less than corresponding ecological screening values.
- **Surface soil.** Sixty-four (64) percent of constituents evaluated were less than corresponding ecological screening values, with 11 constituents identified as COPCs.
- **Sub-surface soil.** Forty-nine (49) percent of constituents evaluated were less than corresponding ecological screening values, with 16 constituents identified as COPCs.
- **Sediment.** Twenty-six (26) percent of constituents analyzed in on-Site sediments were less than corresponding screening levels, with 20 identified as COPCs.

Sixteen (16) percent of constituents analyzed in off-Site sediments were less than corresponding screening levels, with , 10 constituents identified as COPCs.

The following constituents were retained as COPCs needing further evaluation in the baseline ecological risk assessment.

Medium	COPC	
On-Site surface water	None	
Off-Site surface water	None	
Surface soil	• Benzo(a)pyrene • Benzo(b)fluoranthene • Benzo(g,h,i)perylene • Benzo(k)fluoranthene • Chrysene	• Fluoranthene • Indeno(1,2,3-cd)pyrene • Pyrene • Dibenzofuran • Methylene chloride
Sub-surface soil	• Benzo(a)anthracene • Benzo(a)pyrene • Benzo(b)fluoranthene • Benzo(g,h,i)perylene • Benzo(k)fluoranthene • Chrysene • Dibenz(a,h)anthracene • Fluoranthene	• Indeno(1,2,3-cd)pyrene • Phenanthrene • Pyrene • 1,2,4-Trimethylbenzene • 1,3,5-Trimethylbenzene • Bromomethane • Dibenzofuran • Methylene chloride
On-Site sediment	• 2-Methylnaphthalene • Acenaphthene • Acenaphthylene • Anthracene • Benzo(a)anthracene • Benzo(a)pyrene • Benzo(b)fluoranthene • Benzo(g,h,i)perylene • Benzo(k)fluoranthene • Chrysene	• Dibenz(a,h)anthracene • Fluoranthene • Fluorene • Indeno(1,2,3-cd)pyrene • Naphthalene • Phenanthrene • Pyrene • Acetone • Bis(2-Ethylhexyl)phthalate • Methylene chloride
Off-Site sediment	• Acenaphthylene • Anthracene • Benzo(a)anthracene • Benzo(a)pyrene • Benzo(b)fluoranthene	• Benzo(g,h,i)perylene • Chrysene • Fluoranthene • Phenanthrene • Pyrene

Several COPCs associated with ecological exposure were identified in soil and sediment samples. In accordance with the typical risk assessment framework, a scientific/management decision is warranted. Next steps could focus on whether to refine the baseline ecological risk assessment to evaluate whether COPCs pose potential risks to wildlife or whether to implement risk management/remedial measures.

4.0 SUMMARY AND CONCLUSIONS

This human health and ecological risk assessment pertaining to the former Bramlette MGP site was prepared for Duke Energy as part of the RI. Potential risks to human receptors were evaluated using analytical data from groundwater. Additionally, a screening level human health risk assessment was performed using soil, surface water, and sediment sample data. A screening level ecological risk assessment was performed using soil, surface water, and sediment data. This risk assessment employed USEPA guidance.

The exposure scenarios and exposure and toxicity parameters included in the risk models were conservative; as such, the risk results are more likely to overestimate rather than underestimate risks. Thus, the results can be used to inform decision-making for the Site.

Conclusions of the human health and ecological risk assessment are summarized in the following subsections.

4.1 Human Health Risk Assessment

Current and future exposure scenarios were evaluated to assess potential human health risks. A phased, screening level approach was also taken to assess potential human health risk from exposure to surface water and soil/sediment. Several COPCs associated with human exposure were identified in groundwater, soil, and sediment samples as part of the screening assessment. No COPCs were retained for surface water exposure.

In accordance with the typical risk assessment framework, a scientific/management decision is warranted. Next steps could focus on whether to refine the baseline risk assessment for current and future human receptors or whether to implement risk management/remedial measures.

The following conclusions were made for the construction worker exposure scenario:

- Risks, associated with incidental ingestion of groundwater, were not identified.
- Non-carcinogenic risks, associated with dermal exposure, were not identified. Dermal cancer risks (4.54×10^{-6}) were identified.
- Inhalation cancer risks (1.87×10^{-4}) and non-cancer risks (HQ = 121) were identified.

- Cumulative risks, associated with incidental ingestion, dermal contact, and inhalation of vapors from groundwater exposure, are indicated by a cancer risk value of 1.92×10^{-4} and a non-cancer hazard index of 121.

Surface and sub-surface soil samples collected in the previously excavated area, Parcels 1 and 2, were evaluated to determine whether additional remediation is warranted. Industrial and residential exposure settings relative to Site calculated SSRGs were assessed. Additional assessment of soil in Parcels 1 and 2 indicates focused remediation of surface soil in areas of elevated PAH concentrations may be warranted for protection of human health in a residential exposure setting.

4.2 Screening Level Ecological Risk Assessment

The SLERA included a comparison of constituents to published ecological screening levels. Constituents detected at concentrations greater than ecological screening levels are recommended for further evaluation. The following conclusions were made:

- **Surface water.** On-Site and off-Site surface water analytical results for all constituents were less than corresponding ecological screening values.
- **Surface soil.** Sixty-four (64) percent of constituents evaluated were less than corresponding ecological screening values, with 11 constituents identified as COPCs.
- **Sub-surface soil.** Forty-nine (49) percent of constituents evaluated were less than corresponding ecological screening values, with 16 constituents identified as COPCs.
- **Sediment.** Twenty-six (26) percent of constituents analyzed in on-Site sediments were less than corresponding screening levels, with 20 identified as COPCs. Of the 12 constituents evaluated in off-Site sediments, 10 constituents were identified as COPCs.

Several COPCs associated with ecological exposure were identified in soil and sediment samples.

In accordance with risk assessment framework, a scientific/management decision is warranted. Next steps could focus on whether to refine the baseline ecological risk assessment to evaluate the possible risks of COPCs to wildlife or whether to implement risk management/remedial measures.

Based on risk assessment findings, evaluation of institutional controls or other remedial alternatives is recommended to manage affected groundwater at the Site. Additional evaluation of soil and sediment ecological COPCs is recommended.

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FIGURES

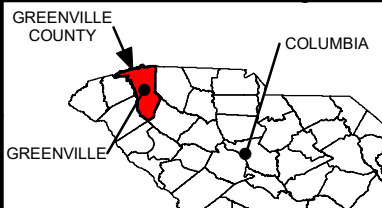
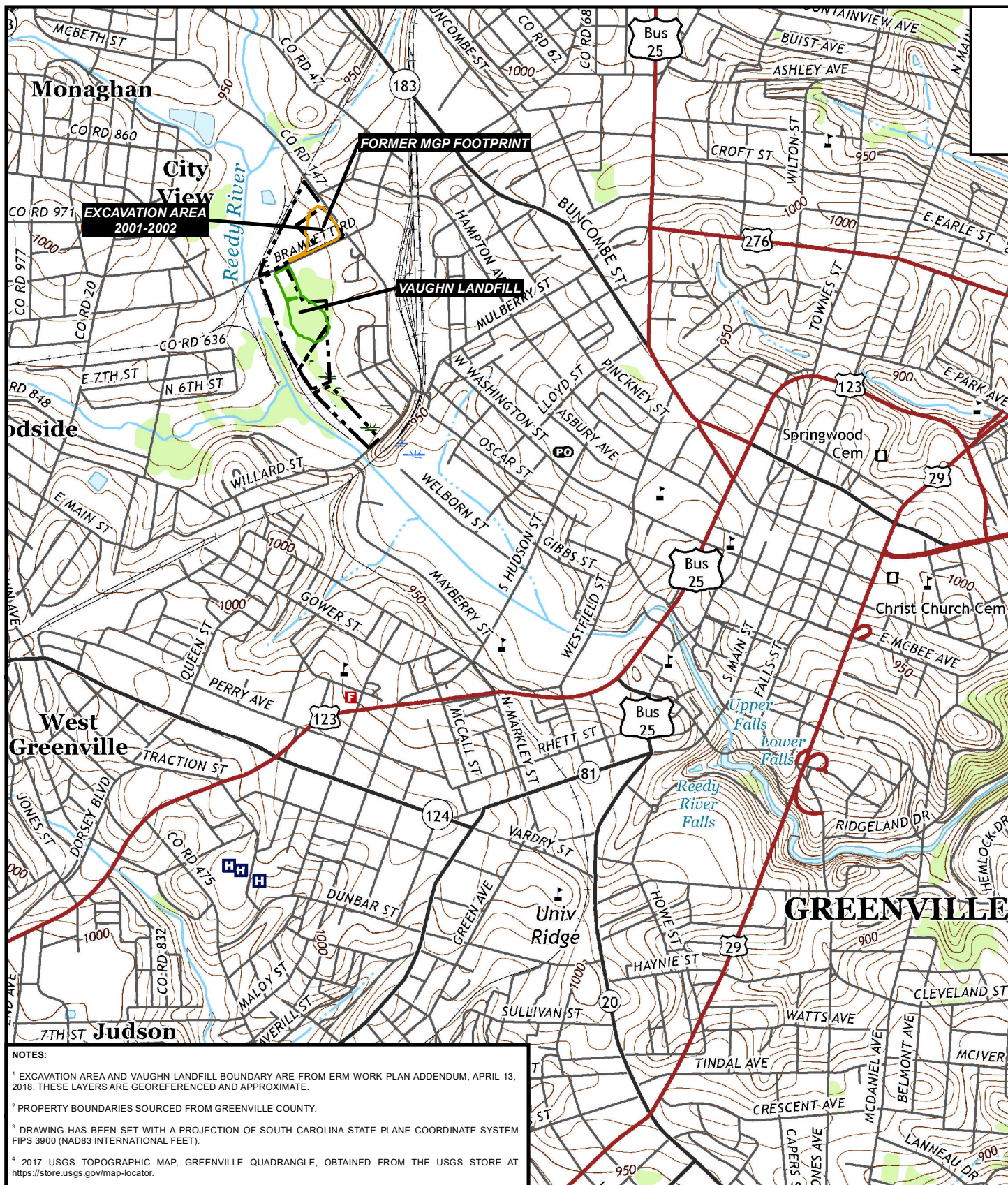
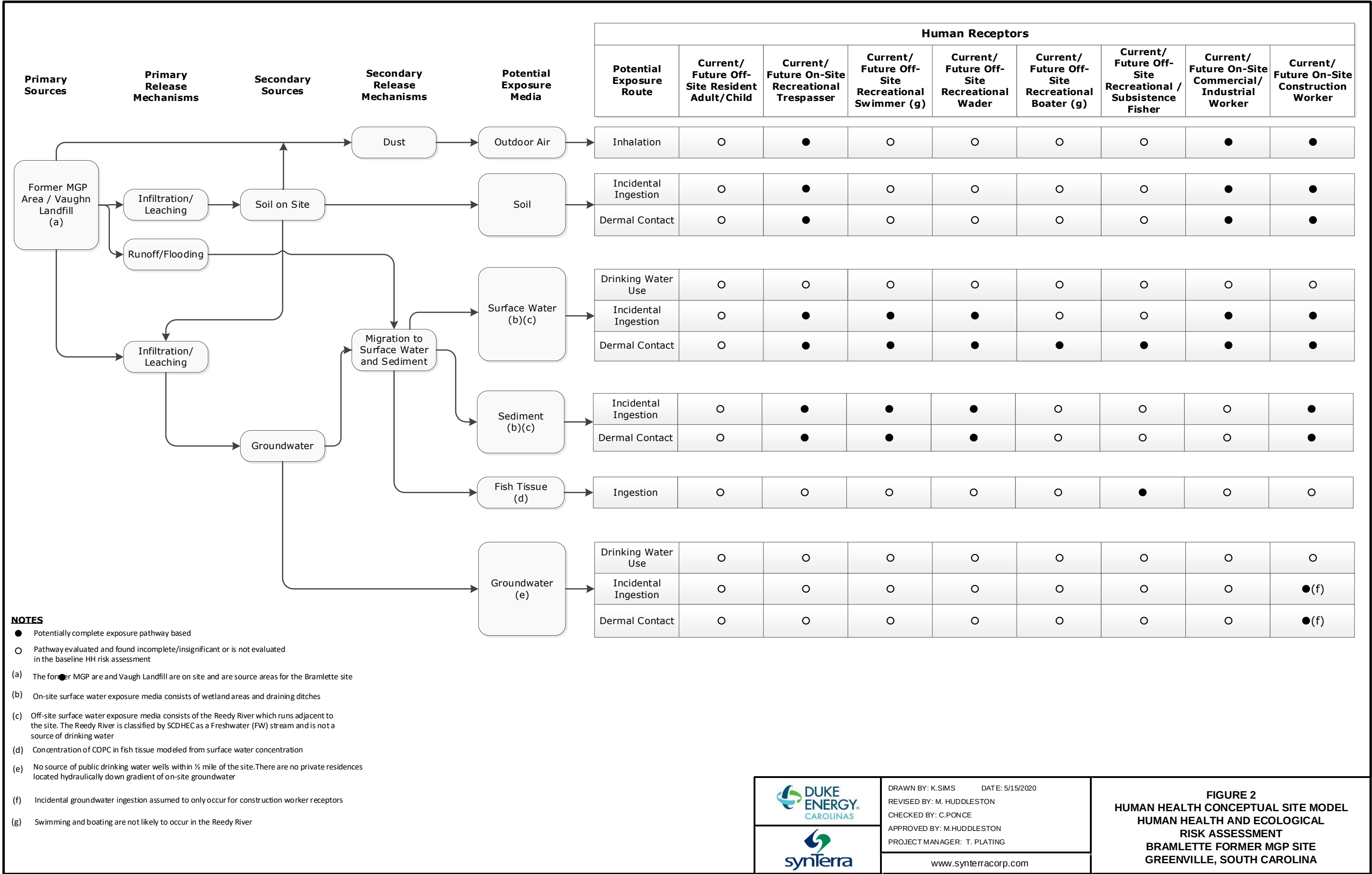


FIGURE 1
USGS TOPOGRAPHIC MAP FORMER BRAMLETTE
MGP SITE HUMAN HEALTH AND ECOLOGICAL
RISK ASSESSMENT
EAST BRAMLETTE ROAD
GREENVILLE, SOUTH CAROLINA

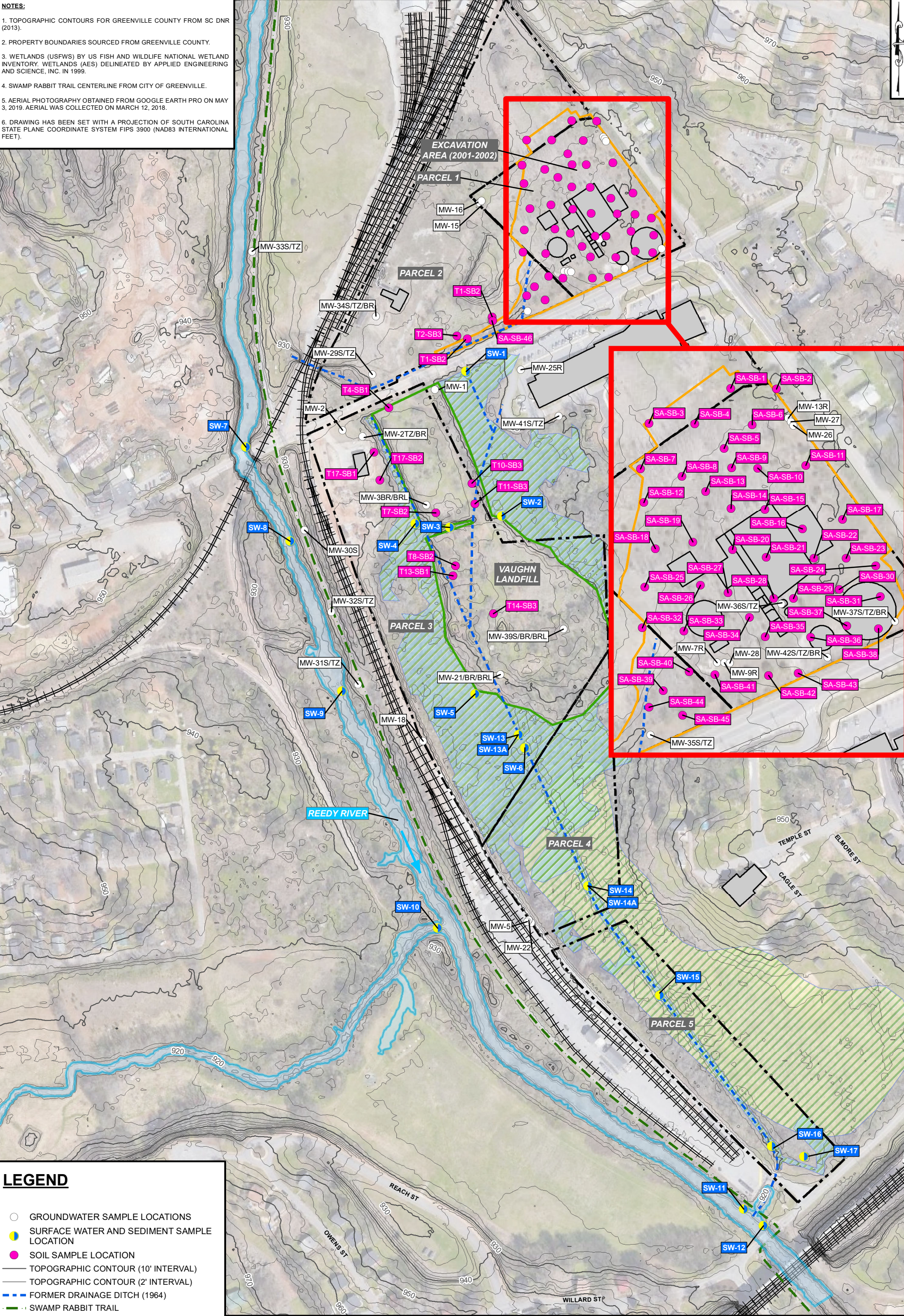
DRAWN BY: T. KING
 PROJECT MANAGER: T. PLATING
 CHECKED BY: T. PLATING

DATE: 5/18/2020





- NOTES:**
1. TOPOGRAPHIC CONTOURS FOR GREENVILLE COUNTY FROM SC DNR (2013).
 2. PROPERTY BOUNDARIES SOURCED FROM GREENVILLE COUNTY.
 3. WETLANDS (USFWS) BY US FISH AND WILDLIFE NATIONAL WETLAND INVENTORY. WETLANDS (AES) DELINEATED BY APPLIED ENGINEERING AND SCIENCE, INC. IN 1999.
 4. SWAMP RABBIT TRAIL CENTERLINE FROM CITY OF GREENVILLE.
 5. AERIAL PHOTOGRAPHY OBTAINED FROM GOOGLE EARTH PRO ON MAY 3, 2019. AERIAL WAS COLLECTED ON MARCH 12, 2018.
 6. DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83 INTERNATIONAL FEET).



LEGEND

- GROUNDWATER SAMPLE LOCATIONS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- SOIL SAMPLE LOCATION
- TOPOGRAPHIC CONTOUR (10' INTERVAL)
- - - TOPOGRAPHIC CONTOUR (2' INTERVAL)
- - - FORMER DRAINAGE DITCH (1964)
- - - SWAMP RABBIT TRAIL
- |||| RAILROAD
- BUILDING
- EXCAVATED AREA (2001-2002)
- VAUGHN LANDFILL BOUNDARY
- HYDROLOGY
- PARCEL BOUNDARY
- WETLANDS (AES)
- WETLANDS (USFWS)



GRAPHIC SCALE
125 0 125 250
(IN FEET)

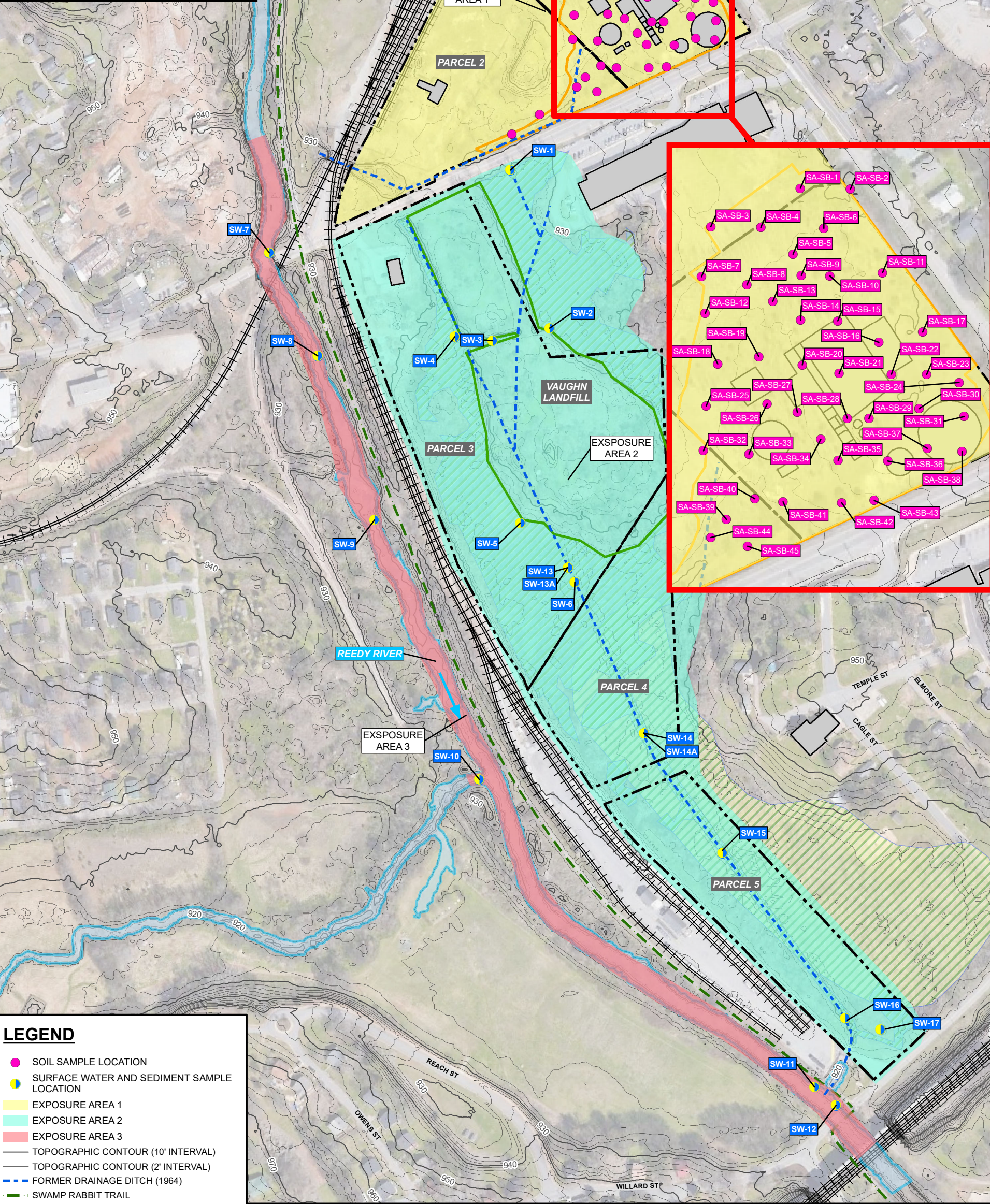
DRAWN BY: C. ALMOND
REVISED BY: B. MCGANN
CHECKED BY: C. PONCE
APPROVED BY: M. HUDDLESTON
PROJECT MANAGER: T. PLATING

DATE: 05/07/2020
DATE: 06/03/2020

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FIGURE 3
HUMAN HEALTH EXPOSURE AREAS
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
EAST BRAMLETTE ROAD
GREENVILLE, SOUTH CAROLINA

- NOTES:**
- 1. EXPOSURE AREA 1 INCLUDES SAMPLES FOR ECOLOGICAL RISK TO SOIL ONLY.
 - 2. EXPOSURE AREA 2 INCLUDES SAMPLES FOR ECOLOGICAL RISK TO SEDIMENT AND SURFACE WATER ONLY.
 - 3. EXPOSURE AREA 3 INCLUDES SAMPLES FOR ECOLOGICAL RISK TO SEDIMENT AND SURFACE WATER ONLY.
 - 4. TOPOGRAPHIC CONTOURS FOR GREENVILLE COUNTY FROM SC DNR (2013).
 - 5. PROPERTY BOUNDARIES SOURCED FROM GREENVILLE COUNTY.
 - 6. WETLANDS (USFWS) BY US FISH AND WILDLIFE NATIONAL WETLAND INVENTORY. WETLANDS (AES) DELINEATED BY APPLIED ENGINEERING AND SCIENCE, INC. IN 1999.
 - 7. SWAMP RABBIT TRAIL CENTERLINE FROM CITY OF GREENVILLE.
 - 8. AERIAL PHOTOGRAPHY OBTAINED FROM GOOGLE EARTH PRO ON MAY 3, 2019. AERIAL WAS COLLECTED ON MARCH 12, 2018.
 - 9. DRAWING HAS BEEN SET WITH A PROJECTION OF SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM FIPS 3900 (NAD83 INTERNATIONAL FEET).



LEGEND

- SOIL SAMPLE LOCATION
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- EXPOSURE AREA 1
- EXPOSURE AREA 2
- EXPOSURE AREA 3
- TOPOGRAPHIC CONTOUR (10' INTERVAL)
- TOPOGRAPHIC CONTOUR (2' INTERVAL)
- FORMER DRAINAGE DITCH (1964)
- SWAMP RABBIT TRAIL
- RAILROAD
- BUILDING
- EXCAVATED AREA (2001-2002)
- VAUGHN LANDFILL BOUNDARY
- HYDROLOGY
- PARCEL BOUNDARY
- WETLANDS (AES)
- WETLANDS (USFWS)



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CHECKED BY: C. PONCE
APPROVED BY: M. HUDDLESTON
PROJECT MANAGER: T. PLATING
DATE: 05/07/2020
DATE: 06/03/2020
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FIGURE 5
ECOLOGICAL EXPOSURE AREAS
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
EAST BRAMLETTE ROAD
GREENVILLE, SOUTH CAROLINA

ATTACHMENT 1

DATA SETS
(PROVIDED ELECTRONICALLY)

Reporting Units	S.U.	ft	Deg C	umhos/cm
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av	Sample Collection Date	pH	Water Level	Temperature	Specific Conductance
MW-02	03/20/2019	6.2	10.58	16	204
MW-02BR	11/25/2019	NM	NM	NM	NM
MW-07R	03/22/2019	6.4	3.95	13	202
MW-15	03/22/2019	5.9	8.20	14	123
MW-16	03/22/2019	6.6	8.79	12	1300
MW-22	03/21/2019	5.9	35.12	16	197
MW-25R	03/21/2019	6.1	2.46	15	191
MW-27	03/21/2019	5.3	4.19	17	59
MW-28	03/22/2019	6.4	4.53	15	206
MW-29BR	02/11/2020	9.2	6.90	19	306
MW-29TZ	03/21/2019	6.5	7.04	17	370
MW-30S	03/21/2019	6.3	12.03	15	254
MW-30TZ	02/17/2020	6.9	12.02	14	320
MW-31TZ	03/21/2019	6.4	13.48	17	314
MW-33TZ	02/17/2020	11.0	9.36	16	454
MW-36BR	02/12/2020	6.8	7.17	17	182
MW-41TZL	02/13/2020	8.2	5.56	17	1070
MW-01	03/20/2019	6.4	6.11	16	407
MW-01	02/17/2020	6.2	5.94	17	360
MW-02	02/17/2020	5.9	9.49	16	200
MW-02BR	02/17/2020	7.6	9.70	18	1421
MW-02TZ	02/17/2020	6.8	9.40	18	468
MW-03BR	04/10/2019	11.7	10.71	20	1249
MW-03BR	02/17/2020	10.2	10.25	17	322
MW-03BRL	02/18/2020	7.3	10.91	14	1610
MW-05	03/21/2019	6.2	7.80	14	224
MW-05	02/18/2020	6.0	8.44	16	229
MW-07R	02/13/2020	5.9	3.05	16	170
MW-09R	03/22/2019	5.7	4.40	14	130
MW-09R	02/13/2020	5.4	3.50	17	129
MW-13R	03/21/2019	4.9	4.41	16	116
MW-13R	02/10/2020	4.7	3.67	16	118
MW-15	02/12/2020	5.5	6.98	15	113
MW-16	02/12/2020	6.4	7.30	14	1581
MW-21	03/20/2019	6.9	10.73	12	432
MW-21	02/18/2020	6.8	10.85	14	515
MW-21BR	02/18/2020	6.9	8.24	15	613
MW-21BRL	02/18/2020	9.1	8.52	15	235
MW-22	02/18/2020	5.6	8.94	16	161
MW-25R	02/13/2020	5.9	2.56	19	175

MW-26	03/21/2019	7.5	4.45	16	325
MW-26	02/10/2020	6.0	3.79	16	119
MW-27	02/10/2020	5.0	3.46	16	62
MW-28	02/13/2020	5.9	3.79	17	171
MW-29S	03/21/2019	6.9	7.45	14	721
MW-29S	02/11/2020	6.7	6.59	15	815
MW-29TZ	02/13/2020	6.5	6.54	17	407
MW-30S	12/12/2018	6.4	11.05	16	350
MW-30S	02/17/2020	6.1	11.39	14	135
MW-31S	12/12/2018	6.2	12.19	16	356
MW-31S	03/21/2019	6.2	13.10	16	245
MW-31S	02/17/2020	6.0	12.81	15	244
MW-31TZ	12/12/2018	6.5	12.75	15	456
MW-31TZ	02/17/2020	6.1	13.22	15	302
MW-32S	02/17/2020	5.5	12.29	15	183
MW-32TZ	02/17/2020	5.8	11.77	17	196
MW-33S	02/17/2020	6.4	11.07	15	822
MW-34BR	02/11/2020	9.1	10.89	18	1300
MW-34S	02/11/2020	6.6	7.70	16	1124
MW-34TZ	02/11/2020	6.0	9.30	19	355
MW-35S	02/13/2020	5.8	3.80	13	179
MW-35TZ	02/13/2020	6.4	4.09	16	192
MW-36S	02/12/2020	6.4	7.28	15	464
MW-36TZ	02/12/2020	5.8	7.10	16	227
MW-37BR	02/11/2020	7.2	9.65	17	280
MW-37S	02/10/2020	5.4	7.46	14	168
MW-37TZ	02/11/2020	6.7	8.17	17	631
MW-39BR	02/18/2020	7.5	11.52	14	448
MW-39BRL	02/18/2020	9.6	12.37	15	265
MW-39S	02/18/2020	5.8	12.29	16	225
MW-41S	02/13/2020	5.4	1.72	17	120
MW-41TZ	02/13/2020	7.2	1.50	16	1171
MW-42BR	02/12/2020	7.5	6.67	17	223
MW-42S	02/13/2020	5.1	7.81	18	106
MW-42TZ	02/12/2020	5.7	7.59	17	163

QC SAMPLE RESULTS					
EQB	12/12/2018	NM	NM	NM	NM
EQB-01	12/19/2018	NM	NM	NM	NM
EQB-1	03/20/2019	NM	NM	NM	NM
EQB-2	03/21/2019	NM	NM	NM	NM
EB-01	03/22/2019	NM	NM	NM	NM
EQB-3	03/22/2019	NM	NM	NM	NM
EB	04/10/2019	NM	NM	NM	NM
EQB-1	11/12/2019	NM	NM	NM	NM
EQB-2	11/13/2019	NM	NM	NM	NM
EQB-3	11/14/2019	NM	NM	NM	NM

EQB-4	11/15/2019	NM	NM	NM	NM
EB-01_WQ_20200210	02/10/2020	NM	NM	NM	NM
EB-02_WQ_20200211	02/11/2020	NM	NM	NM	NM
EB-03_WQ_20200212	02/12/2020	NM	NM	NM	NM
EB-04_WQ_20200213	02/13/2020	NM	NM	NM	NM
EB-05-WQ-20200217	02/17/2020	NM	NM	NM	NM
EB-06_WQ_20200218	02/18/2020	NM	NM	NM	NM
FB 1	12/12/2018	NM	NM	NM	NM
FB-01	12/19/2018	NM	NM	NM	NM
MSMD-03_WQ_20200218	02/18/2020	NM	NM	NM	NM
FD-01 (MW-02)	03/20/2019	6.2	10.58	16	204
MW-03BR DUP	02/17/2020	10.2	10.25	17	322
FD-02 (MW-13R)	03/21/2019	4.9	4.41	16	116
MW-21 DUP	02/18/2020	6.8	10.85	14	515
MW-30S DUP	12/12/2018	6.4	11.05	16	350
MW-42BR DUP	02/12/2020	7.5	6.67	17	223
TRIP BLANK	12/12/2018	NM	NM	NM	NM
TRIP BLANK	12/19/2018	NM	NM	NM	NM
TRIP BLANK	03/12/2019	NM	NM	NM	NM
TRIP BLANK	03/14/2019	NM	NM	NM	NM
TRIP BLANK	03/15/2019	NM	NM	NM	NM
TRIP BLANK_SED	03/19/2019	NM	NM	NM	NM
TRIP BLANK_Soil	03/19/2019	NM	NM	NM	NM
TRIP BLANK_SW	03/19/2019	NM	NM	NM	NM
TRIP BLANK	03/21/2019	NM	NM	NM	NM
TB_SED	03/22/2019	NM	NM	NM	NM
TRIP BLANK	03/22/2019	NM	NM	NM	NM
TRIP BLANK_GW	03/22/2019	NM	NM	NM	NM
TRIP BLANK	03/29/2019	NM	NM	NM	NM
TB	04/10/2019	NM	NM	NM	NM
TRIP BLANK-1	11/13/2019	NM	NM	NM	NM
Trip Blank	11/15/2019	NM	NM	NM	NM
TRIP BLANK	11/25/2019	NM	NM	NM	NM
TB-01_WQ_20200210	02/10/2020	NM	NM	NM	NM
TB-02_WQ_20200211	02/11/2020	NM	NM	NM	NM
TB-03_WQ_20200212	02/12/2020	NM	NM	NM	NM
TB-04_WQ_20200213	02/13/2020	NM	NM	NM	NM
TB-05-WQ-20200217	02/17/2020	NM	NM	NM	NM
TB-06_WQ_20200218	02/18/2020	NM	NM	NM	NM

mg/L	mV	mV	NTUs	ug/L	ug/L
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Dissolved Oxygen	Oxidation Reduction Potential	Eh	Turbidity	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane
2.11	210	415	16.8	<1	<1
NM	NM	NM	NM	<25	<25
0.31	57	262	101.0	<1	<1
4.60	221	426	22.2	<1	<1
0.50	54	259	38.7	<1	<1
1.96	157	362	21.7	<1	<1
0.46	80	285	18.9	<1	<1
0.61	266	471	10.0	<1	<1
1.90	219	424	20.0	<1	<1
0.28	-14	191	16.5	<2.5	<2.5
1.70	150	355	56.2	<25	<25
1.20	109	314	22.3	<1	<1
0.32	5	210	22.9	<1	<1
0.39	47	252	90.0	<1	<1
0.27	84	289	14.8	<1	<1
0.24	-9	196	29.6	<1	<1
0.25	-144	61	17.0	<1	<1
0.50	-43	162	5.4	<10	<10
0.22	217	422	0.3	<10	<10
0.92	161	366	6.9	<1	<1
0.26	132	337	9.8	<12.5	<12.5
0.30	173	378	7.4	<12.5	<12.5
2.76	8	213	7.3	<10	<10
0.32	72	277	9.0	<10	<10
0.42	-32	173	8.9	<10	<10
0.61	70	275	9.7	<1	<1
0.28	78	283	0.9	<1	<1
0.15	257	462	6.2	<1	<1
1.20	176	381	9.4	<1	<1
0.78	276	481	1.0	<1	<1
0.75	263	468	1.0	<1	<1
0.66	293	498	0.4	<1	<1
4.44	232	437	6.9	<1	<1
0.32	246	451	9.9	<1	<1
0.75	-69	136	3.1	<1	<1
0.28	49	254	4.2	<1	<1
0.26	240	445	1.6	<5	<5
0.21	120	325	9.4	<1	<1
0.99	196	401	7.7	<1	<1
0.23	73	278	8.4	<1	<1

1.40	328	533	6.1	<1	<1
1.61	253	458	1.2	<1	<1
0.44	273	478	6.3	<1	<1
0.87	260	465	3.8	<1	<1
0.37	20	225	9.2	<1	<1
0.19	106	311	9.9	<1	<1
0.36	207	412	8.2	<25	<25
0.93	180	385	9.1	<1	<1
2.59	220	425	5.8	<1	<1
4.49	115	320	9.6	<1	<1
0.24	37	242	9.2	<1	<1
0.21	260	465	8.9	<1	<1
1.17	102	307	7.9	<1	<1
0.29	267	472	5.5	<1	<1
0.32	292	497	9.1	<1	<1
1.70	253	458	9.7	<1	<1
0.28	10	215	2.3	<1	<1
1.06	104	309	9.7	<1	<1
0.19	19	224	4.3	<1	<1
0.35	32	237	8.5	<1	<1
2.44	231	436	1.7	<1	<1
2.27	258	463	5.3	<1	<1
0.18	47	252	1.4	<4	<4
1.14	139	344	3.6	<1	<1
0.33	-10	195	3.3	<1	<1
1.63	287	492	9.4	<1	<1
0.43	121	326	8.6	<1	<1
0.28	144	349	2.7	<1	<1
0.28	156	361	9.7	<1	<1
0.17	188	393	0.6	<1	<1
0.33	225	430	5.2	<1	<1
0.47	-66	139	9.1	<1	<1
0.21	-75	130	3.0	<1	<1
2.32	186	391	9.8	<1	<1
1.29	193	398	2.9	<1	<1

NM	NM	NM	NM	<1	<1
NM	NM	NM	NM	<1	<1
NM	NM	NM	NM	<1	<1
NM	NM	NM	NM	<1	<1
NM	NM	NM	NM	<1	<1
NM	NM	NM	NM	<1	<1
NM	NM	NM	NM	<1	<1
NM	NM	NM	NM	NA	NA
NM	NM	NM	NM	NA	NA
NM	NM	NM	NM	NA	NA

[illegible]

[illegible]

ug/L	ug/L	ug/L	ug/L
1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene
<1	<1	<1	<1
<25	<25	<25	<25
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<2.5	<2.5	<2.5	<2.5
<25	<25	<25	<25
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<10	<10	<10	<10
<10	<10	<10	<10
<1	<1	<1	<1
<12.5	<12.5	<12.5	<12.5
<12.5	<12.5	<12.5	<12.5
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<5	<5	<5	<5
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1

[illegible]

[illegible]

ug/L	ug/L	ug/L	ug/L
1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	1-Methylnaphthalene
<1	<1	<1	<10
<25	<25	<25	259
<1	<1	<1	6.5 j
<1	<1	<1	<9.8
<1	<1	<1	<9.9
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<9.8
<2.5	<2.5	<2.5	13
<25	<25	<25	258 E
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<9.8
<1	<1	<1	<9.6
<1	<1	<1	<9.8
<10	<10	<10	491
<10	<10	<10	462
<1	<1	<1	<10
<12.5	<12.5	<12.5	46.5
<12.5	<12.5	<12.5	180
<10	<10	<10	226 E
<10	<10	<10	35.8 j
<10	<10	<10	126
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	4 j
<1	<1	<1	<9.9
<1	<1	<1	<9.7
<1	<1	<1	<10
<1	<1	<1	<9.8
<1	<1	<1	<9.8
<1	<1	<1	<9.7
<1	<1	<1	21
<1	<1	<1	2.2 j
<5	<5	<5	20.1
<1	<1	<1	3.1 j
<1	<1	<1	<9.6
<1	<1	<1	<10

<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<9.9
<1	<1	<1	<9.8
<1	<1	<1	<10
<1	<1	<1	<9.8
<25	<25	<25	322 E
<1	<1	<1	<10
<1	<1	<1	<9.9
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<9.9
<1	<1	<1	<10
<1	<1	<1	<9.9
<1	<1	<1	<10
<1	<1	<1	<9.6
<1	<1	<1	<9.7
<1	<1	<1	<9.9
<1	<1	<1	<9.8
<1	<1	<1	<10
<4	<4	<4	26.6
<1	<1	<1	<10
<1	<1	<1	<9.9
<1	<1	<1	<9.6
<1	<1	<1	<9.6
<10	<1	0.43 j	<10
<1	<1	<1	<9.8
0.26 j	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<9.9
<1	<1	<1	<9.6
<1	<1	<1	<10
<1	<1	<1	<10

<1	<1	<1	<10
<1	<1	<1	<9.9
<1	<1	<1	NA
<1	<1	<1	NA
<1	<1	<1	<10
<1	<1	<1	NA
<1	<1	<1	<10
<9.6	NA	<9.6	<9.6
<9.7	NA	<9.7	<9.7
<9.6	NA	<9.6	<9.6

[illegible]

ug/L	ug/L	ug/L
2,2-Dichloropropane	2,2'-Oxybis(1-chloropropane)	2,4,5-Trichlorophenol
<1	<10	<10
<25	<9.9	<9.9
<1	<9.9	<9.9
<1	<9.8	<9.8
<1	<9.9	<9.9
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<9.8	<9.8
<2.5	<9.9	<9.9
<25	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<9.8	<9.8
<1	<9.6	<9.6
<1	<9.8	<9.8
<10	<10	<10
<10	<96.2	<96.2
<1	<10	<10
<12.5	<9.8	<9.8
<12.5	<99	<99
<10	<10	<10
<10	<98	<98
<10	<98	<98
<1	<10	<10
<1	<10	<10
<1	<9.9	<9.9
<1	<9.9	<9.9
<1	<9.7	<9.7
<1	<10	<10
<1	<9.8	<9.8
<1	<9.8	<9.8
<1	<9.7	<9.7
<1	<9.8	<9.8
<1	<9.8	<9.8
<5	<9.9	<9.9
<1	<10	<10
<1	<9.6	<9.6
<1	<10	<10

<1	<10	<10
<1	<10	<10
<1	<9.9	<9.9
<1	<9.8	<9.8
<1	<10	<10
<1	<9.8	<9.8
<25	<9.6	<9.6
<1	<10	<10
<1	<9.9	<9.9
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<9.9	<9.9
<1	<10	<10
<1	<9.9	<9.9
<1	<10	<10
<1	<9.6	<9.6
<1	<9.7	<9.7
<1	<9.9	<9.9
<1	<9.8	<9.8
<1	<10	<10
<4	<10	<10
<1	<10	<10
<1	<9.9	<9.9
<1	<9.6	<9.6
<1	<9.6	<9.6
<1	<10	<10
<1	<9.8	<9.8
<1	<10	<10
<1	<10	<10
<1	<9.9	<9.9
<1	<9.6	<9.6
<1	<10	<10
<1	<10	<10

<1	<10	<10
<1	<9.9	<9.9
<1	NA	NA
<1	NA	NA
<1	<10	<10
<1	NA	NA
<1	<10	<10
NA	<9.6	<9.6
NA	<9.7	<9.7
NA	<9.6	<9.6

[illegible]

ug/L	ug/L	ug/L	ug/L
2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol
<10	<10	<10	<50
<9.9	<9.9	62.2	<49.5
<9.9	<9.9	<9.9	<49.5
<9.8	<9.8	<9.8	<49
<9.9	<9.9	<9.9	<49.5
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<9.9	<9.9	2.2 j	<49.5
<10	<10	174 E	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<9.6	<9.6	<9.6	<48.1
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<96.2	<96.2	<96.2	<481
<10	<10	<10	<50
<9.8	<9.8	24.8	<49
<99	<99	<99	<495
<10	<10	75.2	<50
<98	<98	49.8 j	<490
<98	<98	<98	<490
<10	<10	<10	<50
<10	<10	<10	<50
<9.9	<9.9	<9.9	<49.5
<9.9	<9.9	<9.9	<49.5
<9.7	<9.7	<9.7	<48.5
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<9.8	<9.8	<9.8	<49
<9.7	<9.7	<9.7	<48.5
<9.8	<9.8	<9.8	<49
<9.8	<9.8	<9.8	<49
<9.9	<9.9	<9.9	<49.5
<10	<10	<10	<50
<9.6	<9.6	<9.6	<48.1
<10	<10	<10	<50

<10	<10	<10	<50
<10	<10	<10	<50
<9.9	<9.9	<9.9	<49.5
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<9.6	<9.6	230 E	<48.1
<10	<10	<10	<50
<9.9	<9.9	<9.9	<49.5
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<9.9	<9.9	<9.9	<49.5
<10	<10	<10	<50
<9.9	<9.9	<9.9	<49.5
<10	<10	<10	<50
<9.6	<9.6	<9.6	<48.1
<9.7	<9.7	<9.7	<48.5
<9.9	<9.9	<9.9	<49.5
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<9.9	<9.9	<9.9	<49.5
<9.6	<9.6	<9.6	<48.1
<9.6	<9.6	<9.6	<48.1
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<10	<10	<10	<50
<9.9	<9.9	<9.9	<49.5
<9.6	<9.6	<9.6	<48.1
<10	<10	<10	<50
<10	<10	<10	<50

<10	<10	<10	<50
<9.9	<9.9	<9.9	<49.5
NA	NA	NA	NA
NA	NA	NA	NA
<10	<10	<10	<50
NA	NA	NA	NA
<10	<10	<10	<50
<9.6	<9.6	<9.6	<48.1
<9.7	<9.7	<9.7	<48.5
<9.6	<9.6	<9.6	<48.1

[illegible]

ug/L	ug/L	ug/L	ug/L	ug/L
2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Butanone (MEK)	2-Chloronaphthalene	2-Chlorophenol
<10	<10	<5	<10	<10
<9.9	<9.9	<125	<9.9	<9.9
<9.9	<9.9	<5	<9.9	<9.9
<9.8	<9.8	<5	<9.8	<9.8
<9.9	<9.9	<5	<9.9	<9.9
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<9.9	<9.9	<12.5	<9.9	<9.9
<10	<10	<125	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<9.8	<9.8	3.4 j	<9.8	<9.8
<9.6	<9.6	<5	<9.6	<9.6
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<50	<10	<10
<96.2	<96.2	<50	<96.2	<96.2
<10	<10	<5	<10	<10
<9.8	<9.8	<62.5	<9.8	<9.8
<99	<99	<62.5	<99	<99
<10	<10	<50	<10	<10
<98	<98	<50	<98	<98
<98	<98	<50	<98	<98
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<9.9	<9.9	<5	<9.9	<9.9
<9.9	<9.9	<5	<9.9	<9.9
<9.7	<9.7	<5	<9.7	<9.7
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<9.8	<9.8	<5	<9.8	<9.8
<9.7	<9.7	<5	<9.7	<9.7
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<9.8	<9.8	<5	<9.8	<9.8
<9.9	<9.9	<25	<9.9	<9.9
<10	<10	<5	<10	<10
<9.6	<9.6	<5	<9.6	<9.6
<10	<10	<5	<10	<10

<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<9.9	<9.9	<5	<9.9	<9.9
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<9.6	<9.6	<125	<9.6	<9.6
<10	<10	<5	<10	<10
<9.9	<9.9	<5	<9.9	<9.9
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
5.3 j,L2	<10	<5	<10	<10
<9.9	<9.9	<5	<9.9	<9.9
<10	<10	<5	<10	<10
<9.9	<9.9	<5	<9.9	<9.9
<10	<10	<5	<10	<10
<9.6	<9.6	<5	<9.6	<9.6
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<9.9	<9.9	<5	<9.9	<9.9
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<5	<10	<10
<10	<10	<20	<10	<10
<10	<10	<5	<10	<10
<9.9	<9.9	<5	<9.9	<9.9
<9.6	<9.6	<5	<9.6	<9.6
<9.6	<9.6	<5	<9.6	<9.6
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<9.9	<9.9	<5	<9.9	<9.9
<9.6	<9.6	<5	<9.6	<9.6
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10

<10	<10	3.7 j	<10	<10
<9.9	<9.9	<5	<9.9	<9.9
NA	NA	<5	NA	NA
NA	NA	<5	NA	NA
<10	<10	<5	<10	<10
NA	NA	<5	NA	NA
<10	<10	<5	<10	<10
<9.6	<9.6	NA	<9.6	<9.6
<9.7	<9.7	NA	<9.7	<9.7
<9.6	<9.6	NA	<9.6	<9.6

[illegible]

ug/L	ug/L	ug/L	ug/L	ug/L
2-Chlorotoluene	2-Hexanone	2-Methylnaphthalene	2-Methylphenol(o-Cresol)	2-Nitroaniline
<1	<5	<10	<10	<50
<25	<125	432	<9.9	<49.5
<1	<5	6.3 j	<9.9	<49.5
<1	<5	<9.8	<9.8	<49
<1	<5	<9.9	<9.9	<49.5
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<9.8	<9.8	<49
<2.5	<12.5	21.1	<9.9	<49.5
<25	<125	412 E	8.8 j	<50
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<9.8	<9.8	<49
<1	<5	<9.6	<9.6	<48.1
<1	<5	<9.8	<9.8	<49
<10	<50	479	<10	<50
<10	<50	476	<96.2	<481
<1	<5	<10	<10	<50
<12.5	<62.5	59.8	<9.8	<49
<12.5	<62.5	224	<99	<495
<10	<50	367 E	4.8 j,L2	<50
<10	<50	49.7 j	<98	<490
<10	<50	193	<98	<490
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<9.9	<9.9	<49.5
<1	<5	<9.9	<9.9	<49.5
<1	<5	<9.7	<9.7	<48.5
<1	<5	<10	<10	<50
<1	<5	<9.8	<9.8	<49
<1	<5	<9.8	<9.8	<49
<1	<5	<9.7	<9.7	<48.5
<1	<5	<9.8	<9.8	<49
<1	<5	<9.8	<9.8	<49
<5	<25	17.5	<9.9	<49.5
<1	<5	5.5 j	<10	<50
<1	<5	<9.6	<9.6	<48.1
<1	<5	<10	<10	<50

<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<9.9	<9.9	<49.5
<1	<5	<9.8	<9.8	<49
<1	<5	<10	<10	<50
<1	<5	<9.8	<9.8	<49
<25	<125	211	<9.6	<48.1
<1	<5	<10	<10	<50
<1	<5	<9.9	<9.9	<49.5
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<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<9.9	<9.9	<49.5
<1	<5	<10	<10	<50
<1	<5	<9.9	<9.9	<49.5
<1	<5	<10	<10	<50
<1	<5	<9.6	<9.6	<48.1
<1	<5	<9.7	<9.7	<48.5
<1	<5	<9.9	<9.9	<49.5
<1	<5	<9.8	<9.8	<49
<1	<5	<10	<10	<50
<4	<20	18	<10	<50
<1	<5	<10	<10	<50
<1	<5	<9.9	<9.9	<49.5
<1	<5	<9.6	<9.6	<48.1
<1	<5	<9.6	<9.6	<48.1
<1	<5	<10	<10	<50
<1	<5	<9.8	<9.8	<49
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<1	<5	<10	<10	<50
<1	<5	<9.9	<9.9	<49.5
<1	<5	<9.6	<9.6	<48.1
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50

<1	0.58 j	<10	<10	<50
<1	<5	<9.9	<9.9	<49.5
<1	<5	NA	NA	NA
<1	<5	NA	NA	NA
<1	<5	<10	<10	<50
<1	<5	NA	NA	NA
<1	<5	<10	<10	<50
NA	NA	<9.6	<9.6	<48.1
NA	NA	<9.7	<9.7	<48.5
NA	NA	<9.6	<9.6	<48.1

[illegible]

ug/L	ug/L	ug/L	ug/L
2-Nitrophenol	3&4-Methylphenol(m&p Cresol)	3,3'-Dichlorobenzidine	3-Nitroaniline
<10	<10	<50	<50
<9.9	<9.9	<49.5	<49.5
<9.9	<9.9	<49.5	<49.5
<9.8	<9.8	<49	<49
<9.9	<9.9	<49.5	<49.5
<10	<10	<50	<50
<10	<10	<50	<50
<10	<10	<50	<50
<9.8	<9.8	<49	<49
<9.9	<9.9	<19.8	<49.5
<10	13.9 L1	<50	<50
<10	<10	<50	<50
<10	<10	<20	<50
<10	<10	<50	<50
<9.8	3.2 j	<19.6	<49
<9.6	<9.6	<19.2	<48.1
<9.8	<9.8	<19.6	<49
<10	<10	<50	<50
<96.2	<96.2	<192	<481
<10	<10	<20	<50
<9.8	<9.8	<19.6	<49
<99	<99	<198	<495
<10	7 j,L2	<50	<50
<98	<98	<196	<490
<98	<98	<196	<490
<10	<10	<50	<50
<10	<10	<20	<50
<9.9	<9.9	<19.8	<49.5
<9.9	<9.9	<49.5	<49.5
<9.7	<9.7	<19.4	<48.5
<10	<10	<50	<50
<9.8	<9.8	<19.6	<49
<9.8	<9.8	<19.6	<49
<9.7	<9.7	<19.4	<48.5
<9.8	<9.8	<49	<49
<9.8	<9.8	<19.6	<49
<9.9	<9.9	<19.8	<49.5
<10	<10	<20	<50
<9.6	<9.6	<19.2	<48.1
<10	<10	<20	<50

<10	<10	<50	<50
<10	<10	<20	<50
<9.9	<9.9	<19.8	<49.5
<9.8	<9.8	<19.6	<49
<10	<10	<50	<50
<9.8	<9.8	<19.6	<49
<9.6	21.8	<19.2	<48.1
<10	<10	<50	<50
<9.9	<9.9	<19.8	<49.5
<10	<10	<50	<50
<10	<10	<50	<50
<10	<10	<20	<50
<10	<10	<50	<50
<9.9	<9.9	<19.8	<49.5
<10	<10	<20	<50
<9.9	<9.9	<19.8	<49.5
<10	<10	<20	<50
<9.6	<9.6	<19.2	<48.1
<9.7	<9.7	<19.4	<48.5
<9.9	<9.9	<19.8	<49.5
<9.8	<9.8	<19.6	<49
<10	<10	<20	<50
<10	<10	<20	<50
<10	<10	<20	<50
<9.9	<9.9	<19.8	<49.5
<9.6	<9.6	<19.2	<48.1
<9.6	<9.6	<19.2	<48.1
<10	<10	<20	<50
<9.8	<9.8	<19.6	<49
<10	<10	<20	<50
<10	<10	<20	<50
<9.9	<9.9	<19.8	<49.5
<9.6	<9.6	<19.2	<48.1
<10	<10	<20	<50
<10	<10	<20	<50

<10	<10	<50	<50
<9.9	<9.9	<49.5	<49.5
NA	NA	NA	NA
NA	NA	NA	NA
<10	<10	<50	<50
NA	NA	NA	NA
<10	<10	<50	<50
<9.6	<9.6	<48.1	<48.1
<9.7	<9.7	<48.5	<48.5
<9.6	<9.6	<48.1	<48.1

[illegible]

ug/L	ug/L	ug/L
4,6-Dinitro-2-methylphenol	4-Bromophenylphenyl ether	4-Chloroaniline
<20	<10	<50
<19.8	<9.9	<49.5
<19.8	<9.9	<49.5
<19.6	<9.8	<49
<19.8	<9.9	<49.5
<20	<10	<50
<20	<10	<50
<20	<10	<50
<19.6	<9.8	<49
<19.8	<9.9	<19.8
<20	<10	<50
<20	<10	<50
<20	<10	<20
<20	<10	<50
<19.6	<9.8	<19.6
<19.2	<9.6	<19.2
<19.6	<9.8	<19.6
<20	<10	<50
<192	<96.2	<192
<20	<10	<20
<19.6	<9.8	<19.6
<198	<99	<198
<20	<10	<50
<196	<98	<196
<196	<98	<196
<20	<10	<50
<20	<10	<20
<19.8	<9.9	<19.8
<19.8	<9.9	<49.5
<19.4	<9.7	<19.4
<20	<10	<50
<19.6	<9.8	<19.6
<19.6	<9.8	<19.6
<19.4	<9.7	<19.4
<19.6	<9.8	<49
<19.6	<9.8	<19.6
<19.8	<9.9	<19.8
<20	<10	<20
<19.2	<9.6	<19.2
<20	<10	<20

<20	<10	<50
<20	<10	<20
<19.8	<9.9	<19.8
<19.6	<9.8	<19.6
<20	<10	<50
<19.6	<9.8	<19.6
<19.2	<9.6	<19.2
<20	<10	<50
<19.8	<9.9	<19.8
<20	<10	<50
<20	<10	<50
<20	<10	<20
<20	<10	<50
<19.8	<9.9	<19.8
<20	<10	<20
<19.8	<9.9	<19.8
<20	<10	<20
<19.2	<9.6	<19.2
<19.4	<9.7	<19.4
<19.8	<9.9	<19.8
<19.6	<9.8	<19.6
<20	<10	<20
<20	<10	<20
<20	<10	<20
<19.8	<9.9	<19.8
<19.2	<9.6	<19.2
<19.2	<9.6	<19.2
<20	<10	<20
<19.6	<9.8	<19.6
<20	<10	<20
<20	<10	<20
<19.8	<9.9	<19.8
<19.2	<9.6	<19.2
<20	<10	<20
<20	<10	<20

<20	<10	<50
<19.8	<9.9	<49.5
NA	NA	NA
NA	NA	NA
<20	<10	<50
NA	NA	NA
<20	<10	<50
<19.2	<9.6	<48.1
<19.4	<9.7	<48.5
<19.2	<9.6	<48.1

[illegible]

ug/L	ug/L	ug/L	ug/L
4-Chlorophenylphenyl ether	4-Chlorotoluene	4-Methyl-2-pentanone (MIBK)	4-Nitroaniline
<10	<1	<5	<50
<9.9	<25	<125	<49.5
<9.9	<1	<5	<49.5
<9.8	<1	<5	<49
<9.9	<1	<5	<49.5
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<50
<9.8	<1	<5	<49
<9.9	<2.5	<12.5	<19.8
<10	<25	<125	<50
<10	<1	<5	<50
<10	<1	<5	<20
<10	<1	<5	<50
<9.8	<1	<5	<19.6
<9.6	<1	<5	<19.2
<9.8	<1	<5	<19.6
<10	<10	<50	<50
<96.2	<10	<50	<192
<10	<1	<5	<20
<9.8	<12.5	<62.5	<19.6
<99	<12.5	<62.5	<198
<10	<10	<50	<50
<98	<10	<50	<196
<98	<10	<50	<196
<10	<1	<5	<50
<10	<1	<5	<20
<9.9	<1	<5	<19.8
<9.9	<1	<5	<49.5
<9.7	<1	<5	<19.4
<10	<1	<5	<50
<9.8	<1	<5	<19.6
<9.8	<1	<5	<19.6
<9.7	<1	<5	<19.4
<9.8	<1	<5	<49
<9.8	<1	<5	<19.6
<9.9	<5	<25	<19.8
<10	<1	<5	<20
<9.6	<1	<5	<19.2
<10	<1	<5	<20

<10	<1	<5	<50
<10	<1	<5	<20
<9.9	<1	<5	<19.8
<9.8	<1	<5	<19.6
<10	<1	<5	<50
<9.8	<1	<5	<19.6
<9.6	<25	<125	<19.2
<10	<1	<5	<50
<9.9	<1	<5	<19.8
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<20
<10	<1	<5	<50
<9.9	<1	<5	<19.8
<10	<1	<5	<20
<9.9	<1	<5	<19.8
<10	<1	<5	<20
<9.6	<1	<5	<19.2
<9.7	<1	<5	<19.4
<9.9	<1	<5	<19.8
<9.8	<1	<5	<19.6
<10	<1	<5	<20
<10	<4	<20	<20
<10	<1	<5	<20
<9.9	<1	<5	<19.8
<9.6	<1	<5	<19.2
<9.6	<1	<5	<19.2
<10	<1	<5	<20
<9.8	<1	<5	<19.6
<10	<1	<5	<20
<10	<1	<5	<20
<9.9	<1	<5	<19.8
<9.6	<1	<5	<19.2
<10	<1	<5	<20
<10	<1	<5	<20

<10	<1	<5	<50
<9.9	<1	<5	<49.5
NA	<1	<5	NA
NA	<1	<5	NA
<10	<1	<5	<50
NA	<1	<5	NA
<10	<1	<5	<50
<9.6	NA	NA	<48.1
<9.7	NA	NA	<48.5
<9.6	NA	NA	<48.1

[illegible]

ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
4-Nitrophenol	Acenaphthene	Acenaphthylene	Acetone	Aniline	Anthracene	Benzene
<50	<10	<10	<25	<10	<10	3.4 D6,S1
<49.5	203 E	20.7	<625	<9.9	4.9 j	1100
<49.5	2.3 j	<9.9	<25	<9.9	<9.9	25.5
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<49.5	<9.9	<9.9	<25	<9.9	<9.9	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<49.5	<9.9	7.2 j	<62.5	<9.9	<9.9	151
<50	109 E	<10	<625	<10	<10	1920
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	2.9
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	18.3 j	<9.8	<9.8	<1
<48.1	<9.6	<9.6	<25	<9.6	<9.6	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	225	<10	<250	<10	10.5	25.8
<481	207	<96.2	<250	<96.2	<96.2	29.9
<50	<10	<10	<25	<10	<10	0.37 j
<49	28.7	3.6 j	<312	<9.8	<9.8	964
<495	94.9 j	<99	<312	<99	<99	817
<50	24.6	167 E	<250	<10	2.9 j	620
<490	<98	28.1 j	<250	<98	<98	595
<490	29.4 j	80.3 j	<250	<98	<98	588
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<49.5	<9.9	<9.9	<25	<9.9	<9.9	22
<49.5	<9.9	<9.9	<25	<9.9	<9.9	<1
<48.5	<9.7	<9.7	<25	<9.7	<9.7	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<48.5	<9.7	<9.7	<25	<9.7	<9.7	<1
<49	27.8	1.8 j	<25	<9.8	4.1 j	30.4
<49	4.6 j	<9.8	<25	<9.8	<9.8	4.8
<49.5	8.4 j	7.1 j	<125	<9.9	<9.9	3.6 j
<50	<10	2.5 j	<25	<10	<10	<1
<48.1	<9.6	<9.6	<25	<9.6	<9.6	<1
<50	<10	<10	<25	<10	<10	<1

<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<49.5	<9.9	<9.9	<25	<9.9	<9.9	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<48.1	142 E	<9.6	<625	<9.6	3.1 j	1680
<50	<10	<10	<25	<10	<10	<1
<49.5	<9.9	<9.9	<25	<9.9	<9.9	<1
<50	2.8 j,L2,M0	<10	<25	<10	<10	<1
<50	3 j	<10	<25	<10	<10	<1
<50	2.8 j	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<49.5	<9.9	<9.9	<25	<9.9	<9.9	<1
<50	<10	<10	<25	<10	<10	<1
<49.5	<9.9	<9.9	<25	<9.9	<9.9	<1
<50	<10	<10	<25	<10	<10	<1
<48.1	<9.6	<9.6	<25	<9.6	<9.6	6.6
<48.5	<9.7	<9.7	<25	<9.7	<9.7	<1
<49.5	<9.9	<9.9	<25	<9.9	<9.9	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	<10	<10	<25	<10	<10	<1
<50	17.8	6.7 j	<100	<10	3.2 j	9.4
<50	<10	<10	<25	<10	<10	<1
<49.5	<9.9	<9.9	<25	<9.9	<9.9	<1
<48.1	<9.6	<9.6	<25	<9.6	<9.6	<1
<48.1	<9.6	<9.6	<25	<9.6	<9.6	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<49.5	<9.9	<9.9	<25	<9.9	<9.9	<1
<48.1	<9.6	<9.6	<25	<9.6	<9.6	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1

<50	<10	<10	18.6 j	<10	<10	<1
<49.5	<9.9	<9.9	<25	<9.9	<9.9	<1
NA	NA	NA	<25	NA	NA	<1
NA	NA	NA	<25	NA	NA	<1
<50	<10	<10	<25	<10	<10	<1
NA	NA	NA	<25	NA	NA	<1
<50	<10	<10	<25	<10	<10	<1
<48.1	<9.6	<9.6	NA	<9.6	<9.6	NA
<48.5	<9.7	<9.7	NA	<9.7	<9.7	NA
<48.1	<9.6	<9.6	NA	<9.6	<9.6	NA

[illegible]

ug/L	ug/L	ug/L	ug/L
Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene
<10	<10	<10	<10
<9.9	<9.9	<9.9	<9.9
<9.9	<9.9	<9.9	<9.9
<9.8	<9.8	<9.8	<9.8
<9.9	<9.9	<9.9	<9.9
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<9.9	<9.9	<9.9	<9.9
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<9.6	<9.6	<9.6	<9.6
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<96.2	<96.2	<96.2	<96.2
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<99	<99	<99	<99
<10	<10	<10	<10
<98	<98	<98	<98
<98	<98	<98	<98
<10	<10	<10	<10
<10	<10	<10	<10
<9.9	<9.9	<9.9	<9.9
<9.9	<9.9	<9.9	<9.9
<9.7	<9.7	<9.7	<9.7
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<9.8	<9.8	<9.8	<9.8
<9.7	<9.7	<9.7	<9.7
<9.8	<9.8	<9.8	<9.8
<9.8	<9.8	<9.8	<9.8
<9.9	<9.9	<9.9	<9.9
<10	<10	<10	<10
<9.6	<9.6	<9.6	<9.6
<10	<10	<10	<10

<10	<10	<10	<10
<10	<10	<10	<10
<9.9	<9.9	<9.9	<9.9
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<9.6	<9.6	<9.6	<9.6
<10	<10	<10	<10
<9.9	<9.9	<9.9	<9.9
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<9.9	<9.9	<9.9	<9.9
<10	<10	<10	<10
<9.9	<9.9	<9.9	<9.9
<10	<10	<10	<10
<9.6	<9.6	<9.6	<9.6
<9.7	<9.7	<9.7	<9.7
<9.9	<9.9	<9.9	<9.9
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<9.9	<9.9	<9.9	<9.9
<9.6	<9.6	<9.6	<9.6
<9.6	<9.6	<9.6	<9.6
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<10	<10	<10	<10
<9.9	<9.9	<9.9	<9.9
<9.6	<9.6	<9.6	<9.6
<10	<10	<10	<10
<10	<10	<10	<10

<10	<10	<10	<10
<9.9	<9.9	<9.9	<9.9
NA	NA	NA	NA
NA	NA	NA	NA
<10	<10	<10	<10
NA	NA	NA	NA
<10	<10	<10	<10
<9.6	<9.6	<9.6	<9.6
<9.7	<9.7	<9.7	<9.7
<9.6	<9.6	<9.6	<9.6

[illegible]

ug/L	ug/L	ug/L	ug/L
Benzo(k)fluoranthene	Benzoic acid	Benzyl alcohol	bis(2-Chloroethoxy)methane
<10	<50	<20	<10
<9.9	<49.5	<19.8	<9.9
<9.9	<49.5	<19.8	<9.9
<9.8	<49	<19.6	<9.8
<9.9	<49.5	<19.8	<9.9
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<9.9	<49.5	<19.8	<9.9
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<9.6	<48.1	<19.2	<9.6
<9.8	<49	<19.6	<9.8
<10	<50	<20	<10
<96.2	<481	<192	<96.2
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<99	<495	<198	<99
<10	<50	<20	<10
<98	<490	<196	<98
<98	<490	<196	<98
<10	<50	<20	<10
<10	<50	<20	<10
<9.9	<49.5	<19.8	<9.9
<9.9	<49.5	<19.8	<9.9
<9.7	<48.5	<19.4	<9.7
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<9.8	<49	<19.6	<9.8
<9.7	<48.5	<19.4	<9.7
<9.8	<49	<19.6	<9.8
<9.8	<49	<19.6	<9.8
<9.9	<49.5	<19.8	<9.9
<10	<50	<20	<10
<9.6	<48.1	<19.2	<9.6
<10	<50	<20	<10

<10	<50	<20	<10
<10	<50	<20	<10
<9.9	<49.5	<19.8	<9.9
<9.8	<49	<19.6	<9.8
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<9.6	<48.1	<19.2	<9.6
<10	<50	<20	<10
<9.9	<49.5	<19.8	<9.9
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<9.9	<49.5	<19.8	<9.9
<10	<50	<20	<10
<9.9	<49.5	<19.8	<9.9
<10	<50	<20	<10
<9.6	<48.1	<19.2	<9.6
<9.7	<48.5	<19.4	<9.7
<9.9	<49.5	<19.8	<9.9
<9.8	<49	<19.6	<9.8
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<9.9	<49.5	<19.8	<9.9
<9.6	<48.1	<19.2	<9.6
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<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<10	<50	<20	<10
<10	<50	<20	<10
<9.9	<49.5	<19.8	<9.9
<9.6	<48.1	<19.2	<9.6
<10	<50	<20	<10
<10	<50	<20	<10

<10	<50	<20	<10
<9.9	<49.5	<19.8	<9.9
NA	NA	NA	NA
NA	NA	NA	NA
<10	<50	<20	<10
NA	NA	NA	NA
<10	<50	<20	<10
<9.6	<48.1	<19.2	<9.6
<9.7	<48.5	<19.4	<9.7
<9.6	<48.1	<19.2	<9.6

[illegible]

ug/L	ug/L	ug/L	ug/L
bis(2-Chloroethyl) ether	bis(2-Ethylhexyl)phthalate	Bromobenzene	Bromochloromethane
<10	<6	<1	<1
<9.9	81.5	<25	<25
<9.9	<5.9	<1	<1
<9.8	<5.9	<1	<1
<9.9	<5.9	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<9.9	<5.9	<2.5	<2.5
<10	<6	<25	<25
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<9.6	<5.8	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<10	<10
<96.2	<57.7	<10	<10
<10	<6	<1	<1
<9.8	<5.9	<12.5	<12.5
<99	<59.4	<12.5	<12.5
<10	<6	<10	<10
<98	<58.8	<10	<10
<98	<58.8	<10	<10
<10	<6	<1	<1
<10	<6	<1	<1
<9.9	<5.9	<1	<1
<9.9	<5.9	<1	<1
<9.7	<5.8	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<9.8	<5.9	<1	<1
<9.7	<5.8	<1	<1
<9.8	<5.9	<1	<1
<9.8	<5.9	<1	<1
<9.9	<5.9	<5	<5
<10	<6	<1	<1
<9.6	<5.8	<1	<1
<10	<6	<1	<1

<10	<6	<1	<1
<10	<6	<1	<1
<9.9	<5.9	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<9.6	<5.8	<25	<25
<10	<6	<1	<1
<9.9	<5.9	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<9.9	<5.9	<1	<1
<10	<6	<1	<1
<9.9	<5.9	<1	<1
<10	<6	<1	<1
<9.6	<5.8	<1	<1
<9.7	<5.8	<1	<1
<9.9	<5.9	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<10	<6	<4	<4
<10	<6	<1	<1
<9.9	<5.9	<1	<1
<9.6	<5.8	<1	<1
<9.6	<5.8	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<9.9	<5.9	<1	<1
<9.6	<5.8	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1

<10	<6	<1	<1
<9.9	<5.9	<1	<1
NA	NA	<1	<1
NA	NA	<1	<1
<10	<6	<1	<1
NA	NA	<1	<1
<10	<6	<1	<1
<9.6	<5.8	NA	NA
<9.7	<5.8	NA	NA
<9.6	<5.8	NA	NA

[illegible]

ug/L	ug/L	ug/L	ug/L	ug/L
Bromodichloromethane	Bromoform	Bromomethane	Butylbenzylphthalate	Carbon tetrachloride
<1	<1	<2	<10	<1
<25	<25	<50	<9.9	<25
<1	<1	<2	<9.9	<1
<1	<1	<2	<9.8	<1
<1	<1	<2	<9.9	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<9.8	<1
<2.5	<2.5	<5	<9.9	<2.5
<25	<25	<50	<10	<25
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<9.8	<1
<1	<1	<2	<9.6	<1
<1	<1	<2	<9.8	<1
<10	<10	<20	<10	<10
<10	<10	<20	<96.2	<10
<1	<1	<2	<10	<1
<12.5	<12.5	<25	<9.8	<12.5
<12.5	<12.5	<25	<99	<12.5
<10	<10	<20	<10	<10
<10	<10	<20	<98	<10
<10	<10	<20	<98	<10
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<9.9	<1
<1	<1	<2	<9.9	<1
<1	<1	<2	<9.7	<1
<1	<1	<2	<10	<1
<1	<1	<2	<9.8	<1
<1	<1	<2	<9.8	<1
<1	<1	<2	<9.7	<1
<1	<1	<2	<9.8	<1
<1	<1	<2	<9.8	<1
<5	<5	<10	<9.9	<5
<1	<1	<2	<10	<1
<1	<1	<2	<9.6	<1
<1	<1	<2	<10	<1

<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<9.9	<1
<1	<1	<2	<9.8	<1
<1	<1	<2	<10	<1
<1	<1	<2	<9.8	<1
<25	<25	<50	<9.6	<25
<1	<1	<5	<10	<1
<1	<1	<2	<9.9	<1
<1	<1	<5	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<5	<10	<1
<1	<1	<2	<9.9	<1
<1	<1	<2	<10	<1
<1	<1	<2	<9.6	<1
<1	<1	<2	<9.7	<1
<1	<1	<2	<9.9	<1
<1	<1	<2	<9.8	<1
<1	<1	<2	<10	<1
<4	<4	<8	<10	<4
<1	<1	<2	<10	<1
<1	<1	<2	<9.9	<1
<1	<1	<2	<9.6	<1
<1	<1	<2	<9.6	<1
<1	<1	<2	<10	<1
<1	<1	<2	<9.8	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
1.2	<1	<2	<9.9	<1
<1	<1	<2	<9.6	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1

<1	<1	<5	<10	<1
<1	<1	<5	<9.9	<1
<1	<1	<2	NA	<1
<1	<1	<2	NA	<1
<1	<1	<2	<10	<1
<1	<1	<2	NA	<1
<1	<1	<2	<10	<1
NA	NA	NA	<9.6	NA
NA	NA	NA	<9.7	NA
NA	NA	NA	<9.6	NA

[illegible]

ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
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Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Chrysene	cis-1,2-Dichloroethene
<1	<1	<5	<1	<10	<1
<25	<25	<125	<25	<9.9	<25
<1	<1	<5	<1	<9.9	<1
<1	<1	<5	<1	<9.8	1
<1	<1	<5	<1	<9.9	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<9.8	<1
<2.5	<2.5	<12.5	<2.5	<9.9	<2.5
<25	<25	<125	<25	<10	<25
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<9.8	<1
<1	<1	<5	<1	<9.6	<1
<1	<1	<5	<1	<9.8	<1
<10	<10	<50	<10	<10	<10
<10	<10	<50	<10	<96.2	<10
<1	<1	<5	<1	<10	<1
<12.5	<12.5	<62.5	<12.5	<9.8	<12.5
<12.5	<12.5	<62.5	<12.5	<99	<12.5
<10	<10	<50	<10	<10	<10
<10	<10	<50	<10	<98	<10
<10	<10	<50	<10	<98	<10
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<9.9	<1
<1	<1	<5	<1	<9.9	<1
<1	<1	<5	<1	<9.7	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<9.8	<1
<1	<1	<5	<1	<9.8	0.77 j
<1	<1	<5	<1	<9.7	<1
<1	<1	<5	<1	<9.8	<1
<1	<1	<5	<1	<9.8	<1
<5	<5	<25	<5	<9.9	<5
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<9.6	<1
<1	<1	<5	<1	<10	<1

<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<9.9	<1
<1	<1	<5	<1	<9.8	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<9.8	<1
<25	<25	<125	<25	<9.6	<25
<1	<1	<1	<1	<10	<1
<1	<1	<5	<1	<9.9	<1
<1	<1	<1	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<1	<1	<10	<1
<1	<1	<5	<1	<9.9	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<9.9	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<9.6	<1
<1	<1	<5	<1	<9.7	<1
<1	<1	<5	<1	<9.9	4.9
<1	<1	<5	<1	<9.8	<1
<1	<1	<5	<1	<10	<1
<4	<4	<20	<4	<10	<4
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<9.9	<1
<1	<1	<5	<1	<9.6	<1
<1	<1	2.3 j	<1	<9.6	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<9.8	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	5.3	<1	<9.9	<1
<1	<1	<5	<1	<9.6	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1

<1	<1	<1	<1	<10	<1
<1	<1	<1	<1	<9.9	<1
<1	<1	<5	<1	NA	<1
<1	<1	<5	<1	NA	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	NA	<1
<1	<1	<5	5.1	<10	<1
NA	NA	NA	NA	<9.6	NA
NA	NA	NA	NA	<9.7	NA
NA	NA	NA	NA	<9.6	NA

[illegible]

ug/L	ug/L	ug/L	ug/L
cis-1,3-Dichloropropene	Dibenz(a,h)anthracene	Dibenzofuran	Dibromochloromethane
<1	<10	<10	<1
<25	<9.9	10.7	<25
<1	<9.9	<9.9	<1
<1	<9.8	<9.8	<1
<1	<9.9	<9.9	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
<2.5	<9.9	<9.9	<2.5
<25	<10	6.2 j	<25
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
<1	<9.6	<9.6	<1
<1	<9.8	<9.8	<1
<10	<10	22.5	<10
<10	<96.2	23.2 j	<10
<1	<10	<10	<1
<12.5	<9.8	<9.8	<12.5
<12.5	<99	<99	<12.5
<10	<10	7.5 j	<10
<10	<98	<98	<10
<10	<98	<98	<10
<1	<10	<10	<1
<1	<10	<10	<1
<1	<9.9	<9.9	<1
<1	<9.9	<9.9	<1
<1	<9.7	<9.7	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
<1	<9.8	<9.8	<1
<1	<9.7	<9.7	<1
<1	<9.8	11.3	<1
<1	<9.8	2 j	<1
<5	<9.9	2.5 j	<5
<1	<10	<10	<1
<1	<9.6	<9.6	<1
<1	<10	<10	<1

<1	<10	<10	<1
<1	<10	<10	<1
<1	<9.9	<9.9	<1
<1	<9.8	<9.8	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
<25	<9.6	9.5 j	<25
<1	<10	<10	<1
<1	<9.9	<9.9	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<9.9	<9.9	<1
<1	<10	<10	<1
<1	<9.9	<9.9	<1
<1	<10	<10	<1
<1	<9.6	<9.6	<1
<1	<9.7	<9.7	<1
<1	<9.9	<9.9	<1
<1	<9.8	<9.8	<1
<1	<10	<10	<1
<4	<10	14	<4
<1	<10	<10	<1
<1	<9.9	<9.9	<1
<1	<9.6	<9.6	<1
<1	<9.6	<9.6	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<9.9	<9.9	<1
<1	<9.6	<9.6	<1
<1	<10	<10	<1
<1	<10	<10	<1

<1	<10	<10	<1
<1	<9.9	<9.9	<1
<1	NA	NA	<1
<1	NA	NA	<1
<1	<10	<10	<1
<1	NA	NA	<1
<1	<10	<10	<1
NA	<9.6	<9.6	NA
NA	<9.7	<9.7	NA
NA	<9.6	<9.6	NA

[illegible]

ug/L	ug/L	ug/L	ug/L
Dibromomethane	Dichlorodifluoromethane	Diethylphthalate	Diisopropyl ether
<1	<1	<10	<1
<25	<25	<9.9	<25
<1	<1	<9.9	<1
<1	<1	<9.8	<1
<1	<1	<9.9	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<9.8	<1
<2.5	<2.5	<9.9	<2.5
<25	<25	<10	<25
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<9.8	<1
<1	<1	<9.6	<1
<1	<1	<9.8	<1
<10	<10	<10	<10
<10	<10	<96.2	<10
<1	<1	<10	<1
<12.5	<12.5	<9.8	<12.5
<12.5	<12.5	<99	<12.5
<10	<10	<10	<10
<10	<10	<98	<10
<10	<10	<98	<10
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<9.9	<1
<1	<1	<9.9	<1
<1	<1	<9.7	<1
<1	<1	<10	<1
<1	<1	<9.8	<1
<1	<1	<9.8	<1
<1	<1	<9.7	<1
<1	<1	<9.8	<1
<1	<1	<9.8	<1
<5	<5	<9.9	<5
<1	<1	<10	<1
<1	<1	<9.6	<1
<1	<1	<10	<1

<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<9.9	<1
<1	<1	<9.8	<1
<1	<1	<10	<1
<1	<1	<9.8	<1
<25	<25	<9.6	<25
<1	<1	<10	<1
<1	<1	<9.9	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<9.9	<1
<1	<1	<10	<1
<1	<1	<9.9	<1
<1	<1	<10	<1
<1	<1	<9.6	<1
<1	<1	<9.7	<1
<1	<1	<9.9	<1
<1	<1	<9.8	<1
<1	<1	<10	<1
<4	<4	<10	<4
<1	<1	<10	<1
<1	<1	<9.9	<1
<1	<1	<9.6	<1
<1	<1	<9.6	<1
<1	<1	<10	<1
<1	<1	<9.8	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<9.9	<1
<1	<1	<9.6	<1
<1	<1	<10	<1
<1	<1	<10	<1

<1	<1	<10	<1
<1	<1	<9.9	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	<10	<1
<1	<1	NA	<1
<1	<1	<10	<1
NA	NA	<9.6	NA
NA	NA	<9.7	NA
NA	NA	<9.6	NA

[illegible]

ug/L	ug/L	ug/L	ug/L	ug/L
Dimethylphthalate	Di-n-butylphthalate	Di-n-octylphthalate	Ethylbenzene	Fluoranthene
<10	<10	<10	<1	<10
<9.9	<9.9	<9.9	274	<9.9
<9.9	<9.9	<9.9	0.75 j	<9.9
<9.8	<9.8	<9.8	<1	<9.8
<9.9	<9.9	<9.9	<1	<9.9
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<9.8	<9.8	<9.8	<1	<9.8
<9.9	<9.9	<9.9	11.2	<9.9
<10	<10	<10	411	<10
<10	<10	<10	<1	<10
<10	<10	<10	0.62 j	<10
<10	<10	<10	<1	<10
<9.8	<9.8	<9.8	<1	<9.8
<9.6	<9.6	<9.6	<1	<9.6
<9.8	<9.8	<9.8	<1	<9.8
<10	<10	<10	44.9	3 j
<96.2	<96.2	<96.2	42.4	<96.2
<10	<10	<10	<1	<10
<9.8	<9.8	<9.8	92.8	<9.8
<99	<99	<99	109	<99
<10	5.3 j	<10	128	<10
<98	<98	<98	136	<98
<98	<98	<98	146	<98
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<9.9	<9.9	<9.9	4.7	<9.9
<9.9	<9.9	<9.9	<1	<9.9
<9.7	<9.7	<9.7	<1	<9.7
<10	<10	<10	<1	<10
<9.8	<9.8	<9.8	<1	<9.8
<9.8	<9.8	<9.8	<1	<9.8
<9.7	<9.7	<9.7	<1	<9.7
<9.8	<9.8	<9.8	4.8	3.9 j
<9.8	<9.8	<9.8	0.92 j	<9.8
<9.9	<9.9	<9.9	53.2	<9.9
<10	<10	<10	2.1	<10
<9.6	<9.6	<9.6	<1	<9.6
<10	<10	<10	<1	<10

<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<9.9	<9.9	<9.9	<1	<9.9
<9.8	<9.8	<9.8	<1	<9.8
<10	<10	<10	<1	<10
<9.8	<9.8	<9.8	<1	<9.8
<9.6	<9.6	<9.6	242	<9.6
<10	<10	<10	<1	<10
<9.9	<9.9	<9.9	<1	<9.9
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<9.9	<9.9	<9.9	<1	<9.9
<10	<10	<10	<1	<10
<9.9	<9.9	<9.9	<1	<9.9
<10	<10	<10	<1	<10
<9.6	<9.6	<9.6	0.37 j	<9.6
<9.7	<9.7	<9.7	<1	<9.7
<9.9	<9.9	<9.9	<1	<9.9
<9.8	<9.8	<9.8	<1	<9.8
<10	<10	<10	<1	<10
<10	<10	<10	51	3.1 j
<10	<10	<10	<1	<10
<9.9	<9.9	<9.9	<1	<9.9
<9.6	<9.6	<9.6	<1	<9.6
<9.6	<9.6	<9.6	<1	<9.6
<10	<10	<10	<1	<10
<9.8	<9.8	<9.8	<1	<9.8
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<9.9	<9.9	<9.9	<1	<9.9
<9.6	<9.6	<9.6	<1	<9.6
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10

<10	<10	<10	<1	<10
<9.9	<9.9	<9.9	<1	<9.9
NA	NA	NA	<1	NA
NA	NA	NA	<1	NA
<10	<10	<10	<1	<10
NA	NA	NA	<1	NA
<10	<10	<10	<1	<10
<9.6	<9.6	<9.6	NA	<9.6
<9.7	<9.7	<9.7	NA	<9.7
<9.6	<9.6	<9.6	NA	<9.6

[illegible]

ug/L	ug/L	ug/L	ug/L
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Fluorene	Hexachloro-1,3-butadiene	Hexachlorobenzene	Hexachlorocyclopentadiene
<10	<1	<10	<10
36.7	22.4 j,B,C8	<9.9	<9.9
<9.9	<1	<9.9	<9.9
<9.8	<1	<9.8	<9.8
<9.9	<1	<9.9	<9.9
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<9.9	<2.5	<9.9	<9.9
19.3	<25	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<9.6	<1	<9.6	<9.6
<9.8	<1	<9.8	<9.8
66.1	<10	<10	<10
66.7 j	<10	<96.2	<96.2
<10	<1	<10	<10
6.2 j	<12.5	<9.8	<9.8
<99	<12.5	<99	<99
24.7	<10	<10	<10
<98	<10	<98	<98
20.2 j	<10	<98	<98
<10	<1	<10	<10
<10	<1	<10	<10
<9.9	<1	<9.9	<9.9
<9.9	<1	<9.9	<9.9
<9.7	<1	<9.7	<9.7
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<9.8	<1	<9.8	<9.8
<9.7	<1	<9.7	<9.7
12.8	<1	<9.8	<9.8
3 j	<1	<9.8	<9.8
3.7 j	<5	<9.9	<9.9
<10	<1	<10	<10
<9.6	<1	<9.6	<9.6
<10	<1	<10	<10

<10	<1	<10	<10
<10	<1	<10	<10
<9.9	<1	<9.9	<9.9
<9.8	<1	<9.8	<9.8
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
28.7	<25	<9.6	<9.6
<10	<1	<10	<10
<9.9	<1	<9.9	<9.9
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<9.9	<1	<9.9	<9.9
<10	<1	<10	<10
<9.9	<1	<9.9	<9.9
<10	<1	<10	<10
<9.6	<1	<9.6	<9.6
<9.7	<1	<9.7	<9.7
<9.9	<1	<9.9	<9.9
<9.8	<1	<9.8	<9.8
<10	<1	<10	<10
11.6	<4	<10	<10
<10	<1	<10	<10
<9.9	<1	<9.9	<9.9
<9.6	<1	<9.6	<9.6
<9.6	<1	<9.6	<9.6
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<10	<1	<10	<10
<10	<1	<10	<10
<9.9	<1	<9.9	<9.9
<9.6	<1	<9.6	<9.6
<10	<1	<10	<10
<10	<1	<10	<10

<10	<1	<10	<10
<9.9	<1	<9.9	<9.9
NA	<1	NA	NA
NA	<1	NA	NA
<10	<1	<10	<10
NA	<1	NA	NA
<10	<1	<10	<10
<9.6	<9.6	<9.6	<9.6
<9.7	<9.7	<9.7	<9.7
<9.6	<9.6	<9.6	<9.6

[illegible]

ug/L	ug/L	ug/L	ug/L	ug/L
Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	m&p-Xylene	Methylene chloride
<10	<10	<10	<2	<5
<9.9	<9.9	<9.9	143	<125
<9.9	<9.9	<9.9	1.7 j	<5
<9.8	<9.8	<9.8	<2	<5
<9.9	<9.9	<9.9	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<5
<9.9	<9.9	<9.9	25.1	<12.5
<10	<10	<10	181	<125
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<5
<9.6	<9.6	<9.6	<2	<5
<9.8	<9.8	<9.8	<2	<5
<10	<10	<10	35.4	<50
<96.2	<96.2	<96.2	43.3	<50
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	72.8	<62.5
<99	<99	<99	28	<62.5
<10	<10	<10	118	<50
<98	<98	<98	150	<50
<98	<98	<98	110	<50
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<9.9	<9.9	<9.9	2.8	<5
<9.9	<9.9	<9.9	<2	<5
<9.7	<9.7	<9.7	<2	<5
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<5
<9.8	<9.8	<9.8	<2	<5
<9.7	<9.7	<9.7	<2	<5
<9.8	<9.8	<9.8	2.8	<5
<9.8	<9.8	<9.8	<2	<5
<9.9	<9.9	<9.9	43	<25
<10	<10	<10	6.6	<5
<9.6	<9.6	<9.6	<2	<5
<10	<10	<10	<2	<5

<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<9.9	<9.9	<9.9	<2	<5
<9.8	<9.8	<9.8	<2	<5
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<5
<9.6	<9.6	<9.6	119	<125
<10	<10	<10	<2	<2
<9.9	<9.9	<9.9	<2	<5
<10	<10	<10	<2	<2
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<2
<9.9	<9.9	<9.9	<2	<5
<10	<10	<10	<2	<5
<9.9	<9.9	<9.9	<2	<5
<10	<10	<10	<2	<5
<9.6	<9.6	<9.6	1.2 j	<5
<9.7	<9.7	<9.7	<2	<5
<9.9	<9.9	<9.9	<2	<5
<9.8	<9.8	<9.8	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	54.8	<20
<10	<10	<10	<2	<5
<9.9	<9.9	<9.9	<2	<5
<9.6	<9.6	<9.6	<2	<5
<9.6	<9.6	<9.6	<2	<5
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<9.9	<9.9	<9.9	<2	<5
<9.6	<9.6	<9.6	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5

<10	<10	<10	<2	<2
<9.9	<9.9	<9.9	<2	<2
NA	NA	NA	<2	<5
NA	NA	NA	<2	<5
<10	<10	<10	<2	<5
NA	NA	NA	<2	<5
<10	<10	<10	<2	<5
<9.6	<9.6	<9.6	NA	NA
<9.7	<9.7	<9.7	NA	NA
<9.6	<9.6	<9.6	NA	NA

[illegible]

ug/L	ug/L	ug/L	ug/L
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Methyl-tert-butyl ether	Naphthalene	Nitrobenzene	N-Nitrosodimethylamine
<1	2.3 j	<10	<10
<25	3900 M1	<9.9	<9.9
1.5	33.8	<9.9	<9.9
<1	<1	<9.8	<9.8
<1	<1	<9.9	<9.9
<1	0.65 j	<10	<10
<1	1.5 j	<10	<10
1.8	<1	<10	<10
2	<1	<9.8	<9.8
<2.5	306	<9.9	<9.9
<25	4060	<10	<10
<1	<1	<10	<10
<1	2 j	<10	<10
<1	<1	<10	<10
<1	2.9 j	<9.8	<9.8
0.32 j	<1	<9.6	<9.6
<1	<1	<9.8	<9.8
<10	1700 M1	<10	<10
<10	1970	<96.2	<96.2
<1	2.4 j	<10	<10
<12.5	1160	<9.8	<9.8
<12.5	1590	<99	<99
<10	2910	<10	<10
<10	1430	<98	<98
<10	2430 M1	<98	<98
<1	<1	<10	<10
<1	<1	<10	<10
1.1	51.7	<9.9	<9.9
2.3	<1	<9.9	<9.9
1.7	<1	<9.7	<9.7
1.2	<1	<10	<10
<1	<1	<9.8	<9.8
<1	<1	<9.8	<9.8
<1	<1	<9.7	<9.7
<1	57.5	<9.8	<9.8
<1	<9.8	<9.8	<9.8
<5	752	<9.9	<9.9
<1	105	<10	<10
<1	1.8 j	<9.6	<9.6
<1	<1	<10	<10

0.48 j	<1	<10	<10
<1	<1	<10	<10
0.41 j	<1	<9.9	<9.9
1.1	2.6 j	<9.8	<9.8
<1	<1	<10	<10
<1	<1	<9.8	<9.8
<25	3200	<9.6	<9.6
<1	<1	<10	<10
<1	<1	<9.9	<9.9
<1	<1	<10	<10
<1	<1	<10	<10
<1	2.8 j	<10	<10
<1	0.38 j	<10	<10
<1	<1	<9.9	<9.9
<1	<1	<10	<10
<1	2.7 j	<9.9	<9.9
<1	6.1 j	<10	<10
<1	2.2 j	<9.6	<9.6
<1	0.73 j	<9.7	<9.7
<1	0.42 j	<9.9	<9.9
<1	<9.8	<9.8	<9.8
<1	1.4 j	<10	<10
<4	368	<10	<10
1.8	<1	<10	<10
<1	<1	<9.9	<9.9
0.38 j	<1	<9.6	<9.6
1.6	<1	<9.6	<9.6
<1	2.2 j	<10	<10
<1	3.8 j	<9.8	<9.8
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<9.9	<9.9
<1	<1	<9.6	<9.6
2.2	<1	<10	<10
0.36 j	<1	<10	<10

<1	<1	<10	<10
<1	<1	<9.9	<9.9
<1	<1	NA	NA
<1	<1	NA	NA
<1	<1	<10	<10
<1	<1	NA	NA
<1	<1	<10	<10
NA	<9.6	<9.6	<9.6
NA	<9.7	<9.7	<9.7
NA	<9.6	<9.6	<9.6

[illegible]

ug/L	ug/L	ug/L	ug/L
N-Nitroso-di-N-propylamine	N-Nitrosodiphenylamine	o-Xylene	p-Chloro-m-cresol
<10	<10	<1	<20
<9.9	<9.9	82.5	<19.8
<9.9	<9.9	0.25 j	<19.8
<9.8	<9.8	<1	<19.6
<9.9	<9.9	<1	<19.8
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<9.8	<9.8	<1	<19.6
<9.9	<9.9	12.8	<19.8
<10	<10	109	<20
<10	<10	<1	<20
<10	<10	0.31 j	<20
<10	<10	<1	<20
<9.8	<9.8	<1	<19.6
<9.6	<9.6	<1	<19.2
<9.8	<9.8	<1	<19.6
<10	<10	27.8	<20
<96.2	<96.2	28.3	<192
<10	<10	<1	<20
<9.8	<9.8	45.5	<19.6
<99	<99	4.9 j	<198
<10	<10	61.9	<20
<98	<98	83	<196
<98	<98	64.6	<196
<10	<10	<1	<20
<10	<10	<1	<20
<9.9	<9.9	0.33 j	<19.8
<9.9	<9.9	<1	<19.8
<9.7	<9.7	<1	<19.4
<10	<10	<1	<20
<9.8	<9.8	<1	<19.6
<9.8	<9.8	<1	<19.6
<9.7	<9.7	<1	<19.4
<9.8	<9.8	7.2	<19.6
<9.8	<9.8	0.98 j	<19.6
<9.9	<9.9	23.2	<19.8
<10	<10	2.7	<20
<9.6	<9.6	<1	<19.2
<10	<10	<1	<20

<10	<10	<1	<20
<10	<10	<1	<20
<9.9	<9.9	<1	<19.8
<9.8	<9.8	<1	<19.6
<10	<10	<1	<20
<9.8	<9.8	<1	<19.6
<9.6	<9.6	79.3	<19.2
<10	<10	<1	<20
<9.9	<9.9	<1	<19.8
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<9.9	<9.9	<1	<19.8
<10	<10	<1	<20
<9.9	<9.9	<1	<19.8
<10	<10	<1	<20
<9.6	<9.6	0.63 j	<19.2
<9.7	<9.7	<1	<19.4
<9.9	<9.9	<1	<19.8
<9.8	<9.8	<1	<19.6
<10	<10	<1	<20
<10	<10	33.3	<20
<10	<10	<1	<20
<9.9	<9.9	<1	<19.8
<9.6	<9.6	<1	<19.2
<9.6	<9.6	<1	<19.2
<10	<10	<1	<20
<9.8	<9.8	<1	<19.6
<10	<10	<1	<20
<10	<10	<1	<20
<9.9	<9.9	<1	<19.8
<9.6	<9.6	<1	<19.2
<10	<10	<1	<20
<10	<10	<1	<20

<10	<10	<1	<20
<9.9	<9.9	<1	<19.8
NA	NA	<1	NA
NA	NA	<1	NA
<10	<10	<1	<20
NA	NA	<1	NA
<10	<10	<1	<20
<9.6	<9.6	NA	<19.2
<9.7	<9.7	NA	<19.4
<9.6	<9.6	NA	<19.2

[illegible]

ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Pentachlorophenol	Phenanthrene	Phenol	p-Isopropyltoluene	Pyrene	Styrene
<50	<10	<10	<1	<10	<1
<49.5	34.3	<9.9	<25	<9.9	9.6 j
<49.5	<9.9	<9.9	<1	<9.9	<1
<49	<9.8	<9.8	<1	<9.8	<1
<49.5	<9.9	<9.9	<1	<9.9	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<49	<9.8	<9.8	<1	<9.8	<1
<24.8	<9.9	<9.9	<2.5	<9.9	27.7
<50	9.5 j	11.1 L2	<25	<10	<25
<50	<10	<10	<1	<10	<1
<25	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<24.5	<9.8	<9.8	<1	<9.8	<1
<24	<9.6	<9.6	<1	<9.6	<1
<24.5	<9.8	<9.8	<1	<9.8	<1
<50	56.3	<10	<10	4.2 j	<10
<240	74.2 j	<96.2	<10	<96.2	<10
<25	<10	<10	<1	<10	<1
<24.5	5.8 j	<9.8	<12.5	<9.8	<12.5
<248	<99	<99	<12.5	<99	<12.5
<50	17	<10	<10	<10	59.1
<245	<98	<98	<10	<98	69.8
<245	21.5 j	<98	<10	<98	38.5
<50	<10	<10	<1	<10	<1
<25	<10	<10	<1	<10	<1
<24.8	<9.9	<9.9	<1	<9.9	<1
<49.5	<9.9	<9.9	<1	<9.9	<1
<24.3	<9.7	<9.7	<1	<9.7	<1
<50	<10	<10	<1	<10	<1
<24.5	<9.8	<9.8	<1	<9.8	<1
<24.5	<9.8	<9.8	<1	<9.8	<1
<24.3	<9.7	<9.7	<1	<9.7	<1
<49	2.2 j	<9.8	<1	2.9 j	<1
<24.5	2 j	<9.8	<1	<9.8	<1
<24.8	4.1 j	<9.9	<5	<9.9	7
<25	<10	<10	<1	<10	6
<24	<9.6	<9.6	<1	<9.6	<1
<25	<10	<10	<1	<10	<1

<50	<10	<10	<1	<10	<1
<25	<10	<10	<1	<10	<1
<24.8	<9.9	<9.9	<1	<9.9	<1
<24.5	<9.8	<9.8	<1	<9.8	<1
<50	<10	<10	<1	<10	<1
<24.5	<9.8	<9.8	<1	<9.8	<1
<24	18.2	5.9 j	<25	<9.6	<25
<50	<10	<10	<1	<10	<1
<24.8	<9.9	<9.9	<1	<9.9	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<25	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<24.8	<9.9	<9.9	<1	<9.9	<1
<25	<10	<10	<1	<10	<1
<24.8	<9.9	<9.9	<1	<9.9	<1
<25	<10	<10	<1	<10	<1
<24	<9.6	<9.6	<1	<9.6	1.1
<24.3	<9.7	<9.7	<1	<9.7	<1
<24.8	<9.9	<9.9	<1	<9.9	<1
<24.5	<9.8	<9.8	<1	<9.8	<1
<25	<10	<10	<1	<10	<1
<25	9.3 j	<10	<4	<10	<4
<25	<10	<10	<1	<10	<1
<24.8	<9.9	<9.9	<1	<9.9	<1
<24	<9.6	<9.6	<1	<9.6	<1
<24	<9.6	<9.6	<1	<9.6	<1
<25	<10	<10	<1	<10	<1
<24.5	<9.8	<9.8	<1	<9.8	<1
<25	<10	<10	<1	<10	<1
<25	<10	<10	<1	<10	<1
<24.8	<9.9	<9.9	<1	<9.9	<1
<24	<9.6	<9.6	<1	<9.6	<1
<25	<10	<10	<1	<10	<1
<25	<10	<10	<1	<10	<1

<50	<10	<10	<1	<10	<1
<49.5	<9.9	<9.9	<1	<9.9	<1
NA	NA	NA	<1	NA	<1
NA	NA	NA	<1	NA	<1
<50	<10	<10	<1	<10	<1
NA	NA	NA	<1	NA	<1
<50	<10	<10	<1	<10	<1
<48.1	<9.6	<9.6	NA	<9.6	NA
<48.5	<9.7	<9.7	NA	<9.7	NA
<48.1	<9.6	<9.6	NA	<9.6	NA

[illegible]

ug/L	ug/L	ug/L	ug/L
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Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene
<1	<1	<1	<1
<25	89.2	<25	<25
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<2.5	109	<2.5	<2.5
<25	66.3	<25	<25
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<10	11.2	<10	<10
<10	12.4	<10	<10
<1	<1	<1	<1
<12.5	69	<12.5	<12.5
<12.5	<12.5	<12.5	<12.5
<10	251	<10	<10
<10	266	<10	<10
<10	124	<10	<10
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	8.9	<1	<1
<1	1.1	<1	<1
<5	43.5	<5	<5
<1	5.3	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1

[illegible]

ug/L	ug/L	ug/L	ug/L	ug/L
Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl chloride	Xylene (Total)
<1	<1	<2	<1	<1
<25	<25	<50	<25	226
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<2.5	<2.5	<5	<2.5	37.8
<25	<25	<50	<25	290
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<10	<10	<20	<10	63.3
<10	<10	<20	<10	71.5
<1	<1	<2	<1	<1
<12.5	<12.5	<25	<12.5	118
<12.5	<12.5	<25	<12.5	28
<10	<10	<20	<10	180
<10	<10	<20	<10	233
<10	<10	<20	<10	175
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	2.8
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
0.72 j	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1
<1	<1	<2	<1	9.9
<1	<1	<2	<1	<1
<5	<5	<10	<5	66.2
<1	<1	<2	<1	9.3
<1	<1	<2	<1	<1
<1	<1	<2	<1	<1

[illegible]

Reporting Units
SCDHEC Regulation 61-68

S.U.	Deg C	umhos/cm	mg/L
NE	NE	NE	NE

Location ID	Sample Collection Date	pH	Temperature	Specific Conductance	Dissolved Oxygen
SW-01	03/19/2019	7.3	10	331	4.1
SW-02	03/19/2019	7.1	10	344	7.88
SW-03	03/19/2019	7.0	12	402	6.47
SW-04	03/19/2019	2.7	11	445	7.08
SW-05	03/19/2019	7.3	12	482	4.33
SW-06	03/19/2019	6.5	9	428	5.93
SW-07	12/19/2018	6.9	10	63	9.54
SW-07	03/09/2020	6.8	12	47 S	10.46
SW-08	12/19/2018	6.8	11	65	9.35
SW-08	03/09/2020	6.9	13	47 S	9.9
SW-09	12/19/2018	7.0	9	64	12.08
SW-09	03/09/2020	6.8	11	57 S	11.02
SW-10	12/19/2018	6.9	10	68	10.1
SW-10	03/09/2020	6.8	11	60 S	10.83
SW-11	12/19/2018	7.0	9	65	9.95
SW-11	03/09/2020	6.8	10	59 S	10.74
SW-12	12/19/2018	7.4	8	183	10.12
SW-12	03/09/2020	6.9	10	67 S	11.28
SW-13	03/01/2020	7.0	6	429	5.17
SW-14	03/01/2020	7.0	6	337	6.75
SW-15	03/01/2020	6.9	5	340	7.22
SW-16	03/01/2020	6.7	5	346	8.72

QC SAMPLE RESULTS					
SW-DUP1 (SW-12)	12/19/2018	7.4	8	183	10.12
SW-15 DUP	03/01/2020	6.9	5	340	7.22

mV	mV	NTUs	GPM	ug/L	ug/L
NE	NE	NE	NE	NE	NE

Oxidation Reduction Potential	Eh	Turbidity	Flow	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane
72	277	5.0	NM	<1	<1
113	318	73.6	NM	<1	<1
-31	174	4.9	NM	<1	<1
-25	180	31.9	NM	<1	<1
-19	186	13.7	NM	<1	<1
-5	200	152.0	NM	<1	<1
233	438	10.4	NM	<1	<1
190	395	7.3	NM	<1	<1
235	440	10.1	NM	<1	<1
179	384	7.4	NM	<1	<1
271	476	9.4	NM	<1	<1
181	386	7.7	NM	<1	<1
255	460	7.9	NM	<1	<1
179	384	6.3	NM	<1	<1
202	407	14.8	NM	<1	<1
169	374	7.5	NM	<1	<1
232	437	6.7	NM	<1	<1
134	339	7.8	NM	<1	<1
85	290	21.3	NM	<1	<1
84	289	15.9	NM	<1	<1
78	283	10.7	46	<1	<1
72	277	9.6	56.8	<1	<1

232	437	6.7	NM	<1	<1
78	283	10.7	46	<1	<1

ug/L	ug/L	ug/L
NE	NE	NE

2,2-Dichloropropane	2,2'-Oxybis(1-chloropropane)	2,4,5-Trichlorophenol
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<9.6	<9.6
<1	<10	<10
<1	<9.8	<9.8
<1	<10	<10
<1	<9.8	<9.8
<1	<10	<10
<1	<9.8	<9.8
<1	<10	<10
<1	<9.8	<9.8
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10

<1	<9.6	<9.6
<1	<10	<10

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<9.6	<9.6	<9.6	<48.1
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50

<9.6	<9.6	<9.6	<48.1
<10	<10	<10	<50

ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE

2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Butanone (MEK)	2-Chloronaphthalene	2-Chlorophenol
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<9.6	<9.6	<5	<9.6	<9.6
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10

<9.6	<9.6	<5	<9.6	<9.6
<10	<10	<5	<10	<10

ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE

2-Chlorotoluene	2-Hexanone	2-Methylnaphthalene	2-Methylphenol(o-Cresol)	2-Nitroaniline
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
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<1	<5	<10	<10	<50
<1	<5	<9.6	<9.6	<48.1
<1	<5	<10	<10	<20
<1	<5	<9.8	<9.8	<49
<1	<5	<10	<10	<20
<1	<5	<9.8	<9.8	<49
<1	<5	<10	<10	<20
<1	<5	<9.8	<9.8	<49
<1	<5	<10	<10	<20
<1	<5	<9.8	<9.8	<49
<1	<5	<10	<10	<20
<1	<5	<10	<10	<50
<1	<5	<10	<10	<20
<1	<5	<10	<10	<20
<1	<5	<10	<10	<20
<1	<5	<10	<10	<20
<1	<5	<10	<10	<20
<1	<5	<10	<10	<20

<1	<5	<9.6	<9.6	<48.1
<1	<5	<10	<10	<20

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

2-Nitrophenol	3&4-Methylphenol(m&p Cresol)	3,3'-Dichlorobenzidine	3-Nitroaniline
<10	<10	<50	<50
<10	<10	<50	<50
<10	<10	<50	<50
<10	<10	<50	<50
<10	<10	<50	<50
<10	<10	<50	<50
<9.6	<9.6	<48.1	<48.1
<10	<10	<20	<20
<9.8	<9.8	<49	<49
<10	<10	<20	<20
<9.8	<9.8	<49	<49
<10	<10	<20	<20
<9.8	<9.8	<49	<49
<10	<10	<20	<20
<9.8	<9.8	<49	<49
<10	<10	<20	<20
<10	<10	<50	<50
<10	<10	<20	<20
<10	<10	<20	<20
<10	<10	<20	<20
<10	<10	<20	<20
<10	<10	<20	<20
<10	<10	<20	<20

<9.6	<9.6	<48.1	<48.1
<10	<10	<20	<20

ug/L	ug/L	ug/L
NE	NE	NE

4,6-Dinitro-2-methylphenol	4-Bromophenylphenyl ether	4-Chloroaniline
<20	<10	<50
<20	<10	<50
<20	<10	<50
<20	<10	<50
<20	<10	<50
<20	<10	<50
<19.2	<9.6	<48.1
<20	<10	<20
<19.6	<9.8	<49
<20	<10	<20
<19.6	<9.8	<49
<20	<10	<20
<19.6	<9.8	<49
<20	<10	<20
<19.6	<9.8	<49
<20	<10	<20
<20	<10	<50
<20	<10	<20
<20	<10	<20
<20	<10	<20
<20	<10	<20
<20	<10	<20

<19.2	<9.6	<48.1
<20	<10	<20

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

4-Chlorophenylphenyl ether	4-Chlorotoluene	4-Methyl-2-pentanone (MIBK)	4-Nitroaniline
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<50
<9.6	<1	<5	<48.1
<10	<1	<5	<20
<9.8	<1	<5	<49
<10	<1	<5	<20
<9.8	<1	<5	<49
<10	<1	<5	<20
<9.8	<1	<5	<49
<10	<1	<5	<20
<9.8	<1	<5	<49
<10	<1	<5	<20
<10	<1	<5	<50
<10	<1	<5	<20
<10	<1	<5	<20
<10	<1	<5	<20
<10	<1	<5	<20
<10	<1	<5	<20
<10	<1	<5	<20

<9.6	<1	<5	<48.1
<10	<1	<5	<20

ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE	NE	5

4-Nitrophenol	Acenaphthene	Acenaphthylene	Acetone	Aniline	Anthracene	Benzene
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	2.3
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<48.1	<9.6	<9.6	<25	<9.6	<9.6	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
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<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1

<48.1	<9.6	<9.6	<25	<9.6	<9.6	<1
<50	<10	<10	<25	<10	<10	<1

ug/L	ug/L	ug/L	ug/L
NE	0.2	NE	NE

Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<9.6	<9.6	<9.6	<9.6
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10

<9.6	<9.6	<9.6	<9.6
<10	<10	<10	<10

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

Benzo(k)fluoranthene	Benzoic acid	Benzyl alcohol	bis(2-Chloroethoxy)methane
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<9.6	<48.1	<19.2	<9.6
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
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<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10

<9.6	<48.1	<19.2	<9.6
<10	<50	<20	<10

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

bis(2-Chloroethyl) ether	bis(2-Ethylhexyl)phthalate	Bromobenzene	Bromochloromethane
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<9.6	<5.8	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
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<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1

<9.6	<5.8	<1	<1
<10	<6	<1	<1

ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE

Bromodichloromethane	Bromoform	Bromomethane	Butylbenzylphthalate	Carbon tetrachloride
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
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<1	<1	<2	<10	<1
<1	<1	<5	<9.8	<1
<1	<1	<2	<10	<1
<1	<1	<5	<9.8	<1
<1	<1	<2	<10	<1
<1	<1	<5	<9.8	<1
<1	<1	<2	<10	<1
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<1	<1	<5	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1

<1	<1	<5	<9.6	<1
<1	<1	<2	<10	<1

ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE	NE

Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Chrysene	cis-1,2-Dichloroethene
<1	<1	<5	<1	<10	<1
<1	<1	<5	4.4	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	13.2	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	10.5	<10	<1
<1	<1	<1	<1	<9.6	<1
<1	<1	<5	<1	<10	<1
<1	<1	<1	<1	<9.8	<1
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<1	<1	<1	<1	<9.8	<1
<1	<1	<5	<1	<10	<1
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<1	<1	<1	<1	<9.8	<1
<1	<1	<5	<1	<10	<1
<1	<1	<1	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1

<1	<1	<1	<1	<9.6	<1
<1	<1	<5	<1	<10	<1

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

cis-1,3-Dichloropropene	Dibenz(a,h)anthracene	Dibenzofuran	Dibromochloromethane
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<9.6	<9.6	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
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<1	<9.8	<9.8	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
<1	<10	<10	<1
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<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1

<1	<9.6	<9.6	<1
<1	<10	<10	<1

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

Dibromomethane	Dichlorodifluoromethane	Diethylphthalate	Diisopropyl ether
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
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<1	<1	<9.8	<1
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<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1

<1	<1	<9.6	<1
<1	<1	<10	<1

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

Fluorene	Hexachloro-1,3-butadiene	Hexachlorobenzene	Hexachlorocyclopentadiene
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<9.6	<1	<9.6	<9.6
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10

<9.6	<1	<9.6	<9.6
<10	<1	<10	<10

ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE

Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	m&p-Xylene	Methylene chloride
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<9.6	<9.6	<9.6	<2	<2
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<2
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<2
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<2
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<2
<10	<10	<10	<2	<5
<10	<10	<10	<2	<2
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5

<9.6	<9.6	<9.6	<2	<2
<10	<10	<10	<2	<5

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

Methyl-tert-butyl ether	Naphthalene	Nitrobenzene	N-Nitrosodimethylamine
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<10	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<9.6	<9.6
<1	<1	<10	<10
<1	<1	<9.8	<9.8
<1	<1	<10	<10
<1	<1	<9.8	<9.8
<1	<1	<10	<10
<1	<1	<9.8	<9.8
<1	<1	<10	<10
<1	<1	<9.8	<9.8
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10

<1	<1	<9.6	<9.6
<1	<1	<10	<10

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

N-Nitroso-di-N-propylamine	N-Nitrosodiphenylamine	o-Xylene	p-Chloro-m-cresol
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<9.6	<9.6	<1	<19.2
<10	<10	<1	<10
<9.8	<9.8	<1	<19.6
<10	<10	<1	<10
<9.8	<9.8	<1	<19.6
<10	<10	<1	<10
<9.8	<9.8	<1	<19.6
<10	<10	<1	<10
<9.8	<9.8	<1	<19.6
<10	<10	<1	<10
<9.8	<9.8	<1	<19.6
<10	<10	<1	<10
<10	<10	<1	<20
<10	<10	<1	<10
<10	<10	<1	<10
<10	<10	<1	<10
<10	<10	<1	<10
<10	<10	<1	<10
<10	<10	<1	<10

<9.6	<9.6	<1	<19.2
<10	<10	<1	<10

ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE	NE

Pentachlorophenol	Phenanthrene	Phenol	p-Isopropyltoluene	Pyrene	Styrene
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<48.1	<9.6	<9.6	<1	<9.6	<1
<20	<10	<10	<1	<10	<1
<49	<9.8	<9.8	<1	<9.8	<1
<20	<10	<10	<1	<10	<1
<49	<9.8	<9.8	<1	<9.8	<1
<20	<10	<10	<1	<10	<1
<49	<9.8	<9.8	<1	<9.8	<1
<20	<10	<10	<1	<10	<1
<49	<9.8	<9.8	<1	<9.8	<1
<20	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1

<48.1	<9.6	<9.6	<1	<9.6	<1
<20	<10	<10	<1	<10	<1

ug/L	ug/L	mg/L	ug/L
NE	1000	NE	NE

Tetrachloroethene	Toluene	Total Suspended Solids	trans-1,2-Dichloroethene
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	8.6	<1
<1	<1	6.4	<1
<1	<1	<4.8	<1
<1	<1	<4.6	<1

<1	<1	NA	<1
<1	<1	<4.9	<1

ug/L	ug/L
NE	10000

Vinyl chloride	Xylene (Total)
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1

<1	<1
<1	<1

Reporting Units
SCDHEC Regulation 61-68

S.U.	Deg C	umhos/cm	mg/L
NE	NE	NE	NE

Location ID	Sample Collection Date	pH	Temperature	Specific Conductance	Dissolved Oxygen
SW-01	03/19/2019	7.3	10	331	4.1
SW-02	03/19/2019	7.1	10	344	7.88
SW-03	03/19/2019	7.0	12	402	6.47
SW-04	03/19/2019	2.7	11	445	7.08
SW-05	03/19/2019	7.3	12	482	4.33
SW-06	03/19/2019	6.5	9	428	5.93
SW-07	12/19/2018	6.9	10	63	9.54
SW-07	03/09/2020	6.8	12	47 S	10.46
SW-08	12/19/2018	6.8	11	65	9.35
SW-08	03/09/2020	6.9	13	47 S	9.9
SW-09	12/19/2018	7.0	9	64	12.08
SW-09	03/09/2020	6.8	11	57 S	11.02
SW-10	12/19/2018	6.9	10	68	10.1
SW-10	03/09/2020	6.8	11	60 S	10.83
SW-11	12/19/2018	7.0	9	65	9.95
SW-11	03/09/2020	6.8	10	59 S	10.74
SW-12	12/19/2018	7.4	8	183	10.12
SW-12	03/09/2020	6.9	10	67 S	11.28
SW-13	03/01/2020	7.0	6	429	5.17
SW-14	03/01/2020	7.0	6	337	6.75
SW-15	03/01/2020	6.9	5	340	7.22
SW-16	03/01/2020	6.7	5	346	8.72

QC SAMPLE RESULTS					
SW-DUP1 (SW-12)	12/19/2018	7.4	8	183	10.12
SW-15 DUP	03/01/2020	6.9	5	340	7.22

mV	mV	NTUs	GPM	ug/L	ug/L
NE	NE	NE	NE	NE	NE

Oxidation Reduction Potential	Eh	Turbidity	Flow	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane
72	277	5.0	NM	<1	<1
113	318	73.6	NM	<1	<1
-31	174	4.9	NM	<1	<1
-25	180	31.9	NM	<1	<1
-19	186	13.7	NM	<1	<1
-5	200	152.0	NM	<1	<1
233	438	10.4	NM	<1	<1
190	395	7.3	NM	<1	<1
235	440	10.1	NM	<1	<1
179	384	7.4	NM	<1	<1
271	476	9.4	NM	<1	<1
181	386	7.7	NM	<1	<1
255	460	7.9	NM	<1	<1
179	384	6.3	NM	<1	<1
202	407	14.8	NM	<1	<1
169	374	7.5	NM	<1	<1
232	437	6.7	NM	<1	<1
134	339	7.8	NM	<1	<1
85	290	21.3	NM	<1	<1
84	289	15.9	NM	<1	<1
78	283	10.7	46	<1	<1
72	277	9.6	56.8	<1	<1

232	437	6.7	NM	<1	<1
78	283	10.7	46	<1	<1

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	1-Methylnaphthalene
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<9.6
<1	<1	<1	<10
<1	<1	<1	<9.8
<1	<1	<1	<10
<1	<1	<1	<9.8
<1	<1	<1	<10
<1	<1	<1	<9.8
<1	<1	<1	<10
<1	<1	<1	<9.8
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10
<1	<1	<1	<10

<1	<1	<1	<9.6
<1	<1	<1	<10

ug/L	ug/L	ug/L
NE	NE	NE

2,2-Dichloropropane	2,2'-Oxybis(1-chloropropane)	2,4,5-Trichlorophenol
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<9.6	<9.6
<1	<10	<10
<1	<9.8	<9.8
<1	<10	<10
<1	<9.8	<9.8
<1	<10	<10
<1	<9.8	<9.8
<1	<10	<10
<1	<9.8	<9.8
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10
<1	<10	<10

<1	<9.6	<9.6
<1	<10	<10

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<9.6	<9.6	<9.6	<48.1
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<9.8	<9.8	<9.8	<49
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50
<10	<10	<10	<50

<9.6	<9.6	<9.6	<48.1
<10	<10	<10	<50

ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE

2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Butanone (MEK)	2-Chloronaphthalene	2-Chlorophenol
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<9.6	<9.6	<5	<9.6	<9.6
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<5	<10	<10
<9.8	<9.8	<5	<9.8	<9.8
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10
<10	<10	<5	<10	<10

<9.6	<9.6	<5	<9.6	<9.6
<10	<10	<5	<10	<10

ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE

2-Chlorotoluene	2-Hexanone	2-Methylnaphthalene	2-Methylphenol(o-Cresol)	2-Nitroaniline
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<10	<10	<50
<1	<5	<9.6	<9.6	<48.1
<1	<5	<10	<10	<20
<1	<5	<9.8	<9.8	<49
<1	<5	<10	<10	<20
<1	<5	<9.8	<9.8	<49
<1	<5	<10	<10	<20
<1	<5	<9.8	<9.8	<49
<1	<5	<10	<10	<20
<1	<5	<9.8	<9.8	<49
<1	<5	<10	<10	<20
<1	<5	<10	<10	<50
<1	<5	<10	<10	<20
<1	<5	<10	<10	<20
<1	<5	<10	<10	<20
<1	<5	<10	<10	<20
<1	<5	<10	<10	<20
<1	<5	<10	<10	<20

<1	<5	<9.6	<9.6	<48.1
<1	<5	<10	<10	<20

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

2-Nitrophenol	3&4-Methylphenol(m&p Cresol)	3,3'-Dichlorobenzidine	3-Nitroaniline
<10	<10	<50	<50
<10	<10	<50	<50
<10	<10	<50	<50
<10	<10	<50	<50
<10	<10	<50	<50
<10	<10	<50	<50
<9.6	<9.6	<48.1	<48.1
<10	<10	<20	<20
<9.8	<9.8	<49	<49
<10	<10	<20	<20
<9.8	<9.8	<49	<49
<10	<10	<20	<20
<9.8	<9.8	<49	<49
<10	<10	<20	<20
<9.8	<9.8	<49	<49
<10	<10	<20	<20
<10	<10	<50	<50
<10	<10	<20	<20
<10	<10	<20	<20
<10	<10	<20	<20
<10	<10	<20	<20
<10	<10	<20	<20
<10	<10	<20	<20

<9.6	<9.6	<48.1	<48.1
<10	<10	<20	<20

ug/L	ug/L	ug/L
NE	NE	NE

4,6-Dinitro-2-methylphenol	4-Bromophenylphenyl ether	4-Chloroaniline
<20	<10	<50
<20	<10	<50
<20	<10	<50
<20	<10	<50
<20	<10	<50
<20	<10	<50
<19.2	<9.6	<48.1
<20	<10	<20
<19.6	<9.8	<49
<20	<10	<20
<19.6	<9.8	<49
<20	<10	<20
<19.6	<9.8	<49
<20	<10	<20
<19.6	<9.8	<49
<20	<10	<20
<20	<10	<50
<20	<10	<20
<20	<10	<20
<20	<10	<20
<20	<10	<20
<20	<10	<20

<19.2	<9.6	<48.1
<20	<10	<20

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

4-Chlorophenylphenyl ether	4-Chlorotoluene	4-Methyl-2-pentanone (MIBK)	4-Nitroaniline
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<50
<10	<1	<5	<50
<9.6	<1	<5	<48.1
<10	<1	<5	<20
<9.8	<1	<5	<49
<10	<1	<5	<20
<9.8	<1	<5	<49
<10	<1	<5	<20
<9.8	<1	<5	<49
<10	<1	<5	<20
<9.8	<1	<5	<49
<10	<1	<5	<20
<10	<1	<5	<50
<10	<1	<5	<20
<10	<1	<5	<20
<10	<1	<5	<20
<10	<1	<5	<20
<10	<1	<5	<20
<10	<1	<5	<20

<9.6	<1	<5	<48.1
<10	<1	<5	<20

ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE	NE	5

4-Nitrophenol	Acenaphthene	Acenaphthylene	Acetone	Aniline	Anthracene	Benzene
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	2.3
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<48.1	<9.6	<9.6	<25	<9.6	<9.6	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	<10	<10	<25	<10	<10	<1
<49	<9.8	<9.8	<25	<9.8	<9.8	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1
<50	<10	<10	<25	<10	<10	<1

<48.1	<9.6	<9.6	<25	<9.6	<9.6	<1
<50	<10	<10	<25	<10	<10	<1

ug/L	ug/L	ug/L	ug/L
NE	0.2	NE	NE

Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<9.6	<9.6	<9.6	<9.6
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<9.8	<9.8	<9.8	<9.8
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10
<10	<10	<10	<10

<9.6	<9.6	<9.6	<9.6
<10	<10	<10	<10

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

Benzo(k)fluoranthene	Benzoic acid	Benzyl alcohol	bis(2-Chloroethoxy)methane
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<9.6	<48.1	<19.2	<9.6
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<10	<50	<20	<10
<9.8	<49	<19.6	<9.8
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10
<10	<50	<20	<10

<9.6	<48.1	<19.2	<9.6
<10	<50	<20	<10

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

bis(2-Chloroethyl) ether	bis(2-Ethylhexyl)phthalate	Bromobenzene	Bromochloromethane
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<9.6	<5.8	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<9.8	<5.9	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1
<10	<6	<1	<1

<9.6	<5.8	<1	<1
<10	<6	<1	<1

ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE

Bromodichloromethane	Bromoform	Bromomethane	Butylbenzylphthalate	Carbon tetrachloride
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<5	<9.6	<1
<1	<1	<2	<10	<1
<1	<1	<5	<9.8	<1
<1	<1	<2	<10	<1
<1	<1	<5	<9.8	<1
<1	<1	<2	<10	<1
<1	<1	<5	<9.8	<1
<1	<1	<2	<10	<1
<1	<1	<5	<9.8	<1
<1	<1	<2	<10	<1
<1	<1	<5	<10	<1
<1	<1	<2	<10	<1
<1	<1	<5	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1
<1	<1	<2	<10	<1

<1	<1	<5	<9.6	<1
<1	<1	<2	<10	<1

ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE	NE

Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Chrysene	cis-1,2-Dichloroethene
<1	<1	<5	<1	<10	<1
<1	<1	<5	4.4	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	13.2	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	10.5	<10	<1
<1	<1	<1	<1	<9.6	<1
<1	<1	<5	<1	<10	<1
<1	<1	<1	<1	<9.8	<1
<1	<1	<5	<1	<10	<1
<1	<1	<1	<1	<9.8	<1
<1	<1	<5	<1	<10	<1
<1	<1	<1	<1	<9.8	<1
<1	<1	<5	<1	<10	<1
<1	<1	<1	<1	<9.8	<1
<1	<1	<5	<1	<10	<1
<1	<1	<1	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1
<1	<1	<5	<1	<10	<1

<1	<1	<1	<1	<9.6	<1
<1	<1	<5	<1	<10	<1

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

cis-1,3-Dichloropropene	Dibenz(a,h)anthracene	Dibenzofuran	Dibromochloromethane
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<9.6	<9.6	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
<1	<10	<10	<1
<1	<9.8	<9.8	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1
<1	<10	<10	<1

<1	<9.6	<9.6	<1
<1	<10	<10	<1

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

Dibromomethane	Dichlorodifluoromethane	Diethylphthalate	Diisopropyl ether
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<9.6	<1
<1	<1	<10	<1
<1	<1	<9.8	<1
<1	<1	<10	<1
<1	<1	<9.8	<1
<1	<1	<10	<1
<1	<1	<9.8	<1
<1	<1	<10	<1
<1	<1	<9.8	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1
<1	<1	<10	<1

<1	<1	<9.6	<1
<1	<1	<10	<1

ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	700	NE

Dimethylphthalate	Di-n-butylphthalate	Di-n-octylphthalate	Ethylbenzene	Fluoranthene
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	0.5 j	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<9.6	<9.6	<9.6	<1	<9.6
<10	<10	<10	<1	<10
<9.8	<9.8	<9.8	<1	<9.8
<10	<10	<10	<1	<10
<9.8	<9.8	<9.8	<1	<9.8
<10	<10	<10	<1	<10
<9.8	<9.8	<9.8	<1	<9.8
<10	<10	<10	<1	<10
<9.8	<9.8	<9.8	<1	<9.8
<10	<10	<10	<1	<10
<9.8	<9.8	<9.8	<1	<9.8
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10
<10	<10	<10	<1	<10

<9.6	<9.6	<9.6	<1	<9.6
<10	<10	<10	<1	<10

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

Fluorene	Hexachloro-1,3-butadiene	Hexachlorobenzene	Hexachlorocyclopentadiene
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<9.6	<1	<9.6	<9.6
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<10	<1	<10	<10
<9.8	<1	<9.8	<9.8
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10
<10	<1	<10	<10

<9.6	<1	<9.6	<9.6
<10	<1	<10	<10

ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE

Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	m&p-Xylene	Methylene chloride
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<9.6	<9.6	<9.6	<2	<2
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<2
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<2
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<2
<10	<10	<10	<2	<5
<9.8	<9.8	<9.8	<2	<2
<10	<10	<10	<2	<5
<10	<10	<10	<2	<2
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5
<10	<10	<10	<2	<5

<9.6	<9.6	<9.6	<2	<2
<10	<10	<10	<2	<5

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

Methyl-tert-butyl ether	Naphthalene	Nitrobenzene	N-Nitrosodimethylamine
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<10	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<9.6	<9.6
<1	<1	<10	<10
<1	<1	<9.8	<9.8
<1	<1	<10	<10
<1	<1	<9.8	<9.8
<1	<1	<10	<10
<1	<1	<9.8	<9.8
<1	<1	<10	<10
<1	<1	<9.8	<9.8
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10
<1	<1	<10	<10

<1	<1	<9.6	<9.6
<1	<1	<10	<10

ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE

N-Nitroso-di-N-propylamine	N-Nitrosodiphenylamine	o-Xylene	p-Chloro-m-cresol
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<10	<10	<1	<20
<9.6	<9.6	<1	<19.2
<10	<10	<1	<10
<9.8	<9.8	<1	<19.6
<10	<10	<1	<10
<9.8	<9.8	<1	<19.6
<10	<10	<1	<10
<9.8	<9.8	<1	<19.6
<10	<10	<1	<10
<9.8	<9.8	<1	<19.6
<10	<10	<1	<10
<10	<10	<1	<20
<10	<10	<1	<10
<10	<10	<1	<10
<10	<10	<1	<10
<10	<10	<1	<10
<10	<10	<1	<10
<10	<10	<1	<10

<9.6	<9.6	<1	<19.2
<10	<10	<1	<10

ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NE	NE	NE	NE	NE	NE

Pentachlorophenol	Phenanthrene	Phenol	p-Isopropyltoluene	Pyrene	Styrene
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<48.1	<9.6	<9.6	<1	<9.6	<1
<20	<10	<10	<1	<10	<1
<49	<9.8	<9.8	<1	<9.8	<1
<20	<10	<10	<1	<10	<1
<49	<9.8	<9.8	<1	<9.8	<1
<20	<10	<10	<1	<10	<1
<49	<9.8	<9.8	<1	<9.8	<1
<20	<10	<10	<1	<10	<1
<49	<9.8	<9.8	<1	<9.8	<1
<20	<10	<10	<1	<10	<1
<50	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1
<20	<10	<10	<1	<10	<1

<48.1	<9.6	<9.6	<1	<9.6	<1
<20	<10	<10	<1	<10	<1

ug/L	ug/L	mg/L	ug/L
NE	1000	NE	NE

Tetrachloroethene	Toluene	Total Suspended Solids	trans-1,2-Dichloroethene
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	NA	<1
<1	<1	8.6	<1
<1	<1	6.4	<1
<1	<1	<4.8	<1
<1	<1	<4.6	<1

<1	<1	NA	<1
<1	<1	<4.9	<1

ug/L	ug/L
NE	10000

Vinyl chloride	Xylene (Total)
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1
<1	<1

<1	<1
<1	<1

Reporting Units	ug/kg
EPA RSL for Industrial Soil	NE
EPA RSL for Residential Soil	NE

Location ID	Sample Collection Date	1,1,1,2-Tetrachloroethane
SW-01-SED	03/19/2019	<9.6
SW-02-SED	03/22/2019	<12.1
SW-03-SED	03/19/2019	<7.8
SW-04-SED	03/19/2019	<19.8
SW-05-SED	03/19/2019	<13.2
SW-06-SED	03/19/2019	<13
SW-07-SED	12/19/2018	<7.8
SW-08-SED	12/19/2018	<4.9
SW-09-SED	12/19/2018	<6.2
SW-10-SED	12/19/2018	<4.4
SW-11-SED	12/19/2018	<5
SW-12-SED	12/19/2018	<4.4
SW-13 (0-0.5)	03/02/2020	<12.1
SW-13 (0.5-1)	03/02/2020	<8.5
SW-13 (1-2)	03/02/2020	<8.2
SW-13A (0-0.5)	03/02/2020	<21.8
SW-13A (0.5-1)	03/02/2020	<20.1
SW-14 (0-0.5)	03/02/2020	<9.9
SW-14 (0.5-1)	e the	<7.7
SW-14 (1-2)	03/02/2020	<9.1
SW-14 (2-3)	03/02/2020	NA
SW-14A (0-0.5)	03/02/2020	<31.3
SW-15 (0-0.5)	03/01/2020	<13.7
SW-15 (0.5-1)	03/01/2020	<10.1
SW-16 (0-0.5)	03/01/2020	<19.6
SW-16 (0.5-1)	03/01/2020	<20.6
SW-16 (1-2)	03/01/2020	<6.2
SW-16 (2-3)	03/01/2020	<7.5
SW-17 (0-.0.5)	04/10/2020	<5.1
SW-17 (0.5-1.0)	04/10/2020	<4.7
SW-17 (1.0-2.0)	04/10/2020	<5.1

QC SAMPLE RESULTS		
SW-DUP1-SED (SW-12)	12/19/2018	<4.4
SW-13A (0-0.5) DUP	03/02/2020	<22.1

ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	NE
NE	NE	NE	NE

1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane
<9.6	<9.6	<9.6	<9.6
<12.1	<12.1	<12.1	<12.1
<7.8	<7.8	<7.8	<7.8
<19.8	<19.8	<19.8	<19.8
<13.2	<13.2	<13.2	<13.2
<13	<13	<13	<13
<7.8	<7.8	<7.8	<7.8
<4.9	<4.9	<4.9	<4.9
<6.2	<6.2	<6.2	<6.2
<4.4	<4.4	<4.4	<4.4
<5	<5	<5	<5
<4.4	<4.4	<4.4	<4.4
<12.1	<12.1	<12.1	<12.1
<8.5	<8.5	<8.5	<8.5
<8.2	<8.2	<8.2	<8.2
<21.8	<21.8	<21.8	<21.8
<20.1	<20.1	<20.1	<20.1
<9.9	<9.9	<9.9	<9.9
<7.7	<7.7	<7.7	<7.7
<9.1	<9.1	<9.1	<9.1
NA	NA	NA	NA
<31.3	<31.3	<31.3	<31.3
<13.7	<13.7	<13.7	<13.7
<10.1	<10.1	<10.1	<10.1
<19.6	<19.6	<19.6	<19.6
<20.6	<20.6	<20.6	<20.6
<6.2	<6.2	<6.2	<6.2
<7.5	<7.5	<7.5	<7.5
<5.1	<5.1	<5.1	<5.1
<4.7	<4.7	<4.7	<4.7
<5.1	<5.1	<5.1	<5.1

<4.4	<4.4	<4.4	<4.4
<22.1	<22.1	<22.1	<22.1

ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	NE
NE	NE	NE	NE

1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane
<9.6	<9.6	<9.6	<9.6
<12.1	<12.1	<12.1	<12.1
<7.8	<7.8	<7.8	<7.8
<19.8	<19.8	<19.8	<19.8
<13.2	<13.2	<13.2	<13.2
<13	<13	<13	<13
<7.8	<7.8	<7.8	<7.8
<4.9	<4.9	<4.9	<4.9
<6.2	<6.2	<6.2	<6.2
<4.4	<4.4	<4.4	<4.4
<5	<5	<5	<5
<4.4	<4.4	<4.4	<4.4
<12.1	<12.1	<12.1	<12.1
<8.5	<8.5	<8.5	<8.5
<8.2	<8.2	<8.2	<8.2
<21.8	<21.8	<21.8	<21.8
<20.1	<20.1	<20.1	<20.1
<9.9	<9.9	<9.9	<9.9
<7.7	<7.7	<7.7	<7.7
<9.1	<9.1	<9.1	<9.1
NA	NA	NA	NA
<31.3	<31.3	<31.3	<31.3
<13.7	<13.7	<13.7	<13.7
<10.1	<10.1	<10.1	<10.1
<19.6	<19.6	<19.6	<19.6
<20.6	<20.6	<20.6	<20.6
<6.2	<6.2	<6.2	<6.2
<7.5	<7.5	<7.5	<7.5
<5.1	<5.1	<5.1	<5.1
<4.7	<4.7	<4.7	<4.7
<5.1	<5.1	<5.1	<5.1

<4.4	<4.4	<4.4	<4.4
<22.1	<22.1	<22.1	<22.1

ug/kg	ug/kg	ug/kg
NE	1800000	NE
NE	300000	NE

1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane
<9.6	<9.6	<9.6
<12.1	<12.1	<12.1
<7.8	<7.8	<7.8
<19.8	<19.8	<19.8
<13.2	<13.2	<13.2
<13	<13	<13
<7.8	<7.8	<7.8
<4.9	<4.9	<4.9
<6.2	<6.2	<6.2
<4.4	<4.4	<4.4
<5	<5	<5
<411	<4.4	<4.4
<12.1	<12.1	<12.1
<8.5	<8.5	<8.5
<8.2	<8.2	<8.2
<21.8	<21.8	<21.8
<20.1	<20.1	<20.1
<9.9	<9.9	<9.9
<7.7	<7.7	<7.7
<9.1	<9.1	<9.1
<487	NA	NA
<31.3	<31.3	<31.3
<13.7	<13.7	<13.7
<10.1	<10.1	<10.1
<19.6	<19.6	<19.6
<20.6	<20.6	<20.6
<6.2	<6.2	<6.2
<7.5	<7.5	<7.5
<5.1	<5.1	<5.1
<2270	<4.7	<4.7
<5.1	<5.1	<5.1

<4.4	<4.4	<4.4
<22.1	<22.1	<22.1

ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	NE
NE	NE	NE	NE

1,2-Dibromoethane (EDB)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane
<9.6	<9.6	<9.6	<9.6
<12.1	<12.1	<12.1	<12.1
<7.8	<7.8	<7.8	<7.8
<19.8	<19.8	<19.8	<19.8
<13.2	<13.2	<13.2	<13.2
<13	<13	<13	<13
<7.8	<7.8	<7.8	<7.8
<4.9	<4.9	<4.9	<4.9
<6.2	<6.2	<6.2	<6.2
<4.4	<4.4	<4.4	<4.4
<5	<5	<5	<5
<4.4	<4.4	<4.4	<4.4
<12.1	<12.1	<12.1	<12.1
<8.5	<8.5	<8.5	<8.5
<8.2	<8.2	<8.2	<8.2
<21.8	<21.8	<21.8	<21.8
<20.1	<933	<20.1	<20.1
<9.9	<9.9	<9.9	<9.9
<7.7	<7.7	<7.7	<7.7
<9.1	<9.1	<9.1	<9.1
NA	<487	NA	NA
<31.3	<31.3	<31.3	<31.3
<13.7	<13.7	<13.7	<13.7
<10.1	<10.1	<10.1	<10.1
<19.6	<19.6	<19.6	<19.6
<20.6	<20.6	<20.6	<20.6
<6.2	<6.2	<6.2	<6.2
<7.5	<7.5	<7.5	<7.5
<5.1	<5.1	<5.1	<5.1
<4.7	<2270	<4.7	<4.7
<5.1	<5.1	<5.1	<5.1

<4.4	<4.4	<4.4	<4.4
<22.1	<22.1	<22.1	<22.1

ug/kg	ug/kg	ug/kg	ug/kg
1500000	NE	NE	NE
270000	NE	NE	NE

1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene
<9.6	<9.6	<9.6	<9.6
<12.1	<12.1	<12.1	<12.1
<7.8	<7.8	<7.8	<7.8
<19.8	<19.8	<19.8	<19.8
<13.2	<13.2	<13.2	<13.2
<13	<13	<13	<13
<7.8	<7.8	<7.8	<7.8
<4.9	<4.9	<4.9	<4.9
<6.2	<6.2	<6.2	<6.2
<4.4	<4.4	<4.4	<4.4
<5	<5	<5	<5
<4.4	<4.4	<4.4	<411
<12.1	<12.1	<12.1	<12.1
<8.5	<8.5	<8.5	<8.5
<8.2	<8.2	<8.2	<8.2
<21.8	<21.8	<21.8	<21.8
<20.1	<933	<20.1	<933
<9.9	<9.9	<9.9	<9.9
<7.7	<7.7	<7.7	<7.7
<9.1	<9.1	<9.1	<9.1
NA	<487	NA	<487
<31.3	<31.3	<31.3	<31.3
<13.7	<13.7	<13.7	<13.7
<10.1	<10.1	<10.1	<10.1
<19.6	<19.6	<19.6	<19.6
<20.6	<20.6	<20.6	<20.6
<6.2	<6.2	<6.2	<6.2
<7.5	<7.5	<7.5	<7.5
<5.1	<5.1	<5.1	<5.1
<4.7	<2270	<4.7	<2270
<5.1	<5.1	<5.1	<5.1

<4.4	<4.4	<4.4	<4.4
<22.1	<22.1	<22.1	<22.1

ug/kg	ug/kg	ug/kg
73000	NE	NE
18000	NE	NE

1-Methylnaphthalene	2,2-Dichloropropane	2,2'-Oxybis(1-chloropropane)
7.5 j,M1	<9.6	<7390
4 j	<12.1	<7390
57.2	<7.8	<4740
11.3 j	<19.8	<4960
8.6 j	<13.2	<9350
54.7	<13	<7600
<451	<7.8	<451
<420	<4.9	<420
<423	<6.2	<423
<420	<4.4	<420
<449	<5	<449
<411	<4.4	<411
<470	<12.1	<470
<482	<8.5	<482
<510	<8.2	<510
<1300	<21.8	<1300
<933	<20.1	<933
<514	<9.9	<514
<504	<7.7	<504
<429	<9.1	<429
<487	NA	<487
<6640	<31.3	<6640
<789	<13.7	<789
<3230	<10.1	<3230
<657	<19.6	<657
<553	<20.6	<553
<488	<6.2	<488
<467	<7.5	<467
<3900	<5.1	<3900
<2270	<4.7	<2270
<462	<5.1	<462

<419	<4.4	<419
<1170	<22.1	<1170

ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	16000000
NE	NE	NE	1300000

2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol
<7390	<7390	<7390	<7390
<7390	<7390	<7390	<7390
<4740	<4740	<4740	<4740
<4960	<4960	<4960	<4960
<9350	<9350	<9350	<9350
<7600	<7600	<7600	<7600
<451	<451	<451	<451
<420	<420	<420	<420
<423	<423	<423	<423
<420	<420	<420	<420
<449	<449	<449	<449
<411	<411	<411	<411
<470	<470	<470	<470
<482	<482	<482	<482
<510	<510	<510	<510
<1300	<1300	<1300	<1300
<933	<933	<933	<933
<514	<514	<514	<514
<504	<504	<504	<504
<429	<429	<429	<429
<487	<487	<487	<487
<6640	<6640	<6640	<6640
<789	<789	<789	<789
<3230	<3230	<3230	<3230
<657	<657	<657	<657
<553	<553	<553	<553
<488	<488	<488	<488
<467	<467	<467	<467
<3900	<3900	<3900	<3900
<2270	<2270	<2270	<2270
<462	<462	<462	<462

<419	<419	<419	<419
<1170	<1170	<1170	<1170

ug/kg	ug/kg	ug/kg	ug/kg
NE	7400	NE	190000000
NE	1700	NE	27000000

2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Butanone (MEK)
<36900	<7390	<7390	12.7 j
<37000	<7390	<7390	<242
<23700	<4740	<4740	<156
<24800	<4960	<4960	31.1 j
<46700	<9350	<9350	17.1 j
<38000	<7600	<7600	11.5 j
<2260	<451	<451	<155
<2100	<420	<420	<97.6
<2120	<423	<423	<124
<2100	<420	<420	<88.8
<2240	<449	<449	<101
<2060	<411	<411	<88.1
<2350	<470	<470	<242
<2410	<482	<482	<170
<2550	<510	<510	<163
<6490	<1300	<1300	<437
<4660	<933	<933	<402
<2570	<514	<514	<197
<2520	<504	<504	<155
<2150	<429	<429	<181
<2440	<487	<487	NA
<33200	<6640	<6640	<625
<3950	<789	<789	<275
<16200	<3230	<3230	<201
<3290	<657	<657	<393
<2760	<553	<553	<412
<2440	<488	<488	<124
<2330	<467	<467	<149
<19500	<3900	<3900	<103
<11300	<2270	<2270	<94
<2310	<462	<462	<103

<2090	<419	<419	<87.1
<5850	<1170	<1170	<442

ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	1300000	3000000
NE	NE	NE	200000	240000

2-Chloronaphthalene	2-Chlorophenol	2-Chlorotoluene	2-Hexanone	2-Methylnaphthalene
<7390	<7390	<9.6	<96.5	12.3 j,M1
<7390	<7390	<12.1	<121	5.9 j
<4740	<4740	<7.8	<78.2	90.5
<4960	<4960	<19.8	<198	11.5 j
<9350	<9350	<13.2	<132	9.3 j
<7600	<7600	<13	<130	83.9
<451	<451	<7.8	<77.7	<451
<420	<420	<4.9	<48.8	<420
<423	<423	<6.2	<62.1	<423
<420	<420	<4.4	<44.4	<420
<449	<449	<5	<50.3	<449
<411	<411	<4.4	<44.1	<411
<470	<470	<12.1	<121	<470
<482	<482	<8.5	<85.2	<482
<510	<510	<8.2	<81.7	<510
<1300	<1300	<21.8	<218	<1300
<933	<933	<20.1	<201	<933
<514	<514	<9.9	<98.7	<514
<504	<504	<7.7	<77.3	<504
<429	<429	<9.1	<90.6	<429
<487	<487	NA	NA	<487
<6640	<6640	<31.3	<313	<6640
<789	<789	<13.7	<137	<789
<3230	<3230	<10.1	<101	<3230
<657	<657	<19.6	<196	<657
<553	<553	<20.6	<206	<553
<488	<488	<6.2	<62	<488
<467	<467	<7.5	<74.5	<467
<3900	<3900	<5.1	<51.4	<3900
<2270	<2270	<4.7	<47	<2270
<462	<462	<5.1	<51.4	<462

<419	<419	<4.4	<43.5	<419
<1170	<1170	<22.1	<221	<1170

ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	NE
NE	NE	NE	NE

2-Methylphenol(o-Cresol)	2-Nitroaniline	2-Nitrophenol	3&4-Methylphenol(m&p Cresol)
<7390	<36900	<7390	<7390
<7390	<37000	<7390	<7390
<4740	<23700	<4740	<4740
<4960	<24800	<4960	<4960
<9350	<46700	<9350	<9350
<7600	<38000	<7600	<7600
<451	<2260	<451	<451
<420	<2100	<420	<420
<423	<2120	<423	<423
<420	<2100	<420	<420
<449	<2240	<449	<449
<411	<2060	<411	<411
<470	<2350	<470	<470
<482	<2410	<482	<482
<510	<2550	<510	<510
<1300	<6490	<1300	<1300
<933	<4660	<933	<933
<514	<2570	<514	<514
<504	<2520	<504	<504
<429	<2150	<429	<429
<487	<2440	<487	<487
<6640	<33200	<6640	<6640
<789	<3950	<789	<789
<3230	<16200	<3230	<3230
<657	<3290	<657	<657
<553	<2760	<553	<553
<488	<2440	<488	<488
<467	<2330	<467	<467
<3900	<19500	<3900	<3900
<2270	<11300	<2270	<2270
<462	<2310	<462	<462

<419	<2090	<419	<419
<1170	<5850	<1170	<1170

ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	NE
NE	NE	NE	NE

3,3'-Dichlorobenzidine	3-Nitroaniline	4,6-Dinitro-2-methylphenol	4-Bromophenylphenyl ether
<36900	<36900	<14800	<7390
<37000	<37000	<14800	<7390
<23700	<23700	<9470	<4740
<24800	<24800	<9930	<4960
<46700	<46700	<18700	<9350
<38000	<38000	<15200	<7600
<2260	<2260	<903	<451
<2100	<2100	<840	<420
<2120	<2120	<847	<423
<2100	<2100	<839	<420
<2240	<2240	<897	<449
<2060	<2060	<823	<411
<940	<2350	<940	<470
<963	<2410	<963	<482
<1020	<2550	<1020	<510
<2590	<6490	<2590	<1300
<1870	<4660	<1870	<933
<1030	<2570	<1030	<514
<1010	<2520	<1010	<504
<859	<2150	<859	<429
<974	<2440	<974	<487
<13300	<33200	<13300	<6640
<1580	<3950	<1580	<789
<6460	<16200	<6460	<3230
<1310	<3290	<1310	<657
<1110	<2760	<1110	<553
<975	<2440	<975	<488
<933	<2330	<933	<467
<7800	<19500	<7800	<3900
<4540	<11300	<4540	<2270
<924	<2310	<924	<462

<2090	<2090	<838	<419
<2340	<5850	<2340	<1170

ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	140000000
NE	NE	NE	33000000

4-Chloroaniline	4-Chlorophenylphenyl ether	4-Chlorotoluene	4-Methyl-2-pentanone (MIBK)
<36900	<7390	<9.6	12 j,B
<37000	<7390	<12.1	<121
<23700	<4740	<7.8	10.5 j,B
<24800	<4960	<19.8	<198
<46700	<9350	<13.2	<132
<38000	<7600	<13	<130
<2260	<451	<7.8	<77.7
<2100	<420	<4.9	<48.8
<2120	<423	<6.2	<62.1
<2100	<420	<4.4	<44.4
<2240	<449	<5	<50.3
<2060	<411	<4.4	<44.1
<940	<470	<12.1	<121
<963	<482	<8.5	<85.2
<1020	<510	<8.2	<81.7
<2590	<1300	<21.8	<218
<1870	<933	<20.1	<201
<1030	<514	<9.9	<98.7
<1010	<504	<7.7	<77.3
<859	<429	<9.1	<90.6
<974	<487	NA	NA
<13300	<6640	<31.3	<313
<1580	<789	<13.7	<137
<6460	<3230	<10.1	<101
<1310	<657	<19.6	<196
<1110	<553	<20.6	<206
<975	<488	<6.2	<62
<933	<467	<7.5	<74.5
<7800	<3900	<5.1	<51.4
<4540	<2270	<4.7	<47
<924	<462	<5.1	<51.4

<2090	<419	<4.4	<43.5
<2340	<1170	<22.1	<221

ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	45000000	NE	670000000	NE	230000000
NE	NE	3600000	NE	61000000	NE	18000000

4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Acetone	Aniline	Anthracene
<14800	<36900	10 j,M1	113 M1	211	<7390	60.2 M1
<14800	<37000	2.5 j	15 j	35.8 j	<7390	15.4 j
<9470	<23700	218	31.8	251	<4740	459
<9930	<24800	28.5 j	140	738	<4960	90.4
<18700	<46700	<28.7	139	455	<9350	115
<15200	<38000	55.5	418	183 j	<7600	714
<903	<2260	<451	<451	<155	<451	<451
<840	<2100	<420	<420	<97.6	<420	<420
<847	<2120	<423	<423	<124	<423	<423
<839	<2100	<420	<420	<88.8	<420	<420
<897	<2240	<449	<449	<101	<449	<449
<823	<2060	<411	106 j,L2,M0	<88.1	<411	167 j,L2,M0
<940	<2350	<470	287 j	68.3 j	<470	490
<963	<2410	<482	142 j	<170	<482	<482
<1020	<2550	<510	<510	<163	<510	<510
<2590	<6490	<1300	516 j	65.5 j	<1300	1100 j
<1870	<4660	<933	<933	59.5 j	<933	<933
<1030	<2570	<514	<514	<197	<514	<514
<1010	<2520	<504	<504	81.2 j	<504	<504
<859	<2150	<429	<429	252	<429	<429
<974	<2440	<487	<487	NA	<487	<487
<13300	<33200	<6640	3360 j	<625	<6640	10500
<1580	<3950	<789	<789	48.8 j	<789	<789
<6460	<16200	<3230	1540 j	39 j	<3230	3580
<1310	<3290	<657	566 j	184 j	<657	1910
<1110	<2760	<553	<553	104 j	<553	<553
<975	<2440	<488	<488	<124	<488	<488
<933	<2330	<467	<467	21.7 j	<467	<467
<7800	<19500	<3900	<3900	<103	<3900	<3900
<4540	<11300	<2270	<2270	23.6 j,M1	<2270	<2270
<924	<2310	<462	<462	37.6 j	<462	<462

<838	<2090	<419	<419	<87.1	<419	<419
<2340	<5850	<1170	342 j	<442	<1170	520 j

ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
5100	NE	2100	21000	NE
1200	NE	110	1100	NE

Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene
<9.6	296 M1	295 M1	358 M1	189 M1
<12.1	63.9	61.5	77.7	27.4
<7.8	909	599	1050	334
<19.8	432	415	537	210
<13.2	1030	584	813	278
<13	2160	1840	2170	733
<7.8	<451	<451	<451	<451
<4.9	<420	<420	<420	<420
<6.2	<423	<423	<423	<423
<4.4	<420	<420	<420	<420
<5	<449	<449	<449	<449
<4.4	503 j,S1,L2,M0	435 L2,M0,S1	562 L2,M0,S1	183 j,L2,M0
<12.1	1720	1680	1870	1030
<8.5	597	615	683	391 j
<8.2	172 j	<510	<510	<510
<21.8	1990	1860	2160	1040 j
<20.1	432 j	421 j	469 j	<933
<9.9	<514	<514	<514	<514
<7.7	<504	<504	<504	<504
<9.1	<429	<429	<429	<429
NA	<487	<487	<487	<487
<31.3	22800	20800	23200	11400
<13.7	593 j	573 j	613 j	<789
<10.1	8320	8060	8970	4600
<19.6	4710	3970	4540	2210
<20.6	824	739	827	337 j
<6.2	<488	<488	<488	<488
<7.5	<467	<467	<467	<467
<5.1	<3900	<3900	<3900	<3900
<4.7	<2270	<2270	<2270	<2270
<5.1	<462	<462	<462	<462

<4.4	145 j,S1,L2,M0	162 j,L2,M0,S1	213 j,L2,M0,S1	124 j,L2,M0
<22.1	1020 j	978 j	976 j	545 j

ug/kg	ug/kg	ug/kg	ug/kg
210000	NE	NE	NE
11000	NE	NE	NE

Benzo(k)fluoranthene	Benzoic acid	Benzyl alcohol	bis(2-Chloroethoxy)methane
155 M1	<36900	<14800	<7390
31.4	<37000	<14800	<7390
321	<23700	<9470	<4740
212	<24800	<9930	<4960
281	<46700	<18700	<9350
715	<38000	<15200	<7600
<451	<2260	<903	<451
<420	<2100	<840	<420
<423	<2120	<847	<423
<420	<2100	<839	<420
<449	<2240	<897	<449
236 j,L2,M0	<2060	<823	<411
748	<2350	<940	<470
279 j	<2410	<963	<482
<510	<2550	<1020	<510
902 j	<6490	<2590	<1300
<933	<4660	<1870	<933
<514	<2570	<1030	<514
<504	<2520	<1010	<504
<429	<2150	<859	<429
<487	<2440	<974	<487
8810	<33200	<13300	<6640
<789	<3950	<1580	<789
3390	<16200	<6460	<3230
2070	<3290	<1310	<657
358 j	<2760	<1110	<553
<488	<2440	<975	<488
<467	<2330	<933	<467
<3900	<19500	<7800	<3900
<2270	<11300	<4540	<2270
<462	<2310	<924	<462

92 j,L2,M0	<2090	<838	<419
<1170	<5850	<2340	<1170

ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	NE
NE	NE	NE	NE

bis(2-Chloroethyl) ether	bis(2-Ethylhexyl)phthalate	Bromobenzene	Bromochloromethane
<7390	<7390	<9.6	<9.6
<7390	<7390	<12.1	<12.1
<4740	<4740	<7.8	<7.8
<4960	<4960	<19.8	<19.8
<9350	<9350	<13.2	<13.2
<7600	<7600	<13	<13
<451	<451	<7.8	<7.8
<420	<420	<4.9	<4.9
<423	<423	<6.2	<6.2
<420	<420	<4.4	<4.4
<449	<449	<5	<5
<411	<411	<4.4	<4.4
<470	<470	<12.1	<12.1
<482	<482	<8.5	<8.5
<510	<510	<8.2	<8.2
<1300	<1300	<21.8	<21.8
<933	<933	<20.1	<20.1
<514	<514	<9.9	<9.9
<504	<504	<7.7	<7.7
<429	<429	<9.1	<9.1
<487	<487	NA	NA
<6640	<6640	<31.3	<31.3
<789	<789	<13.7	<13.7
<3230	<3230	<10.1	<10.1
<657	<657	<19.6	<19.6
<553	<553	<20.6	<20.6
<488	<488	<6.2	<6.2
<467	246 j	<7.5	<7.5
<3900	<3900	<5.1	<5.1
<2270	<2270	<4.7	<4.7
<462	<462	<5.1	<5.1

<419	<419	<4.4	<4.4
<1170	<1170	<22.1	<22.1

ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	NE	NE
NE	NE	NE	NE	NE

Bromodichloromethane	Bromoform	Bromomethane	Butylbenzylphthalate	Carbon tetrachloride
<9.6	<9.6	<19.3	<7390	<9.6
<12.1	<12.1	<24.2	<7390	<12.1
<7.8	<7.8	<15.6	<4740	<7.8
<19.8	<19.8	<39.6	<4960	<19.8
<13.2	<13.2	<26.5	<9350	<13.2
<13	<13	<26	<7600	<13
<7.8	<7.8	<15.5	<451	<7.8
<4.9	<4.9	<9.8	<420	<4.9
<6.2	<6.2	<12.4	<423	<6.2
<4.4	<4.4	<8.9	<420	<4.4
<5	<5	<10.1	<449	<5
<4.4	<4.4	<8.8	<411	<4.4
<12.1	<12.1	<24.2	<470	<12.1
<8.5	<8.5	<17	<482	<8.5
<8.2	<8.2	<16.3	<510	<8.2
<21.8	<21.8	<43.7	<1300	<21.8
<20.1	<20.1	<40.2	<933	<20.1
<9.9	<9.9	<19.7	<514	<9.9
<7.7	<7.7	<15.5	<504	<7.7
<9.1	<9.1	<18.1	<429	<9.1
NA	NA	NA	<487	NA
<31.3	<31.3	<62.5	<6640	<31.3
<13.7	<13.7	<27.5	<789	<13.7
<10.1	<10.1	<20.1	<3230	<10.1
<19.6	<19.6	<39.3	<657	<19.6
<20.6	<20.6	<41.2	<553	<20.6
<6.2	<6.2	<12.4	<488	<6.2
<7.5	<7.5	<14.9	<467	<7.5
<5.1	<5.1	<10.3	<3900	<5.1
<4.7	<4.7	<9.4	<2270	<4.7
<5.1	<5.1	<10.3	<462	<5.1

<4.4	<4.4	<8.7	<419	<4.4
<22.1	<22.1	<44.2	<1170	<22.1

ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	1400	460000	2100000	NE
NE	NE	320	110000	110000	NE

Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Chrysene	cis-1,2-Dichloroethene
<9.6	<19.3	4.3 j,B	<19.3	266 M1	<9.6
<12.1	<24.2	<12.1	<24.2	66.5	<12.1
<7.8	<15.6	<7.8	<15.6	890	<7.8
<19.8	<39.6	9.1 j,B	<39.6	421	<19.8
<13.2	<26.5	5.9 j,B	<26.5	1240	<13.2
<13	<26	5.2 j,B	<26	1910	<13
<7.8	<15.5	<7.8	<15.5	<451	<7.8
<4.9	<9.8	<4.9	<9.8	<420	<4.9
<6.2	<12.4	<6.2	<12.4	<423	<6.2
<4.4	<8.9	<4.4	<8.9	<420	<4.4
<5	<10.1	<5	<10.1	<449	<5
<4.4	<8.8	<4.4	<8.8	490 L2,M0,S1	<4.4
<12.1	<24.2	<12.1	<24.2	1530	<12.1
<8.5	<17	<8.5	<17	529	<8.5
<8.2	<16.3	<8.2	<16.3	163 j	<8.2
<21.8	<43.7	<21.8	<43.7	1810	<21.8
<20.1	<40.2	<20.1	<40.2	396 j	<20.1
<9.9	<19.7	<9.9	<19.7	<514	<9.9
<7.7	<15.5	<7.7	<15.5	<504	<7.7
<9.1	<18.1	<9.1	<18.1	<429	<9.1
NA	NA	NA	NA	<487	NA
<31.3	<62.5	<31.3	<62.5	19700	<31.3
<13.7	<27.5	<13.7	<27.5	515 j	<13.7
<10.1	<20.1	<10.1	<20.1	7280	<10.1
<19.6	<39.3	<19.6	<39.3	4040	<19.6
<20.6	<41.2	<20.6	<41.2	720	<20.6
<6.2	<12.4	<6.2	<12.4	<488	<6.2
<7.5	<14.9	<7.5	<14.9	<467	<7.5
<5.1	<10.3	<5.1	<10.3	<3900	<5.1
<4.7	<9.4	<4.7	<9.4	<2270	<4.7
<5.1	<10.3	<5.1	<10.3	<462	<5.1

<4.4	<8.7	<4.4	<8.7	141 j,L2,M0,S1	<4.4
<22.1	<44.2	<22.1	<44.2	935 j	<22.1

ug/kg	ug/kg	ug/kg	ug/kg
NE	2100	1000000	NE
NE	110	73000	NE

cis-1,3-Dichloropropene	Dibenz(a,h)anthracene	Dibenzofuran	Dibromochloromethane
<9.6	57.1 M1	<7390	<9.6
<12.1	9.7 j	<7390	<12.1
<7.8	132	<4740	<7.8
<19.8	65.2	<4960	<19.8
<13.2	110	<9350	<13.2
<13	256	<7600	<13
<7.8	<451	<451	<7.8
<4.9	<420	<420	<4.9
<6.2	<423	<423	<6.2
<4.4	<420	<420	<4.4
<5	<449	<449	<5
<4.4	<411	<411	<4.4
<12.1	<470	<470	<12.1
<8.5	<482	<482	<8.5
<8.2	<510	<510	<8.2
<21.8	<1300	<1300	<21.8
<20.1	<933	<933	<20.1
<9.9	<514	<514	<9.9
<7.7	<504	<504	<7.7
<9.1	<429	<429	<9.1
NA	<487	<487	NA
<31.3	<6640	<6640	<31.3
<13.7	<789	<789	<13.7
<10.1	<3230	<3230	<10.1
<19.6	<657	242 j	<19.6
<20.6	<553	<553	<20.6
<6.2	<488	<488	<6.2
<7.5	<467	<467	<7.5
<5.1	<3900	<3900	<5.1
<4.7	<2270	<2270	<4.7
<5.1	<462	<462	<5.1

<4.4	<419	<419	<4.4
<22.1	<1170	<1170	<22.1

ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	NE
NE	NE	NE	NE

Dibromomethane	Dichlorodifluoromethane	Diethylphthalate	Diisopropyl ether
<9.6	<19.3	<7390	<9.6
<12.1	<24.2	<7390	<12.1
<7.8	<15.6	<4740	<7.8
<19.8	<39.6	<4960	<19.8
<13.2	<26.5	<9350	<13.2
<13	<26	<7600	<13
<7.8	<15.5	<451	<7.8
<4.9	<9.8	<420	<4.9
<6.2	<12.4	<423	<6.2
<4.4	<8.9	<420	<4.4
<5	<10.1	<449	<5
<4.4	<8.8	<411	<4.4
<12.1	<24.2	<470	<12.1
<8.5	<17	<482	<8.5
<8.2	<16.3	<510	<8.2
<21.8	<43.7	<1300	<21.8
<20.1	<40.2	<933	<20.1
<9.9	<19.7	<514	<9.9
<7.7	<15.5	<504	<7.7
<9.1	<18.1	<429	<9.1
NA	NA	<487	NA
<31.3	<62.5	<6640	<31.3
<13.7	<27.5	<789	<13.7
<10.1	<20.1	<3230	<10.1
<19.6	<39.3	<657	<19.6
<20.6	<41.2	<553	<20.6
<6.2	<12.4	<488	<6.2
<7.5	<14.9	<467	<7.5
<5.1	<10.3	<3900	<5.1
<4.7	<9.4	<2270	<4.7
<5.1	<10.3	<462	<5.1

<4.4	<8.7	<419	<4.4
<22.1	<44.2	<1170	<22.1

ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	25000	30000000
NE	NE	NE	5800	2400000

Dimethylphthalate	Di-n-butylphthalate	Di-n-octylphthalate	Ethylbenzene	Fluoranthene
<7390	<7390	<7390	<9.6	351 M1
<7390	<7390	<7390	<12.1	90.2
<4740	<4740	<4740	<7.8	1910
<4960	<4960	<4960	<19.8	628
<9350	<9350	<9350	<13.2	889
<7600	<7600	<7600	<13	3400
<451	<451	<451	<7.8	106 j,L2
<420	<420	<420	<4.9	<420
<423	<423	<423	<6.2	<423
<420	<420	<420	<4.4	<420
<449	<449	<449	<5	<449
<411	<411	<411	<4.4	822 L2,M0,S1
<470	<470	<470	<12.1	3010
<482	<482	<482	<8.5	942
<510	<510	<510	<8.2	301 j
<1300	<1300	<1300	<21.8	4530
<933	<933	<933	<20.1	875 j,R1
<514	<514	<514	<9.9	182 j
<504	<504	<504	<7.7	<504
<429	<429	<429	<9.1	<429
<487	<487	<487	NA	<487
<6640	<6640	<6640	<31.3	44500
<789	<789	<789	<13.7	968
<3230	<3230	<3230	<10.1	16300
<657	<657	<657	<19.6	11400
<553	<553	<553	<20.6	1080
<488	<488	<488	<6.2	<488
<467	<467	<467	<7.5	<467
<3900	<3900	<3900	<5.1	<3900
<2270	<2270	<2270	<4.7	<2270
<462	<462	<462	<5.1	<462

<419	<419	<419	<4.4	230 j,L2,M0,S1
<1170	<1170	<1170	<22.1	2340

ug/kg	ug/kg	ug/kg	ug/kg
30000000	NE	NE	NE
2400000	NE	NE	NE

Fluorene	Hexachloro-1,3-butadiene	Hexachlorobenzene	Hexachlorocyclopentadiene
17.2 j,M1	<9.6	<7390	<7390
3.8 j	<12.1	<7390	<7390
259	<7.8	<4740	<4740
35.1	<19.8	<4960	<4960
26.7 j	<13.2	<9350	<9350
207	<13	<7600	<7600
<451	<7.8	<451	<451
<420	<4.9	<420	<420
<423	<6.2	<423	<423
<420	<4.4	<420	<420
<449	<5	<449	<449
<411	<411	<411	<411
<470	<12.1	<470	<470
<482	<8.5	<482	<482
<510	<8.2	<510	<510
449 j	<21.8	<1300	<1300
<933	<20.1	<933	<933
<514	<9.9	<514	<514
<504	<7.7	<504	<504
<429	<9.1	<429	<429
<487	<487	<487	<487
3230 j	<31.3	<6640	<6640
<789	<13.7	<789	<789
1420 j	<10.1	<3230	<3230
412 j	<19.6	<657	<657
<553	<20.6	<553	<553
<488	<6.2	<488	<488
<467	<7.5	<467	<467
<3900	<5.1	<3900	<3900
<2270	<4.7	<2270	<2270
<462	<5.1	<462	<462

<419	<4.4	<419	<419
<1170	<22.1	<1170	<1170

ug/kg	ug/kg	ug/kg	ug/kg
NE	21000	NE	9900000
NE	1100	NE	1900000

Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	Isopropylbenzene (Cumene)
<7390	169 M1	<7390	<9.6
<7390	26.6	<7390	<12.1
<4740	328	<4740	<7.8
<4960	188	<4960	<19.8
<9350	224	<9350	<13.2
<7600	772	<7600	<13
<451	<451	<451	<7.8
<420	<420	<420	<4.9
<423	<423	<423	<6.2
<420	<420	<420	<4.4
<449	<449	<449	<5
<411	186 j,L2,M0	<411	<4.4
<470	876	<470	<12.1
<482	326 j	<482	<8.5
<510	<510	<510	<8.2
<1300	898 j	<1300	<21.8
<933	<933	<933	<20.1
<514	<514	<514	<9.9
<504	<504	<504	<7.7
<429	<429	<429	<9.1
<487	<487	<487	NA
<6640	10400	<6640	<31.3
<789	<789	<789	<13.7
<3230	4040	<3230	<10.1
<657	2000	<657	<19.6
<553	338 j	<553	<20.6
<488	<488	<488	<6.2
<467	<467	<467	<7.5
<3900	<3900	<3900	<5.1
<2270	<2270	<2270	<4.7
<462	<462	<462	<5.1

<419	104 j,L2,M0	<419	<4.4
<1170	<1170	<1170	<22.1

ug/kg	mg/kg	ug/kg	ug/kg
2400000	NE	1000000	210000
560000	NE	57000	47000

m&p-Xylene	Mean Total Organic Carbon	Methylene chloride	Methyl-tert-butyl ether
<19.3	NA	18.2 j	<9.6
<24.2	NA	<48.5	<12.1
<15.6	NA	<31.3	<7.8
<39.6	NA	62.3 j	<19.8
<26.5	NA	14.8 j	<13.2
<26	NA	14.1 j	<13
<15.5	NA	<31.1	<7.8
<9.8	NA	<19.5	<4.9
<12.4	NA	<24.8	<6.2
<8.9	NA	<17.8	<4.4
<10.1	NA	<20.1	<5
<8.8	NA	<17.6	<4.4
<24.2	NA	<48.4	<12.1
<17	NA	<34.1	<8.5
<16.3	NA	<32.7	<8.2
<43.7	113000	<87.4	<21.8
<40.2	NA	<80.3	<20.1
<19.7	NA	<39.5	<9.9
<15.5	NA	<30.9	<7.7
<18.1	NA	<36.2	<9.1
NA	NA	NA	NA
<62.5	189000	<125	<31.3
<27.5	NA	<54.9	<13.7
<20.1	NA	<40.3	<10.1
<39.3	97900	<78.6	<19.6
<41.2	NA	<82.3	<20.6
<12.4	NA	<24.8	<6.2
<14.9	NA	<29.8	<7.5
<10.3	NA	<20.6	<5.1
<9.4	NA	<18.8	<4.7
<10.3	NA	<20.6	<5.1

<8.7	NA	<17.4	<4.4
<44.2	NA	<88.4	<22.1

ug/kg	ug/kg	ug/kg	ug/kg
17000	NE	NE	NE
3800	NE	NE	NE

Naphthalene	n-Butylbenzene	Nitrobenzene	N-Nitrosodimethylamine
2.7 j,B	<9.6	<7390	<7390
8 j	<12.1	<7390	<7390
2.7 j,B	<7.8	<4740	<4740
14.4 j	<19.8	<4960	<4960
14.2 j,B	<13.2	<9350	<9350
<13	<13	<7600	<7600
<7.8	<7.8	<451	<451
<4.9	<4.9	<420	<420
<6.2	<6.2	<423	<423
<4.4	<4.4	<420	<420
<5	<5	<449	<449
<411	<4.4	<411	<411
192 j	<12.1	<470	<470
<8.5	<8.5	<482	<482
<8.2	<8.2	<510	<510
379 j	<21.8	<1300	<1300
<933	<20.1	<933	<933
<9.9	<9.9	<514	<514
<7.7	<7.7	<504	<504
<9.1	<9.1	<429	<429
<487	NA	<487	<487
2180 j	<31.3	<6640	<6640
<13.7	<13.7	<789	<789
<10.1	<10.1	<3230	<3230
240 j	<19.6	<657	<657
<20.6	<20.6	<553	<553
<6.2	<6.2	<488	<488
<7.5	<7.5	<467	<467
<5.1	<5.1	<3900	<3900
<4.7	<4.7	<2270	<2270
<5.1	<5.1	<462	<462

<4.4	<4.4	<419	<419
<22.1	<22.1	<1170	<1170

ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	2800000
NE	NE	NE	650000

N-Nitroso-di-N-propylamine	N-Nitrosodiphenylamine	n-Propylbenzene	o-Xylene
<7390	<7390	<9.6	<9.6
<7390	<7390	<12.1	<12.1
<4740	<4740	<7.8	<7.8
<4960	<4960	<19.8	<19.8
<9350	<9350	<13.2	<13.2
<7600	<7600	<13	<13
<451	<451	<7.8	<7.8
<420	<420	<4.9	<4.9
<423	<423	<6.2	<6.2
<420	<420	<4.4	<4.4
<449	<449	<5	<5
<411	<411	<4.4	<4.4
<470	<470	<12.1	<12.1
<482	<482	<8.5	<8.5
<510	<510	<8.2	<8.2
<1300	<1300	<21.8	<21.8
<933	<933	<20.1	<20.1
<514	<514	<9.9	<9.9
<504	<504	<7.7	<7.7
<429	<429	<9.1	<9.1
<487	<487	NA	NA
<6640	<6640	<31.3	<31.3
<789	<789	<13.7	<13.7
<3230	<3230	<10.1	<10.1
<657	<657	<19.6	<19.6
<553	<553	<20.6	<20.6
<488	<488	<6.2	<6.2
<467	<467	<7.5	<7.5
<3900	<3900	<5.1	<5.1
<2270	<2270	<4.7	<4.7
<462	<462	<5.1	<5.1

<419	<419	<4.4	<4.4
<1170	<1170	<22.1	<22.1

ug/kg	ug/kg	%	ug/kg	ug/kg
NE	NE	NE	NE	250000000
NE	NE	NE	NE	19000000

p-Chloro-m-cresol	Pentachlorophenol	Percent Moisture	Phenanthrene	Phenol
<14800	<36900	55.8	91 M1	<7390
<14800	<37000	55.4	32.9	<7390
<9470	<23700	29.2	1730	<4740
<9930	<24800	66.5	195	<4960
<18700	<46700	64.7	850	<9350
<15200	<38000	55.9	2020	<7600
<903	<2260	26.9	<451	<451
<840	<2100	21.4	<420	<420
<847	<2120	20.7	<423	<423
<839	<2100	20.6	<420	<420
<897	<2240	26.7	<449	<449
<823	<2060	20.3	217 j,L2,M0	<411
<940	<940	30.5	1280	<470
<963	<963	30.3	201 j	<482
<1020	<1020	34.6	<510	<510
<2590	<2590	74.4	2380	<1300
<1870	<1870	64	389 j	<933
<1030	<1030	34.9	<514	<514
<1010	<1010	34.1	<504	<504
<859	<859	24.4	<429	<429
<974	<974	32	<487	<487
<13300	<13300	75.4	28600	<6640
<1580	<1580	57.8	296 j	<789
<6460	<6460	49.4	10400	<3230
<1310	<1310	50.3	6630	<657
<1110	<1110	39.3	143 j	<553
<975	<975	31.4	<488	<488
<933	<933	28.8	<467	<467
<7800	<7800	14	<3900	<3900
<4540	<4540	26.5	<2270	<2270
<924	<924	27.8	<462	<462

<838	<2090	20.1	<419	<419
<2340	<2340	71.8	1060 j	<1170

ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
NE	23000000	NE	NE	NE	NE
NE	1800000	NE	NE	NE	NE

p-Isopropyltoluene	Pyrene	Pyridine	sec-Butylbenzene	Styrene	tert-Butylbenzene
5.2 j	488 M1	NA	<9.6	<9.6	<9.6
<12.1	88.2	NA	<12.1	<12.1	<12.1
<7.8	1450	NA	<7.8	<7.8	<7.8
<19.8	776	NA	<19.8	<19.8	<19.8
<13.2	1980	NA	<13.2	<13.2	<13.2
<13	2990	NA	<13	<13	<13
<7.8	90 j,L2	NA	<7.8	<7.8	<7.8
<4.9	<420	NA	<4.9	<4.9	<4.9
<6.2	<423	NA	<6.2	<6.2	<6.2
<4.4	<420	NA	<4.4	<4.4	<4.4
<5	<449	NA	<5	<5	<5
<4.4	791 L2,M0,S1	NA	<4.4	<4.4	<4.4
<12.1	2860	<470	<12.1	<12.1	<12.1
<8.5	819	<482	<8.5	<8.5	<8.5
<8.2	269 j	<510	<8.2	<8.2	<8.2
<21.8	4060	<1300	<21.8	<21.8	<21.8
<20.1	901 j,R1	<933	<20.1	<20.1	<20.1
<9.9	192 j	<514	<9.9	<9.9	<9.9
<7.7	<504	<504	<7.7	<7.7	<7.7
<9.1	<429	<429	<9.1	<9.1	<9.1
NA	<487	<487	NA	NA	NA
<31.3	43400	<6640	<31.3	<31.3	<31.3
<13.7	879	<789	<13.7	<13.7	<13.7
<10.1	16100	<3230	<10.1	<10.1	<10.1
<19.6	8250	<657	<19.6	<19.6	<19.6
23.3	962	<553	<20.6	<20.6	<20.6
<6.2	<488	<488	<6.2	<6.2	<6.2
<7.5	<467	<467	<7.5	<7.5	<7.5
<5.1	<3900	<3900	<5.1	<5.1	<5.1
<4.7	<2270	<2270	<4.7	<4.7	<4.7
<5.1	<462	<462	<5.1	2.7 j	<5.1

<4.4	197 j,L2,M0,S1	NA	<4.4	<4.4	<4.4
<22.1	1860	<1170	<22.1	<22.1	<22.1

ug/kg	ug/kg	mg/kg	ug/kg
NE	47000000	NE	NE
NE	4900000	NE	NE

Tetrachloroethene	Toluene	Total Organic Carbon	trans-1,2-Dichloroethene
<9.6	<9.6	NA	<9.6
<12.1	<12.1	NA	<12.1
<7.8	<7.8	NA	<7.8
<19.8	<19.8	NA	<19.8
<13.2	<13.2	NA	<13.2
<13	<13	NA	<13
<7.8	<7.8	NA	<7.8
<4.9	<4.9	NA	<4.9
<6.2	<6.2	NA	<6.2
<4.4	<4.4	NA	<4.4
<5	<5	NA	<5
<4.4	<4.4	NA	<4.4
<12.1	<12.1	NA	<12.1
<8.5	<8.5	NA	<8.5
<8.2	<8.2	NA	<8.2
<21.8	<21.8	108000	<21.8
<20.1	<20.1	NA	<20.1
<9.9	<9.9	NA	<9.9
<7.7	<7.7	NA	<7.7
<9.1	<9.1	NA	<9.1
NA	NA	NA	NA
<31.3	<31.3	207000	<31.3
<13.7	<13.7	NA	<13.7
<10.1	<10.1	NA	<10.1
<19.6	<19.6	76300	<19.6
<20.6	<20.6	NA	<20.6
<6.2	<6.2	NA	<6.2
<7.5	<7.5	NA	<7.5
<5.1	<5.1	NA	<5.1
<4.7	<4.7	NA	<4.7
<5.1	<5.1	NA	<5.1

<4.4	<4.4	NA	<4.4
<22.1	<22.1	NA	<22.1

ug/kg	ug/kg	ug/kg	ug/kg
NE	NE	NE	NE
NE	NE	NE	NE

trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate
<9.6	<9.6	<9.6	<96.5
<12.1	<12.1	<12.1	<121
<7.8	<7.8	<7.8	<78.2
<19.8	<19.8	<19.8	<198
<13.2	<13.2	<13.2	<132
<13	<13	<13	<130
<7.8	<7.8	<7.8	<77.7
<4.9	<4.9	<4.9	<48.8
<6.2	<6.2	<6.2	<62.1
<4.4	<4.4	<4.4	<44.4
<5	<5	<5	<50.3
<4.4	<4.4	<4.4	<44.1
<12.1	<12.1	<12.1	<121
<8.5	<8.5	<8.5	<85.2
<8.2	<8.2	<8.2	<81.7
<21.8	<21.8	<21.8	<218
<20.1	<20.1	<20.1	<201
<9.9	<9.9	<9.9	<98.7
<7.7	<7.7	<7.7	<77.3
<9.1	<9.1	<9.1	<90.6
NA	NA	NA	NA
<31.3	<31.3	<31.3	<313
<13.7	<13.7	<13.7	<137
<10.1	<10.1	<10.1	<101
<19.6	<19.6	<19.6	<196
<20.6	<20.6	<20.6	<206
<6.2	<6.2	<6.2	<62
<7.5	<7.5	<7.5	<74.5
<5.1	<5.1	<5.1	<51.4
<4.7	<4.7	<4.7	<47
<5.1	<5.1	<5.1	<51.4

<4.4	<4.4	<4.4	<43.5
<22.1	<22.1	<22.1	<221

ug/kg	ug/kg
NE	2500000
NE	580000

Vinyl chloride	Xylene (Total)
<19.3	<19.3
<24.2	<24.2
<15.6	<15.6
<39.6	<39.6
<26.5	<26.5
<26	<26
<15.5	<15.5
<9.8	<9.8
<12.4	<12.4
<8.9	<8.9
<10.1	<10.1
<8.8	<8.8
<24.2	<24.2
<17	<17
<16.3	<16.3
<43.7	<43.7
<40.2	<40.2
<19.7	<19.7
<15.5	<15.5
<18.1	<18.1
NA	NA
<62.5	<62.5
<27.5	<27.5
<20.1	<20.1
<39.3	<39.3
<41.2	<41.2
<12.4	<12.4
<14.9	<14.9
<10.3	<10.3
<9.4	<9.4
<10.3	<10.3

<8.7	<8.7
<44.2	<44.2

Bramlette MGP

, SOUTH CAROLINA

Reporting Units

ug/kg

ug/L

ug/kg

Location ID	Sample Collection Date	1,1,4-Trimethylcyclohexane	1,1,4-Trimethylcyclohexane	1,1-Dimethylcyclopentane
SS-01	04/24/2019	<357000	NA	<357000
SS-02	04/24/2019	<192000	NA	<192000
SS-03	04/24/2019	<250000	NA	<250000

QC SAMPLE RESULTS

Equipment Blank	04/24/2019	NA	<2	NA
Trip Blank	04/24/2019	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg
------	-------	------	-------

1,1-Dimethylcyclopentane	1,2,3,4-Tetramethylbenzene	1,2,3,4-Tetramethylbenzene	1,2,3,5-Tetramethylbenzene
NA	<357000	NA	<357000
NA	<192000	NA	<192000
NA	<250000	NA	<250000

<2	NA	<2	NA
<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L
------	-------	------	-------	------

1,2,3,5-Tetramethylbenzene	1,2,3-Trimethylbenzene	1,2,3-Trimethylbenzene	1,2,4,5-Tetramethylbenzene	1,2,4,5-Tetramethylbenzene
NA	<357000	NA	<357000	NA
NA	<192000	NA	<192000	NA
NA	<250000	NA	<250000	NA

<2	NA	<2	NA	<2
<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------	-------	------

1,2,4-Triethylbenzene	1,2,4-Triethylbenzene	1,2,4-Trimethylbenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,2-Dichloroethane
<357000	NA	<357000	NA	<357000	NA
<192000	NA	<192000	NA	<192000	NA
<250000	NA	<250000	NA	<250000	NA

NA	<2	NA	<2	NA	<2
NA	<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg
-------	------	-------	------	-------

1,2-Diethylbenzene	1,2-Diethylbenzene	1,2-Dimethyl-3-Ethylbenzene	1,2-Dimethyl-3-Ethylbenzene	1,2-Dimethyl-4-ethylbenzene
<357000	NA	<357000	NA	<357000
<192000	NA	<192000	NA	<192000
<250000	NA	<250000	NA	<250000

NA	<2	NA	<2	NA
NA	<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg
------	-------	------	-------

1,2-Dimethyl-4-ethylbenzene	1,2-Dimethylcyclohexane (cis)	1,2-Dimethylcyclohexane (cis)	1,2-Dimethylcyclohexane (trans)
NA	<357000	NA	<357000
NA	<192000	NA	<192000
NA	<250000	NA	<250000

<2	NA	<2	NA
<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L
------	-------	------	-------	------

1,2-Dimethylcyclohexane (trans)	1,3,5-Triethylbenzene	1,3,5-Triethylbenzene	1,3,5-Trimethylbenzene	1,3,5-Trimethylbenzene
NA	<357000	NA	<357000	NA
NA	<192000	NA	<192000	NA
NA	<250000	NA	<250000	NA

<2	NA	<2	NA	<2
<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg
-------	------	-------	------	-------

1,3-Diethylbenzene	1,3-Diethylbenzene	1,3-Dimethyl-2-Ethylbenzene	1,3-Dimethyl-2-Ethylbenzene	1,3-Dimethyl-4-ethylbenzene
<357000	NA	<357000	NA	<357000
<192000	NA	<192000	NA	<192000
<250000	NA	<250000	NA	<250000

NA	<2	NA	<2	NA
NA	<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg
------	-------	------	-------

1,3-Dimethyl-4-ethylbenzene	1,3-Dimethyl-5-Ethylbenzene	1,3-Dimethyl-5-Ethylbenzene	1,3-Dimethyl-5-tert-Butylbenzene
NA	<357000	NA	<357000
NA	<192000	NA	<192000
NA	<250000	NA	<250000

<2	NA	<2	NA
<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg
------	-------	------	-------

1,3-Dimethyl-5-tert-Butylbenzene	1,3-Dimethylcyclopentane (cis)	1,3-Dimethylcyclopentane (cis)	1,3-DMCP (trans)/2-Methyl-1-hexene
NA	<357000	NA	<714000
NA	<192000	NA	<385000
NA	<250000	NA	<500000

<2	NA	<2	NA
<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg
------	-------	------	-------

1,3-DMCP (trans)/2-Methyl-1-hexene	1,4-Dimethyl-2-Ethylbenzene	1,4-Dimethyl-2-Ethylbenzene	1,4-Dimethylcyclohexane (trans)
NA	<357000	NA	<357000
NA	<192000	NA	<192000
NA	<250000	NA	<250000

<4	NA	<2	NA
<4	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
------	-------	------	-------	------	-------	------

1,4-Dimethylcyclohexane (trans)	1-Decene	1-Decene	1-Heptene/1,2-DMCP (trans)	1-Heptene/1,2-DMCP (trans)	1-Hexene	1-Hexene
NA	<357000	NA	<714000	NA	<357000	NA
NA	<192000	NA	<385000	NA	<192000	NA
NA	<250000	NA	<500000	NA	<250000	NA

<2	NA	<2	NA	<4	NA	<2
<2	NA	<2	NA	<4	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------

1-Methyl-2-ethylbenzene	1-Methyl-2-ethylbenzene	1-Methyl-2-isopropylbenzene	1-Methyl-2-isopropylbenzene
<357000	NA	<357000	NA
<192000	NA	<192000	NA
<250000	NA	<250000	NA

NA	<2	NA	<2
NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------

1-Methyl-2-n-propylbenzene	1-Methyl-2-n-propylbenzene	1-Methyl-3-ethylbenzene	1-Methyl-3-ethylbenzene
<357000	NA	<357000	NA
<192000	NA	<192000	NA
<250000	NA	<250000	NA

NA	<2	NA	<2
NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------

1-Methyl-3-isopropylbenzene	1-Methyl-3-isopropylbenzene	1-Methyl-3-n-propylbenzene	1-Methyl-3-n-propylbenzene
<357000	NA	<357000	NA
<192000	NA	<192000	NA
<250000	NA	<250000	NA

NA	<2	NA	<2
NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------

1-Methyl-4-Ethylbenzene	1-Methyl-4-Ethylbenzene	1-Methyl-4-Isopropylbenzene	1-Methyl-4-Isopropylbenzene
<357000	NA	<357000	NA
<192000	NA	<192000	NA
<250000	NA	<250000	NA

NA	<2	NA	<2
NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	mg/kg	ng/L	ug/L	ug/kg
-------	------	-------	------	------	-------

1-Methyl-4-N-Propylbenzene	1-Methyl-4-N-Propylbenzene	1-Methylnaphthalene	1-Methylnaphthalene	1-Methylnaphthalene	1-Nonene
<357000	NA	27.8	NA	NA	<893000
<192000	NA	15.9	NA	NA	<481000
<250000	NA	24.1	NA	NA	<625000

NA	<2	NA	<10.3	<5	NA
NA	<2	NA	NA	<5	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg
------	-------	------	-------	------	-------	------	-------

1-Nonene	1-Octene	1-Octene	1-Pentene	1-Pentene	2,2,3-Trimethylbutane	2,2,3-Trimethylbutane	2,2,3-Trimethylpentane
NA	<893000	NA	<357000	NA	<357000	NA	<357000
NA	<481000	NA	<192000	NA	<192000	NA	<192000
NA	<625000	NA	<250000	NA	<250000	NA	<250000

<5	NA	<5	NA	<2	NA	<2	NA
<5	NA	<5	NA	<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg
------	-------	------	-------	------	-------

2,2,3-Trimethylpentane	2,2-Dimethylbutane	2,2-Dimethylbutane	2,2-Dimethylhexane	2,2-Dimethylhexane	2,2-Dimethylpentane
NA	<357000	NA	<357000	NA	<357000
NA	<192000	NA	<192000	NA	<192000
NA	<250000	NA	<250000	NA	<250000

<2	NA	<2	NA	<2	NA
<2	NA	<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L
------	-------	------	-------	------

2,2-Dimethylpentane	2,3,3-Trimethylpentane	2,3,3-Trimethylpentane	2,3,4-Trimethylpentane	2,3,4-Trimethylpentane
NA	<357000	NA	<357000	NA
NA	<192000	NA	<192000	NA
NA	<250000	NA	<250000	NA

<2	NA	<2	NA	<2
<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------	-------	------

2,3-Dimethylbutane	2,3-Dimethylbutane	2,3-Dimethylheptane	2,3-Dimethylheptane	2,3-Dimethylhexane	2,3-Dimethylhexane
<357000	NA	<357000	NA	<357000	NA
<192000	NA	<192000	NA	<192000	NA
<250000	NA	<250000	NA	<250000	NA

NA	<2	NA	<2	NA	<2
NA	<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------	-------	------

2,3-Dimethylpentane	2,3-Dimethylpentane	2,4-Dimethylhexane	2,4-Dimethylhexane	2,4-Dimethylpentane	2,4-Dimethylpentane
<357000	NA	<357000	NA	<357000	NA
<192000	NA	<192000	NA	<192000	NA
<250000	NA	<250000	NA	<250000	NA

NA	<2	NA	<2	NA	<2
NA	<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	mg/kg
-------	------	-------	------	-------

2,5-Dimethylheptane	2,5-Dimethylheptane	2,5-Dimethylhexane	2,5-Dimethylhexane	2,6,10-Trimethyldodecane (1380)
<357000	NA	<357000	NA	<781
<192000	NA	<192000	NA	<833
<250000	NA	<250000	NA	<694

NA	<2	NA	<2	NA
NA	<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

mg/L	mg/kg	mg/L	ug/kg
------	-------	------	-------

2,6,10-Trimethyldodecane (1380)	2,6,10-Trimethyltridecane (1470)	2,6,10-Trimethyltridecane (1470)	2-Ethylthiophene
NA	<781	NA	<357000
NA	<833	NA	<192000
NA	<694	NA	<250000

<0.001	NA	<0.001	NA
NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
------	-------	------	-------	------	-------	------

2-Ethylthiophene	2-Methyl-1-Butene	2-Methyl-1-Butene	2-Methyl-2-pentene	2-Methyl-2-pentene	2-Methylheptane	2-Methylheptane
NA	<357000	NA	<357000	NA	<357000	NA
NA	<192000	NA	<192000	NA	<192000	NA
NA	<250000	NA	<250000	NA	<250000	NA

<2	NA	<2	NA	<2	NA	<2
<2	NA	<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	mg/kg	ng/L	ug/L	ug/kg	ug/L
-------	------	-------	------	------	-------	------

2-Methylhexane	2-Methylhexane	2-Methylnaphthalene	2-Methylnaphthalene	2-Methylnaphthalene	2-Methylnonane	2-Methylnonane
<357000	NA	61.7	NA	NA	<357000	NA
<192000	NA	33.5	NA	NA	<192000	NA
<250000	NA	57.9	NA	NA	<250000	NA

NA	<2	NA	<10.3	<5	NA	<2
NA	<2	NA	NA	<5	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------	-------	------	-------	------

2-Methyloctane	2-Methyloctane	2-Methylpentane	2-Methylpentane	2-Methylthiophene	2-Methylthiophene	2-Nonene	2-Nonene
<357000	NA	<357000	NA	<357000	NA	<893000	NA
<192000	NA	<192000	NA	<192000	NA	<481000	NA
<250000	NA	<250000	NA	<250000	NA	<625000	NA

NA	<2	NA	<2	NA	<2	NA	<5
NA	<2	NA	<2	NA	<2	NA	<5

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------	-------	------

3,3-Diethylpentane	3,3-Diethylpentane	3,3-Dimethylheptane	3,3-Dimethylheptane	3,3-Dimethyloctane	3,3-Dimethyloctane
<357000	NA	<357000	NA	<357000	NA
<192000	NA	<192000	NA	<192000	NA
<250000	NA	<250000	NA	<250000	NA

NA	<2	NA	<2	NA	<2
NA	<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------	-------	------

3,3-Dimethylpentane	3,3-Dimethylpentane	3,4-Dimethylheptane	3,4-Dimethylheptane	3,5-Dimethylheptane	3,5-Dimethylheptane
<357000	NA	<357000	NA	<357000	NA
<192000	NA	<192000	NA	<192000	NA
<250000	NA	<250000	NA	<250000	NA

NA	<2	NA	<2	NA	<2
NA	<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------	-------	------	-------	------

3-Ethylhexane	3-Ethylhexane	3-Ethylpentane	3-Ethylpentane	3-Methyl-1-butene	3-Methyl-1-butene	3-Methylheptane	3-Methylheptane
<357000	NA	<357000	NA	<357000	NA	<357000	NA
<192000	NA	<192000	NA	<192000	NA	<192000	NA
<250000	NA	<250000	NA	<250000	NA	<250000	NA

NA	<2	NA	<2	NA	<2	NA	<2
NA	<2	NA	<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
-------	------	-------	------	-------	------	-------	------

3-Methylhexane	3-Methylhexane	3-Methylnonane	3-Methylnonane	3-Methyloctane	3-Methyloctane	3-Methylpentane	3-Methylpentane
<357000	NA	<357000	NA	<357000	NA	<357000	NA
<192000	NA	<192000	NA	<192000	NA	<192000	NA
<250000	NA	<250000	NA	<250000	NA	<250000	NA

NA	<2	NA	<2	NA	<2	NA	<2
NA	<2	NA	<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg
-------	------	-------	------	-------	------	-------

3-Methylthiophene	3-Methylthiophene	4-Methyl-1-pentene	4-Methyl-1-pentene	4-Methylheptane	4-Methylheptane	4-Methyloctane
<357000	NA	<357000	NA	<357000	NA	<357000
<192000	NA	<192000	NA	<192000	NA	<192000
<250000	NA	<250000	NA	<250000	NA	<250000

NA	<2	NA	<2	NA	<2	NA
NA	<2	NA	<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	mg/kg	ng/L	mg/kg	ng/L	mg/kg	ng/L	mg/kg
------	-------	------	-------	------	-------	------	-------

4-Methyloctane	Acenaphthene	Acenaphthene	Acenaphthylene	Acenaphthylene	Anthracene	Anthracene	Benz(a)anthracene
NA	58.2	NA	17.6	NA	26.7	NA	65.7
NA	13	NA	2.63 j	NA	9.4 j	NA	11 j
NA	19.9	NA	<10.4	NA	7.58 j	NA	2.54 j

<2	NA	<10.3	NA	<10.3	NA	<10.3	NA
<2	NA	NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	ug/kg	ug/L	mg/kg	ng/L	mg/kg	ng/L
------	-------	------	-------	------	-------	------

Benz(a)anthracene	Benzene	Benzene	Benzo(a)fluoranthene	Benzo(a)fluoranthene	Benzo(a)pyrene	Benzo(a)pyrene
NA	<357000	NA	18.7	NA	85.4	NA
NA	<192000	NA	<12.5	NA	12.7	NA
NA	<250000	NA	<10.4	NA	4.32 j	NA

<10.3	NA	<2	NA	<10.3	NA	<10.3
NA	NA	<2	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/kg	ng/L	mg/kg	ng/L	mg/kg	ng/L
-------	------	-------	------	-------	------

Benzo(b)fluoranthene	Benzo(b)fluoranthene	Benzo(e)pyrene	Benzo(e)pyrene	Benzo(g,h,i)perylene	Benzo(g,h,i)perylene
74	NA	66.7	NA	58.1	NA
24.4	NA	18.8	NA	13.7	NA
3.41 j	NA	3.18 j	NA	3.5 j	NA

NA	<10.3	NA	<10.3	NA	<10.3
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/kg	ng/L	mg/kg	ng/L	ug/kg	ug/L	mg/kg
-------	------	-------	------	-------	------	-------

Benzo(j)+(k)fluoranthene	Benzo(j)+(k)fluoranthene	Benzothiophene	Benzothiophene	Benzothiophene	Benzothiophene	Biphenyl
81.7	NA	<11.7	NA	<357000	NA	25.8
21	NA	<12.5	NA	<192000	NA	12.1 j
3.6 j	NA	<10.4	NA	<250000	NA	24.2

NA	<10.3	NA	<10.3	NA	<2	NA
NA	NA	NA	NA	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	mg/kg	ng/L	mg/kg	ng/L	mg/kg	ng/L	mg/kg
------	-------	------	-------	------	-------	------	-------

Biphenyl	C1-Benzo(b)thiophenes	C1-Benzo(b)thiophenes	C1-Chrysenes	C1-Chrysenes	C1-Decalins	C1-Decalins	C1-Dibenzothiophenes BS
NA	16.3	NA	36.3	NA	<11.7	NA	8.41 j
NA	8.69 j	NA	7.69 j	NA	<12.5	NA	<12.5
NA	12.5	NA	2.23 j	NA	<10.4	NA	4.91 j

<10.3	NA	<10.3	NA	<10.3	NA	<10.3	NA
NA	NA	NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	mg/kg	ng/L	mg/kg	ng/L	mg/kg
------	-------	------	-------	------	-------

C1-Dibenzothiophenes BS	C1-Fluoranthenes/Pyrenes	C1-Fluoranthenes/Pyrenes	C1-Fluorenes	C1-Fluorenes	C1-Naphthalenes
NA	55.8	NA	15.9	NA	61.1
NA	9.92 j	NA	5.16 j	NA	33.9
NA	4.82 j	NA	8.9 j	NA	56.1

<10.3	NA	<10.3	NA	<10.3	NA
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	mg/kg	ng/L	mg/kg
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C1-Naphthalenes	C1-Naphthobenzothiophenes	C1-Naphthobenzothiophenes	C1-Phenanthrenes/Anthracenes
NA	8.09 j	NA	53.6
NA	3.52 j	NA	16.1
NA	<10.4	NA	22.9

<10.3	NA	<10.3	NA
NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	mg/kg	ng/L	mg/kg	ng/L	mg/kg
------	-------	------	-------	------	-------

C1-Phenanthrenes/Anthracenes	C2-Benzo(b)thiophenes	C2-Benzo(b)thiophenes	C2-Chrysenes BS	C2-Chrysenes BS	C2-Decalins
NA	5.8 j	NA	17.5	NA	5.38 j
NA	<12.5	NA	6.32 j	NA	7.06 j
NA	3.8 j	NA	<10.4	NA	<10.4

<10.3	NA	<10.3	NA	<10.3	NA
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	mg/kg	ng/L	mg/kg	ng/L	mg/kg
------	-------	------	-------	------	-------

C2-Decalins	C2-Dibenzothiophenes	C2-Dibenzothiophenes	C2-Fluoranthenes/Pyrenes	C2-Fluoranthenes/Pyrenes	C2-Fluorenes
NA	12.9	NA	36.9	NA	28.5
NA	5.01 j	NA	11.1 j	NA	12.4 j
NA	7.33 j	NA	3.76 j	NA	20.6

<10.3	NA	<10.3	NA	<10.3	NA
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	mg/kg	ng/L	mg/kg	ng/L	mg/kg
------	-------	------	-------	------	-------

C2-Fluorenes	C2-Naphthalenes	C2-Naphthalenes	C2-Naphthobenzothiophenes	C2-Naphthobenzothiophenes	C2-Phenanthrenes/Anthr BS
NA	78.7	NA	11.1 j	NA	26.7
NA	35.2	NA	11.5 j	NA	6.51 j
NA	63.8	NA	<10.4	NA	6.67 j

<10.3	NA	2.42 j	NA	<10.3	NA
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	mg/kg	ng/L	mg/kg	ng/L	mg/kg	ng/L
------	-------	------	-------	------	-------	------

C2-Phenanthrenes/Anthr BS	C3-Benzo(b)thiophenes	C3-Benzo(b)thiophenes	C3-Chrysenes	C3-Chrysenes	C3-Decalins	C3-Decalins
NA	7.73 j	NA	20.5	NA	6.12 j	NA
NA	4.67 j	NA	<12.5	NA	7.26 j	NA
NA	6.08 j	NA	<10.4	NA	<10.4	NA

<10.3	NA	<10.3	NA	<10.3	NA	<10.3
NA	NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/kg	ng/L	mg/kg	ng/L	mg/kg	ng/L
-------	------	-------	------	-------	------

C3-Dibenzothiophenes	C3-Dibenzothiophenes	C3-Fluoranthenes/Pyrenes	C3-Fluoranthenes/Pyrenes	C3-Fluorenes	C3-Fluorenes
8.6 j	NA	19	NA	26.6	NA
5.82 j	NA	6 j	NA	14.8	NA
4.96 j	NA	<10.4	NA	16.4	NA

NA	<10.3	NA	<10.3	NA	<10.3
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/kg	ng/L	mg/kg	ng/L	mg/kg
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C3-Naphthalenes	C3-Naphthalenes	C3-Naphthobenzothiophenes	C3-Naphthobenzothiophenes	C3-Phenanthrenes/Anthracenes
47.6	NA	7.4 j	NA	16.1
17.6	NA	4.47 j	NA	4.6 j
33.7	NA	<10.4	NA	3.52 j

NA	<10.3	NA	<10.3	NA
NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	mg/kg	ng/L	mg/kg	ng/L	mg/kg	ng/L
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C3-Phenanthrenes/Anthracenes	C4-Benzo(b)thiophenes	C4-Benzo(b)thiophenes	C4-Chrysenes	C4-Chrysenes	C4-Decalins	C4-Decalins
NA	4.39 j	NA	<11.7	NA	15.3	NA
NA	<12.5	NA	<12.5	NA	14.6	NA
NA	<10.4	NA	<10.4	NA	10.7	NA

<10.3	NA	<10.3	NA	<10.3	NA	<10.3
NA	NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/kg	ng/L	mg/kg	ng/L	mg/kg	ng/L
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C4-Dibenzothiophenes	C4-Dibenzothiophenes	C4-Fluoranthenes/Pyrenes	C4-Fluoranthenes/Pyrenes	C4-Naphthalenes	C4-Naphthalenes
<11.7	NA	12.1	NA	23.8	NA
<12.5	NA	9.56 j	NA	9.9 j	NA
<10.4	NA	3.09 j	NA	17	NA

NA	<10.3	NA	<10.3	NA	<10.3
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/kg	ng/L	mg/kg	ng/L	mg/kg
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C4-Naphthobenzothiophenes	C4-Naphthobenzothiophenes	C4-Phenanthrenes/Anthracenes	C4-Phenanthrenes/Anthracenes	Chrysene
<11.7	NA	9.13 j	NA	85.6
<12.5	NA	<12.5	NA	33.6
<10.4	NA	<10.4	NA	3.84 j

NA	<10.3	NA	<10.3	NA
NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	mg/kg	ng/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
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Chrysene	cis/trans-Decalin	cis/trans-Decalin	cis-2-Heptene	cis-2-Heptene	cis-2-Hexene	cis-2-Hexene	cis-2-Octene	cis-2-Octene
NA	<5.86	NA	<357000	NA	<357000	NA	<357000	NA
NA	<6.25	NA	<192000	NA	<192000	NA	<192000	NA
NA	<5.21	NA	<250000	NA	<250000	NA	<250000	NA

<10.3	NA	<5.15	NA	<2	NA	<2	NA	<2
NA	NA	NA	NA	<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg
-------	------	-------	------	-------	------	-------	------	-------

cis-2-Pentene	cis-2-Pentene	cis-3-Nonene	cis-3-Nonene	Cyclohexane	Cyclohexane	Cyclopentane	Cyclopentane	Decane (C10)
<357000	NA	<357000	NA	<357000	NA	<357000	NA	<357000
<192000	NA	<192000	NA	<192000	NA	<192000	NA	<192000
<250000	NA	<250000	NA	<250000	NA	<250000	NA	<250000

NA	<2	NA	<2	NA	<2	NA	<2	NA
NA	<2	NA	<2	NA	<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	mg/kg	ng/L	mg/kg	ng/L	mg/kg
------	-------	------	-------	------	-------

Decane (C10)	Dibenz(a,h)+(a,c)anthracene	Dibenz(a,h)+(a,c)anthracene	Dibenzofuran	Dibenzofuran	Dibenzothiophene
NA	15.9	NA	103	NA	17.4
NA	4.28 j	NA	45.4	NA	6.94 j
NA	<10.4	NA	95.6	NA	12.1

<2	NA	<10.3	NA	<10.3	NA
<2	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	ug/kg	ug/L	mg/kg	mg/L	ug/kg	ug/L	ug/kg
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Dibenzothiophene	Dodecane (C12)	Dodecane (C12)	DRO (C10-C28)	DRO (C10-C28)	Ethylbenzene	Ethylbenzene	Ethylcyclopentane
NA	<893000	NA	64100	NA	<357000	NA	<357000
NA	<481000	NA	66300	NA	<192000	NA	<192000
NA	<625000	NA	46100	NA	<250000	NA	<250000

<10.3	NA	<5	NA	<0.022	NA	<2	NA
NA	NA	<5	NA	NA	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L	mg/kg	ng/L
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Ethylcyclopentane	Ethylene dibromide	Ethylene dibromide	Ethyl-Tert-Butyl-Ether	Ethyl-Tert-Butyl-Ether	Fluoranthene	Fluoranthene
NA	<357000	NA	<357000	NA	133	NA
NA	<192000	NA	<192000	NA	36.2	NA
NA	<250000	NA	<250000	NA	28	NA

<2	NA	<2	NA	<2	NA	<10.3
<2	NA	<2	NA	<2	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/kg	ng/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	mg/kg
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Fluorene	Fluorene	Heptane	Heptane	Hexylbenzene	Hexylbenzene	Indane	Indane	Indene	Indene	Indeno(1,2,3-cd)pyrene
36.4	NA	<357000	NA	<357000	NA	<357000	NA	<357000	NA	48.1
16.8	NA	<192000	NA	<192000	NA	<192000	NA	<192000	NA	11.8 j
28.1	NA	<250000	NA	<250000	NA	<250000	NA	<250000	NA	2.89 j

NA	<10.3	NA	<2	NA	<2	NA	<2	NA	<2	NA
NA	NA	NA	<2	NA	<2	NA	<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg
------	-------	------	-------	------	-------	------	-------

Indeno(1,2,3-cd)pyrene	Isobutylbenzene	Isobutylbenzene	Isobutylcyclohexane	Isobutylcyclohexane	Isooctane	Isooctane	Isopentane
NA	<357000	NA	<357000	NA	<357000	NA	<357000
NA	<192000	NA	<192000	NA	<192000	NA	<192000
NA	<250000	NA	<250000	NA	<250000	NA	<250000

<10.3	NA	<2	NA	<2	NA	<2	NA
NA	NA	<2	NA	<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg
------	-------	------	-------	------	-------	------	-------

Isopentane	Isoprene	Isoprene	Isopropyl Ether	Isopropyl Ether	Isopropylbenzene	Isopropylbenzene	Isopropylcyclohexane
NA	<357000	NA	<357000	NA	<357000	NA	<357000
NA	<192000	NA	<192000	NA	<192000	NA	<192000
NA	<250000	NA	<250000	NA	<250000	NA	<250000

<2	NA	<2	NA	<2	NA	<2	NA
<2	NA	<2	NA	<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L				
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Isopropylcyclohexane	Isopropylcyclopentane	Isopropylcyclopentane	Location.CX	Location.CX	Location.CY	Location.CY
NA	<357000	NA	9999	9999	9999	9999
NA	<192000	NA	9999	9999	9999	9999
NA	<250000	NA	9999	9999	9999	9999

<2	NA	<2	9999	9999	9999	9999
<2	NA	<2	9999	9999	9999	9999

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg
-------	------	-------	------	-------	------	-------

Methylcyclohexane	Methylcyclohexane	Methylcyclopentane	Methylcyclopentane	Methyl-tert-butyl ether	Methyl-tert-butyl ether	MMT
<357000	NA	<357000	NA	<357000	NA	<893000
<192000	NA	<192000	NA	<192000	NA	<481000
<250000	NA	<250000	NA	<250000	NA	<625000

NA	<2	NA	<2	NA	<2	NA
NA	<2	NA	<2	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	mg/kg	ng/L	ug/L	mg/kg	ng/L	ug/kg	ug/L
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MMT	Naphthalene	Naphthalene	Naphthalene	Naphthobenzothiophenes	Naphthobenzothiophenes	n-Butylbenzene	n-Butylbenzene
NA	33.8	NA	NA	11.5 j	NA	<357000	NA
NA	24.1	NA	NA	5.66 j	NA	<192000	NA
NA	29.4	NA	NA	<10.4	NA	<250000	NA

<5	NA	<10.3	<2	NA	<10.3	NA	<2
<5	NA	NA	<2	NA	NA	NA	<2

Bramlette MGP

, SOUTH CAROLINA

mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
-------	------	-------	------	-------	------	-------

n-Decane (C10)	n-Decane (C10)	n-Docosane (C22)	n-Docosane (C22)	n-Dodecane (C12)	n-Dodecane (C12)	n-Dotriacontane (C32)
<781	NA	159 j	NA	<781	NA	1270
<833	NA	132 j	NA	<833	NA	3310
<694	NA	111 j	NA	<694	NA	2130

NA	<0.001	NA	<0.001	NA	<0.001	NA
NA	NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
------	-------	------	-------	------	-------

n-Dotriacontane (C32)	n-Eicosane (C20)	n-Eicosane (C20)	n-Heneicosane (C21)	n-Heneicosane (C21)	n-Hentriacontane (C31)
NA	162 j	NA	152 j	NA	2760
NA	<833	NA	169 j	NA	9390
NA	109 j	NA	<694	NA	2480

0.0003 j	NA	<0.001	NA	<0.001	NA
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/L	mg/kg	mg/L	mg/kg	mg/L
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n-Hentriacontane (C31)	n-Heptacosane (C27)	n-Heptacosane (C27)	n-Heptadecane (C17)	n-Heptadecane (C17)
NA	4150	NA	1080	NA
NA	9780	NA	<833	NA
NA	3580	NA	989	NA

0.0004 j	NA	0.0002 j	NA	<0.001
NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
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n-Heptatriacontane (C37)	n-Heptatriacontane (C37)	n-Hexacosane (C26)	n-Hexacosane (C26)	n-Hexadecane (C16)	n-Hexadecane (C16)
1250	NA	702 j	NA	202 j	NA
1860	NA	1680	NA	<833	NA
1260	NA	1100	NA	199 j	NA

NA	<0.001	NA	0.0002 j	NA	<0.001
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
-------	------	-------	------	-------	------	-------

n-Hexane	n-Hexane	n-Hexatriacontane (C36)	n-Hexatriacontane (C36)	n-Nonacosane (C29)	n-Nonacosane (C29)	n-Nonadecane (C19)
<357000	NA	658 j	NA	2710	NA	<781
<192000	NA	2210	NA	7620	NA	<833
<250000	NA	1910	NA	3440	NA	<694

NA	<2	NA	0.0002 j	NA	0.0003 j	NA
NA	<2	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
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n-Nonadecane (C19)	n-Nonane (C9)	n-Nonane (C9)	n-Nonatriacontane (C39)	n-Nonatriacontane (C39)	n-Octacosane (C28)
NA	<781	NA	397 j	NA	1090
NA	<833	NA	1130	NA	2540
NA	<694	NA	978	NA	1700

<0.001	NA	<0.001	NA	<0.001	NA
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/L	mg/kg	mg/L	mg/kg	mg/L	ug/kg	ug/L
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n-Octacosane (C28)	n-Octadecane (C18)	n-Octadecane (C18)	n-Octatriacontane (C38)	n-Octatriacontane (C38)	Nonane (C9)	Nonane (C9)
NA	919	NA	471 j	NA	<357000	NA
NA	928	NA	1280	NA	<192000	NA
NA	835	NA	903	NA	<250000	NA

0.0003 j	NA	<0.001	NA	<0.001	NA	<2
NA	NA	NA	NA	NA	NA	<2

Bramlette MGP

, SOUTH CAROLINA

mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
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Norpristane (1650)	Norpristane (1650)	n-Pentacosane (C25)	n-Pentacosane (C25)	n-Pentadecane (C15)	n-Pentadecane (C15)
<781	NA	1110	NA	<781	NA
<833	NA	2240	NA	168 j	NA
<694	NA	1260	NA	308 j	NA

NA	<0.001	NA	<0.005	NA	<0.001
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/kg	mg/L	ug/kg	ug/L	ug/kg	ug/L
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n-Pentatriacontane (C35)	n-Pentatriacontane (C35)	N-Pentylbenzene	N-Pentylbenzene	n-Propylbenzene	n-Propylbenzene
973	NA	<357000	NA	<357000	NA
2460	NA	<192000	NA	<192000	NA
1580	NA	<250000	NA	<250000	NA

NA	0.0002 j	NA	<2	NA	<2
NA	NA	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
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n-Tetracontane (C40)	n-Tetracontane (C40)	n-Tetracosane (C24)	n-Tetracosane (C24)	n-Tetradecane (C14)	n-Tetradecane (C14)
294 j	NA	262 j	NA	187 j	NA
958	NA	533 j	NA	<833	NA
820	NA	447 j	NA	203 j	NA

NA	<0.001	NA	0.0001 j	NA	<0.001
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
-------	------	-------	------	-------	------

n-Tetratriacontane (C34)	n-Tetratriacontane (C34)	n-Triacontane (C30)	n-Triacontane (C30)	n-Tricosane (C23)	n-Tricosane (C23)
1360	NA	1500	NA	388 j	NA
3040	NA	3100	NA	607 j	NA
1920	NA	2140	NA	319 j	NA

NA	0.0003 j	NA	0.0003 j	NA	<0.001
NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	ug/kg
-------	------	-------	------	-------	------	-------

n-Tridecane (C13)	n-Tridecane (C13)	n-Tritriacontane (C33)	n-Tritriacontane (C33)	n-Undecane (C11)	n-Undecane (C11)	Octane
<781	NA	1780	NA	<781	NA	<357000
<833	NA	5320	NA	<833	NA	<192000
<694	NA	2050	NA	<694	NA	<250000

NA	<0.005	NA	0.0003 j	NA	<0.001	NA
NA	NA	NA	NA	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	mg/kg	ng/L	mg/kg
------	-------	------	-------	------	-------	------	-------	------	-------	------	-------

Octane	o-Xylene	o-Xylene	p/m-Xylene	p/m-Xylene	Pentadecane	Pentadecane	Pentane	Pentane	Perylene	Perylene	Phenanthrene
NA	<357000	NA	<714000	NA	<893000	NA	<357000	NA	24.6	NA	233
NA	<192000	NA	<385000	NA	<481000	NA	<192000	NA	6.45 j	NA	114
NA	<250000	NA	<500000	NA	<625000	NA	<250000	NA	3.22 j	NA	195

<2	NA	<2	NA	<4	NA	<5	NA	<2	NA	<10.3	NA
<2	NA	<2	NA	<4	NA	<5	NA	<2	NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

ng/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	ng/L	mg/kg	ng/L			ug/kg
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Phenanthrene	Phytane	Phytane	Pristane	Pristane	Pyrene	Pyrene	Retene	Retene	SampleDate.D	SampleDate.D	sec-Butylbenzene
NA	<781	NA	<781	NA	110	NA	2.9 j	NA	04/24/2019	04/24/2019	<357000
NA	<833	NA	<833	NA	23	NA	<12.5	NA	04/24/2019	04/24/2019	<192000
NA	<694	NA	<694	NA	14.2	NA	<10.4	NA	04/24/2019	04/24/2019	<250000

1.58 j	NA	<0.001	NA	<0.001	NA	<10.3	NA	<10.3	04/24/2019	04/24/2019	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	04/24/2019	04/24/2019	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg
------	-------	------	-------	------	-------	------	-------

sec-Butylbenzene	Styrene	Styrene	tert-Butylbenzene	tert-Butylbenzene	Tertiary Butanol	Tertiary Butanol	Tertiary-Amyl Methyl Ether
NA	<357000	NA	<357000	NA	<4460000	NA	<357000
NA	<192000	NA	<192000	NA	<2400000	NA	<192000
NA	<250000	NA	<250000	NA	<3120000	NA	<250000

<2	NA	<2	NA	<2	NA	<25	NA
<2	NA	<2	NA	<2	NA	<25	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
------	-------	------	-------	------	-------	------

Tertiary-Amyl Methyl Ether	Tetradecane (C14)	Tetradecane (C14)	Thiophene	Thiophene	Toluene	Toluene
NA	<893000	NA	<357000	NA	<357000	NA
NA	<481000	NA	<192000	NA	<192000	NA
NA	<625000	NA	<250000	NA	<250000	NA

<2	NA	<5	NA	<2	NA	<2
<2	NA	<5	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

mg/kg	mg/L	mg/kg
-------	------	-------

Total Petroleum Hydrocarbons (C9-C44)	Total Petroleum Hydrocarbons (C9-C44)	Total Saturated Hydrocarbons
173000	NA	26000 j
236000	NA	60500 j
119000	NA	32800 j

NA	<0.034	NA
NA	NA	NA

Bramlette MGP

, SOUTH CAROLINA

mg/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L
------	-------	------	-------	------	-------	------

Total Saturated Hydrocarbons	trans-2-Heptene	trans-2-Heptene	trans-2-Hexene	trans-2-Hexene	trans-2-Pentene	trans-2-Pentene
NA	<357000	NA	<357000	NA	<357000	NA
NA	<192000	NA	<192000	NA	<192000	NA
NA	<250000	NA	<250000	NA	<250000	NA

0.003 j	NA	<2	NA	<2	NA	<2
NA	NA	<2	NA	<2	NA	<2

Bramlette MGP

, SOUTH CAROLINA

ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg	ug/L	ug/kg
-------	------	-------	------	-------	------	-------	------	-------

trans-3-Heptene	trans-3-Heptene	trans-3-Nonene	trans-3-Nonene	Tridecane	Tridecane	Undecane	Undecane	Xylene (Total)
<357000	NA	<357000	NA	<893000	NA	<357000	NA	<357000
<192000	NA	<192000	NA	<481000	NA	<192000	NA	<192000
<250000	NA	<250000	NA	<625000	NA	<250000	NA	<250000

NA	<2	NA	<2	NA	<5	NA	<2	NA
NA	<2	NA	<2	NA	<5	NA	<2	NA

Bramlette MGP

, SOUTH CAROLINA

ug/L

Xylene (Total)
NA
NA
NA

<2
<2

ATTACHMENT 2

HUMAN HEALTH SCREENING

TABLE 2-1
HUMAN HEALTH SCREENING - GROUNDWATER
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	Exposure Source	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection (µg/L)		Concentration Used for Screening (µg/L)	MCL/RSL ¹ HI=0.1 (µg/L)		SC DHEC ^{2,3} MCL (µg/L)		SCDHEC ⁴ UST RBSL	c/n	Screening Value Used (µg/L)	Hazard Quotient	COPC? ⁵
						Min	Max										
PAHs																	
Acenaphthene	GW	83-32-9	59	14	24%	2.8	225	225	530	RSL Tap	–	–	–	n	530	4.25E-01	N
Acenaphthylene	GW	208-96-8	59	8	14%	1.8	167	167	–	–	–	–	–	–	NA	NA	NA
Anthracene	GW	120-12-7	59	5	8%	2.9	10.5	10.5	1,800	RSL Tap	–	–	–	n	1,800	5.83E-03	N
Fluoranthene	GW	206-44-0	59	3	5%	3	3.9	3.9	800	RSL Tap	–	–	–	n	800	4.88E-03	N
Fluorene	GW	86-73-7	59	10	17%	3	66.7	66.7	290	RSL Tap	–	–	–	n	290	2.30E-01	N
Naphthalene	GW	91-20-3	59	26	44%	0.38	3200	3,200	0.17	RSL Tap	–	–	25	c	25	1.28E+02	Y
Phenanthrene	GW	85-01-8	59	10	17%	2	74.2	74.2	–	–	–	–	–	–	NA	NA	NA
Pyrene	GW	129-00-0	59	2	3%	2.9	4.2	4.2	120	RSL Tap	–	–	–	n	120	3.50E-02	N
1-Methylnaphthalene	GW	90-12-0	59	14	24%	2.2	491	491	1.1	RSL Tap	–	–	–	c	1.1	4.46E+02	Y
2-Methylnaphthalene	GW	91-57-6	59	11	19%	5.5	479	479	36	RSL Tap	–	–	–	n	36	1.33E+01	Y
BTEX																	
Benzene	GW	71-43-2	59	15	25%	0.37	1,680	1,680	5	MCL	5	2	–	c	5	3.36E+02	Y
Ethylbenzene	GW	100-41-4	59	15	25%	0.37	242	242	700	MCL	700	2	–	c	700	3.46E-01	N
m&p-Xylene	GW	179601-23-1	59	14	24%	1.2	150	150	190	RSL Tap	–	–	–	n	190	7.89E-01	N
o-Xylene	GW	95-47-6	59	15	25%	0.33	83	83	190	RSL Tap	–	–	–	n	190	4.37E-01	N
Toluene	GW	108-88-3	59	14	24%	0.52	266	266	1,000	MCL	1,000	2	–	n	1,000	2.66E-01	N
Xylene (Total)	GW	1330-20-7	59	13	22%	2.8	233	233	10,000	MCL	10,000	2	–	n	10,000	2.33E-02	N
OTHER VOCs																	
2,4-Dimethylphenol	GW	105-67-9	59	4	7%	24.8	230	230	360	RSL Tap	–	–	–	n	360	6.39E-01	N
2,4-Dinitrotoluene	GW	121-14-2	59	1	2%	5.3	5.3	5.3	0.24	RSL Tap	–	–	–	c	0.24	2.21E+01	Y
2-Methylphenol(o-Cresol)	GW	95-48-7	59	1	2%	4.8	4.8	4.8	930	RSL Tap	–	–	–	n	930	5.16E-03	N
Dibenzofuran	GW	132-64-9	59	8	14%	2	23.2	23.2	7.9	RSL Tap	–	–	–	n	7.9	2.94E+00	Y
Methyl-tert-butyl ether	GW	1634-04-4	59	13	22%	0.36	2.3	2.3	14	RSL Tap	–	–	40	c	40	5.75E-02	N
Phenol	GW	108-95-2	59	1	2%	5.9	5.9	5.9	5,800	RSL Tap	–	–	–	n	5,800	1.02E-03	N
Trichloroethene	GW	79-01-6	59	1	2%	0.72	0.72	0.72	5	MCL	5	2	–	n	5	1.44E-01	N
1,2-Dichlorobenzene	GW	95-50-1	59	1	2%	0.85	0.85	0.85	600	MCL	600	2	–	n	600	1.42E-03	N
1,3-Dichlorobenzene	GW	541-73-1	59	1	2%	0.26	0.26	0.26	–	–	–	–	–	–	NA	NA	NA
1,4-Dichlorobenzene	GW	106-46-7	59	1	2%	0.43	0.43	0.43	75	MCL	75	2	–	c	75	5.73E-03	N
3&4-Methylphenol(m&p Cresol)	GW	59-50-7	59	2	3%	7	21.8	21.8	1,400	RSL Tap	–	–	–	n	1400	1.56E-02	N
Bromodichloromethane	GW	75-27-4	59	1	2%	1.2	1.2	1.2	80	MCL	80	3	–	c	80	1.50E-02	N
Chloroform	GW	67-66-3	59	2	3%	2.3	5.3	5.3	80	MCL	80	3	–	c*	80	6.63E-02	N
cis-1,2-Dichloroethene	GW	156-59-2	59	2	3%	0.77	4.9	4.9	70	MCL	–	–	–	n	70	7.00E-02	N
Di-n-butylphthalate	GW	84-74-2	59	1	2%	5.3	5.3	5.3	900	RSL Tap	–	–	–	n	900	5.89E-03	N
Styrene	GW	100-42-5	59	6	10%	1.1	69.8	69.8	100	MCL	100	2	–	n	100	6.98E-01	N
Vinyl chloride	GW	75-01-4	59	1	2%	0.57	0.57	0.57	2	MCL	2	2	–	c	2	2.85E-01	N

*Data evaluated includes data from 1st quarter 2019 to 1st quarter 2020, unless otherwise noted

Prepared by: KCS_ Checked by: HES

Notes:

BTEX - benzene, toluene, ethylbenzene and xylene chemicals
C - Cancerous
CAS - Chemical Abstracts Service
COPC - Constituent of Potential Concern
HI - Hazard index

MCL - Maximum Contaminant Level
n - non-cancerous
NA - Not Applicable
ND - Non Detect
PAHs - Polyaromatic hydrocarbons

RSL - Regional Screening Level
SC DHEC - South Carolina Department of Health and Environmental Control
UST RBSL - Underground Storage Tank Risk Based Screening Level
VOC - Volatile Organic Compounds

1) USEPA Regional Screening Levels calculator (November 2019). RSL Tap Water HI=0.1. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>
2) SC DHEC R.61-58. State Primary Drinking Water Regulations. 2014. <https://www.scdhec.gov/sites/default/files/Library/Regulations/R.61-58.pdf>
3) SC DHEC R.61-68. Water Classifications and Standards. 2014. https://www.scdhec.gov/sites/default/files/media/document/R.61-68_0.pdf
4) SC DHEC Quality Assurance Program Plan For the Underground Storage Tank Management Division. 2016. Appendix D. [https://www.scdhec.gov/sites/default/files/docs/Environment/docs/DHEC%20UST%20QAPP_Rev-3.1\(2\).pdf](https://www.scdhec.gov/sites/default/files/docs/Environment/docs/DHEC%20UST%20QAPP_Rev-3.1(2).pdf)
5.) For screening purposes of COPC, the Max concenration is compared to SC DHEC numbers in the following order of references; 2,3,4. If not SC DHEC number then Max is compared to EPA RSL.

TABLE 2-2
HUMAN HEALTH SCREENING - SURFACE SOIL (0-0.5 FEET)
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	Exposure Source	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection (mg/kg)		Concentration Used for Screening (mg/kg)	Residential ¹ SSL (mg/kg) HI=0.1	Industrial ¹ SSL (mg/kg) HI=0.1	Risk-based ¹ SSL (mg/kg) GW Protection HI=0.1	MCL-based ¹ SSL (mg/kg) GW Protection HI=0.1	c/n	Residential Screening Value Used (mg/kg)	Industrial Screening Value Used (mg/kg)	Hazard Quotient (Residential)	Hazard Quotient (Industrial)	Residential COPC?	Industrial COPC?
						Min	Max												
PAHs																			
Acenaphthene	Soil	83-32-9	47	29	62%	0.00061	1	1	360	4500	0.55	–	n	360	4500	3.56E-03	2.84E-04	N	N
Acenaphthylene	Soil	208-96-8	47	38	81%	0.00054	1	1	–	–	–	–	–	–	–	NA	NA	NA	NA
Anthracene	Soil	120-12-7	47	41	87%	0.00052	3	3	1,800	23,000	5.8	–	n	1,800	23,000	1.81E-03	1.41E-04	N	N
Benzo(a)anthracene	Soil	56-55-3	47	44	94%	0.00083	6	6	1.1	21	0.011	–	c	1.1	21	5.88E+00	3.08E-01	Y	N
Benzo(a)pyrene	Soil	50-32-8	47	44	94%	0.00072	6	6	0.11	2.1	0.029	0.24	c	0.11	2.1	5.35E+01	2.80E+00	Y	Y
Benzo(b)fluoranthene	Soil	205-99-2	47	44	94%	0.0011	8	8	1.1	21	0.3	–	c	1.1	21	7.00E+00	3.67E-01	Y	N
Benzo(g,h,i)perylene	Soil	191-24-2	47	40	85%	0.0027	3	3	–	–	–	–	–	–	–	NA	NA	NA	NA
Benzo(k)fluoranthene	Soil	207-08-9	47	43	91%	0.00063	3	3	11	210	2.9	–	c	11	210	2.67E-01	1.40E-02	N	N
Chrysene	Soil	218-01-9	47	44	94%	0.00065	6	6	110	2,100	9	–	c	110	2,100	5.66E-02	2.97E-03	N	N
Dibenz(a,h)anthracene	Soil	53-70-3	47	38	81%	0.0014	1	1	0.11	2.1	0.096	–	c	0.11	2.1	9.82E+00	5.14E-01	Y	N
Fluoranthene	Soil	206-44-0	47	41	87%	0.0026	11	11	240	3,000	8.9	–	n	240	3,000	4.58E-02	3.67E-03	N	N
Fluorene	Soil	86-73-7	47	37	79%	0.00068	2	2	240	3,000	0.54	–	n	240	3,000	7.75E-03	6.20E-04	N	N
Indeno(1,2,3-cd)pyrene	Soil	193-39-5	47	40	85%	0.0022	3	3	1.1	21	0.98	–	c	1.1	21	2.47E+00	1.30E-01	Y	N
Naphthalene	Soil	91-20-3	44	13	30%	0.00093	0	0	2	8.6	0.00038	–	c	2	8.6	4.26E-02	9.91E-03	N	N
Phenanthrene	Soil	85-01-8	47	41	87%	0.0016	9	9	–	–	–	–	–	–	–	NA	NA	NA	NA
Pyrene	Soil	129-00-0	47	43	91%	0.0013	10	10	180	2,300	1.3	–	n	180	2,300	5.37E-02	4.20E-03	N	N
BTEX																			
Benzene	Soil	71-43-2	44	0	0%	NA	NA	ND	1.2	5.1	0.00023	0.0026	c	1.2	5.1	NA	NA	NA	NA
Ethylbenzene	Soil	100-41-4	44	0	0%	NA	NA	ND	5.8	25	0.0017	0.78	c	5.8	25	NA	NA	NA	NA
m&p-Xylene	Soil	179601-23-1	44	0	0%	NA	NA	ND	55	240	0.019	–	n	55	240	NA	NA	NA	NA
OTHER VOCs/sVOCs																			
1,2,4-Trichlorobenzene	Soil	120-82-1	44	1	2%	0.0555	0.0555	0.0555	5.8	26	0.0012	0.2	n	5.8	26	1.E-02	2.E-03	N	N
1,2,4-Trimethylbenzene	Soil	95-36-3	44	0	0%	N/A	N/A	ND	–	–	–	–	–	–	–	NA	NA	NA	NA
1,3,5-Trimethylbenzene	Soil	108-67-8	44	0	0%	N/A	N/A	ND	27	150	0.0087		n	27	150	NA	NA	NA	NA
1-Methylnaphthalene	Soil	90-12-0	47	38	81%	0.0011	1	1	18	73	0.006	–	c	18	73	6.E-02	1.E-02	N	N
2-Butanone(MEK)	Soil	78-93-3	44	1	2%	0.0039	0.0039	0.0039	2,700	19,000	0.12	–	n	2,700	19,000	1.E-06	2.E-07	N	N
2-Hexanone	Soil	591-78-6	44	6	14%	0.0046	0.0821	0.0821	20	130	0.00088	–	n	20	130	4.E-03	6.E-04	N	N
2-Methylnaphthalene	Soil	91-57-6	47	39	83%	0.00077	1	1	24	300	0.019	–	n	24	300	5.E-02	4.E-03	N	N
4-Bromophenylphenyl ether	Soil	101-55-3	47	1	2%	0.108	0.108	0.108	–	–	–	–	–	–	–	NA	NA	NA	NA
Acetone	Soil	67-64-1	44	11	25%	0.0113	0.168	0.168	6,100	67,000	0.29	–	n	6,100	67,000	3.E-05	3.E-06	N	N
Bromomethane	Soil	74-83-9	44	0	0%	N/A	N/A	ND	0.68	3	0.00019	-	n	0.68	3	NA	NA	NA	NA
Chloroform	Soil	67-66-3	44	0	0%	N/A	N/A	ND	0.32	1.4	0.000061	0.022	c	0.32	1.4	NA	NA	NA	NA
Dibenzofuran	Soil	132-64-9	47	9	19%	0.0756	0.432	0.432	7.8	120	0.015	–	n	7.8	120	6.E-02	4.E-03	N	N
Methylene chloride	Soil	75-09-2	44	2	5%	0.502	0.628	0.628	35	320	0.0027	0.0013	n	35	320	2.E-02	2.E-03	N	N
p-Isopropyltoluene	Soil	99-87-6	44	1	2%	0.0055	0.0055	0.0055	–	–	–	–	–	–	–	NA	NA	NA	NA

*Data evaluated includes data from 1st quarter 2019 to 4th quarter 2019, unless otherwise noted

Prepared by: KCS Checked by: ALL

Notes:

BTEX - benzene, toluene, ethylbenzene and xylene chemicals

c - Cancerous

CAS - Chemical Abstracts Service

COPC - Constituent of Potential Concern

HI - Hazard index

MCL - Maximum Contaminant Level

mg/kg - milligram per kilogram

n - non-cancerous

NA - Not Applicable

ND - Non Detect

PAHs - Polyaromatic hydrocarbons

SSL - Soil Screening Level

sVOC - semi volatile organ compounds

VOC - volatile organic compounds

1) USEPA Regional Screening Levels (November 2019). Summary Table THQ=0.1. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>

TABLE 2-3
HUMAN HEALTH SCREENING - SUBSURFACE SOIL (0-10 FEET)
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	Exposure Source	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection (mg/kg)		Concentration Used for Screening (mg/kg)	Residential ¹ SSL (mg/kg)	Industrial ¹ SSL (mg/kg)	Risk-based ¹ SSL (mg/kg) GW Protection	MCL-based ¹ SSL (mg/kg) GW Protection	c/n	Residential Screening Value Used (mg/kg)	Industrial Screening Value Used (mg/kg)	Hazard Quotient (Residential)	Hazard Quotient (Industrial)	Residential COPC?	Industrial COPC?
						Min	Max												
PAH's																			
Acenaphthene	Soil	83-32-9	46	26	57%	0.00082	1.15	1.15	360	4500	0.55	–	n	360	4,500	3.19E-03	2.56E-04	N	N
Acenaphthylene	Soil	208-96-8	46	30	65%	0.00069	4.38	4.38	–	–	–	–	–	–	–	NA	NA	NA	NA
Anthracene	Soil	120-12-7	46	37	80%	0.00066	21.1	21.10	1,800	23,000	5.8	–	n	1,800	23,000	1.17E-02	9.17E-04	N	N
Benzo(a)anthracene	Soil	56-55-3	46	37	80%	0.0011	27.9	27.90	1.1	21	0.011	–	c	1.1	21	2.54E+01	1.33E+00	Y	Y
Benzo(a)pyrene	Soil	50-32-8	46	37	80%	0.0011	21.5	21.50	0.11	2.1	0.029	0.24	c	0.11	2.1	1.95E+02	1.02E+01	Y	Y
Benzo(b)fluoranthene	Soil	205-99-2	46	37	80%	0.0011	27.2	27.20	1.1	21	0.3	–	c	1.1	21	2.47E+01	1.30E+00	Y	Y
Benzo(g,h,i)perylene	Soil	191-24-2	46	37	80%	0.0014	12.3	12.30	–	–	–	–	–	–	–	NA	NA	NA	NA
Benzo(k)fluoranthene	Soil	207-08-9	46	37	80%	0.00073	12.1	12.10	11	210	2.9	–	c	11	210	1.10E+00	5.76E-02	Y	N
Chrysene	Soil	218-01-9	46	38	83%	0.00062	24	24.00	110	2,100	9	–	c	110	2,100	2.18E-01	1.14E-02	N	N
Dibenz(a,h)anthracene	Soil	53-70-3	46	30	65%	0.0015	2.17	2.17	0.11	2.1	0.096	–	c	0.11	2.1	1.97E+01	1.03E+00	Y	Y
Fluoranthene	Soil	206-44-0	46	36	78%	0.0025	63.3	63.30	240	3,000	8.9	–	n	240	3,000	2.64E-01	2.11E-02	N	N
Fluorene	Soil	86-73-7	46	32	70%	0.00089	8.84	8.84	240	3,000	0.54	–	n	240	3,000	3.68E-02	2.95E-03	N	N
Indeno(1,2,3-cd)pyrene	Soil	193-39-5	46	36	78%	0.0017	11	11.00	1.1	21	0.98	–	c	1.1	21	1.00E+01	5.24E-01	Y	N
Naphthalene	Soil	91-20-3	46	19	41%	0.0013	27.3	27.30	2	8.6	0.00038	–	c	2	8.6	1.37E+01	3.17E+00	Y	Y
Phenanthrene	Soil	85-01-8	46	36	78%	0.0015	77.7	77.70	–	–	–	–	–	–	–	NA	NA	NA	NA
Pyrene	Soil	129-00-0	46	37	80%	0.0012	50.3	50.30	180	2,300	1.3	–	n	180	2,300	2.79E-01	2.19E-02	N	N
BTEX																			
Benzene	Soil	71-43-2	46	1	2%	0.0711	0.0711	0.0711	1.2	5.1	0.00023	0.0026	c	1.2	5.1	5.93E-02	1.39E-02	N	N
Ethylbenzene	Soil	100-41-4	46	1	2%	0.003	0.003	0.003	5.8	25	0.0017	0.78	c	5.8	25	5.17E-04	1.20E-04	N	N
m&p-Xylene	Soil	179601-23-1	46	0	0%	NA	NA	ND	55	240	0.019	–	n	55	240	NA	NA	NA	NA
OTHER VOCs/ sVOCs																			
1,2,4-Trichlorobenzene	Soil	120-82-1	46	0	0%	NA	NA	ND	5.8	26	0.0012	0.2	n	5.8	26	NA	NA	NA	NA
1,2,4-Trimethylbenzene	Soil	95-63-3	46	2	4%	0.0042	1	1	–	–	–	–	–	–	–	NA	NA	NA	NA
1,3,5-Trimethylbenzene	Soil	108-67-8	46	2	4%	0.0015	0.428	0.428	27	150	0.0087		n	27	150	2.E-02	3.E-03	N	N
1-Methylnaphthalene	Soil	90-12-0	46	35	76%	0.00083	3	3	18	73	0.006	–	c	18	73	2.E-01	5.E-02	N	N
2-Butanone(MEK)	Soil	78-93-3	46	0	0%	NA	NA	ND	2,700	19,000	0.12	–	n	2,700	19,000	NA	NA	NA	NA
2-Hexanone	Soil	591-78-6	46	0	0%	NA	NA	ND	20	130	0.00088	–	n	20	130	NA	NA	NA	NA
2-Methylnaphthalene	Soil	91-57-6	46	35	76%	0.00095	6	6	24	300	0.019	–	n	24	300	3.E-01	2.E-02	N	N
4-Bromophenylphenyl ether	Soil	101-55-3	46	0	0%	NA	NA	ND	–	–	–	–	–	–	–	NA	NA	NA	NA
Acetone	Soil	67-64-1	46	12	26%	0.0081	0.0768	0.0768	6,100	67,000	0.29	–	n	6,100	67,000	1.E-05	1.E-06	N	N
Bromomethane	Soil	74-83-9	46	1	2%	0.278	0.278	0.278	0.68	3	0.00019	-	n	0.68	3	4.E-01	9.E-02	N	N
Chloroform	Soil	67-66-3	46	0	0%	NA	NA	ND	0.32	1.4	0.000061	0.022	c	0.32	1.4	NA	NA	NA	NA
Dibenzofuran	Soil	132-64-9	46	13	28%	0.072	0.804	0.804	7.8	120	0.015	–	n	7.8	120	1.E-01	7.E-03	N	N
Methylene chloride	Soil	75-09-2	46	2	4%	0.295	0.81	0.81	35	320	0.0027	0.0013	n	35	320	2.E-02	3.E-03	N	N
p-Isopropyltoluene	Soil	99-87-6	46	1	2%	0.0023	0.0023	0.0023	–	–	–	–	–	–	–	NA	NA	NA	NA

*Data evaluated includes data from 1st quarter 2019 to 4th quarter 2019, unless otherwise noted

Prepared by: KCS Checked by: ALL

Notes:

BTEX - benzene, toluene, ethylbenzene and xylene chemicals

c - Cancerous

CAS - Chemical Abstracts Service

COPC - Constituent of Potential Concern

HI - Hazard index

MCL - Maximum Contaminant Level

mg/kg - milligram per kilogram

n - non-cancerous

NA - Not Applicable

ND - Non Detect

PAHs - Polyaromatic hydrocarbons

SSL - Soil Screening Level

sVOC - semi volatile organ compounds

VOC - volatile organic compounds

1) USEPA Regional Screening Levels (November 2019). Summary Table THQ=0.1. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>

TABLE 2-4
HUMAN HEALTH SCREENING - SEDIMENT - REEDY RIVER - OFF-SITE
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	Exposure Source	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection (mg/kg)		Concentration Used for Screening (mg/kg)	Residential ¹ SSL (mg/kg)	Industrial ¹ SSL (mg/kg)	Risk-based ¹ SSL (mg/kg) GW Protection	MCL-based ¹ SSL (mg/kg) GW Protection	c/n	Residential Screening Value Used (mg/kg)	Industrial Screening Value Used (mg/kg)	Hazard Quotient (Residential)	Hazard Quotient (Industrial)	Residential COPC?	Industrial COPC?
						Min	Max												
PAH's																			
Acenaphthylene	SED	208-96-8	6	1	17%	0.106	0.106	0.106	–	–	–	–	–	–	–	NA	NA	NA	NA
Anthracene	SED	120-12-7	6	1	17%	0.167	0.167	0.167	1,800	23,000	5.8	–	n	1,800	23,000	9.28E-05	7.26E-06	N	N
Benzo(a)anthracene	SED	56-55-3	6	1	17%	0.503	0.503	0.503	1.1	21	0.011	–	c	1.1	21	4.57E-01	2.40E-02	N	N
Benzo(a)pyrene	SED	50-32-8	6	1	17%	0.435	0.435	0.435	0.11	2.1	0.029	0.24	c	0.11	2.1	3.95E+00	2.07E-01	Y	N
Benzo(b)fluoranthene	SED	205-99-2	6	1	17%	0.562	0.562	0.562	1.1	21	0.3	–	c	1.1	21	5.11E-01	2.68E-02	N	N
Benzo(g,h,i)perylene	SED	191-24-2	6	1	17%	0.183	0.183	0.183	–	–	–	–	–	–	–	NA	NA	NA	NA
Benzo(k)fluoranthene	SED	207-08-9	6	1	17%	0.236	0.236	0.236	11	210	2.9	–	c	11	210	2.15E-02	1.12E-03	N	N
Chrysene	SED	218-01-9	6	1	17%	0.49	0.49	0.490	110	2,100	9	–	c	110	2,100	4.45E-03	2.33E-04	N	N
Fluoranthene	SED	206-44-0	6	2	33%	0.106	0.822	0.822	240	3,000	8.9	–	n	240	3,000	3.43E-03	2.74E-04	N	N
Indeno(1,2,3-cd)pyrene	SED	193-39-5	6	1	17%	0.186	0.186	0.186	1.1	21	0.98	–	c	1.1	21	1.69E-01	8.86E-03	N	N
Phenanthrene	SED	85-01-8	6	1	17%	0.217	0.217	0.217	–	–	–	–	–	–	–	NA	NA	NA	NA
Pyrene	SED	129-00-0	6	2	33%	0.09	0.791	0.791	180	2,300	1.3	–	n	180	2,300	4.39E-03	3.44E-04	N	N

*Data evaluated includes data from 4th quarter 2018, unless otherwise noted

Prepared by: KCS Checked by: HES

Notes:
BTEx - benzene, toluene, ethylbenzene and xylene chemicals
c - Cancerous
CAS - Chemical Abstracts Service
COPC - Constituent of Potential Concern
HI - Hazard index

MCL - Maximum Contaminant Level
mg/kg - milligram per kilogram
n - non-cancerous
NA - Not Applicable
ND - Non Detect

PAHs - Polyaromatic hydrocarbons
SSL - Soil Screening Level
sVOC - semi volatile organ compounds
VOC - volatile organic compounds

1) USEPA Regional Screening Levels (November 2019). Summary Table THQ=0.1. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>

TABLE 2-5
HUMAN HEALTH SCREENING - SEDIMENT ON-SITE
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	Exposure Source	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection (mg/kg)		Concentration Used for Screening (mg/kg)	Residential ¹ SSL (mg/kg)	Industrial ¹ SSL (mg/kg)	Risk-based ¹ SSL (mg/kg) GW Protection	MCL-based ¹ SSL (mg/kg) GW Protection	c/n	Residential Screening Value Used (mg/kg)	Industrial Screening Value Used (mg/kg)	Hazard Quotient (Residential)	Hazard Quotient (Industrial)	Residential COPC?	Industrial COPC?
						Min	Max												
PAH's																			
Acenaphthene	SED	83-32-9	25	5	20%	0.0025	0.2	0.22	360	4500	0.55	–	n	360	4,500	6.06E-04	4.84E-05	N	N
Acenaphthylene	SED	208-96-8	25	12	48%	0.015	3.4	3.36	–	–	–	–	–	–	–	NA	NA	NA	NA
Anthracene	SED	120-12-7	25	11	44%	0.0154	10.5	10.50	1,800	23,000	5.8	–	n	1,800	23,000	5.83E-03	4.57E-04	N	N
Benzo(a)anthracene	SED	56-55-3	25	16	64%	0.0639	22.8	22.80	1.1	21	0.011	–	c	1.1	21	2.07E+01	1.09E+00	Y	Y
Benzo(a)pyrene	SED	50-32-8	25	15	60%	0.0615	20.8	20.80	0.11	2.1	0.029	0.24	c	0.11	2.1	1.89E+02	9.90E+00	Y	Y
Benzo(b)fluoranthene	SED	205-99-2	25	15	60%	0.0777	23.2	23.20	1.1	21	0.3	–	c	1.1	21	2.11E+01	1.10E+00	Y	Y
Benzo(g,h,i)perylene	SED	191-24-2	25	13	52%	0.0274	11.4	11.40	–	–	–	–	–	–	–	NA	NA	NA	NA
Benzo(k)fluoranthene	SED	207-08-9	25	13	52%	0.0314	8.8	8.81	11	210	2.9	–	c	11	210	8.01E-01	4.20E-02	N	N
Chrysene	SED	218-01-9	25	16	64%	0.0665	19.7	19.70	110	2,100	9	–	c	110	2,100	1.79E-01	9.38E-03	N	N
Dibenz(a,h)anthracene	SED	53-70-3	25	6	24%	0.0097	0.3	0.26	0.11	2.1	0.096	–	c	0.11	2.1	2.33E+00	1.22E-01	Y	N
Fluoranthene	SED	206-44-0	25	17	68%	0.0902	44.5	44.50	240	3,000	8.9	–	n	240	3,000	1.85E-01	1.48E-02	N	N
Fluorene	SED	86-73-7	25	10	40%	0.0038	3.2	3.23	240	3,000	0.54	–	n	240	3,000	1.35E-02	1.08E-03	N	N
Indeno(1,2,3-cd)pyrene	SED	193-39-5	25	13	52%	0.0266	10.4	10.40	1.1	21	0.98	–	c	1.1	21	9.45E+00	4.95E-01	Y	N
Naphthalene	SED	91-20-3	25	9	36%	0.0027	2.2	2.18	2	8.6	0.00038	–	c	2	8.6	1.09E+00	2.53E-01	Y	N
Phenanthrene	SED	85-01-8	25	15	60%	0.0329	28.6	28.60	–	–	–	–	–	–	–	NA	NA	NA	NA
Pyrene	SED	129-00-0	25	17	68%	0.0882	43.4	43.40	180	2,300	1.3	–	n	180	2,300	2.41E-01	1.89E-02	N	N
OTHER VOCs/sVOCs																			
1-Methylnaphthalene	SED	90-12-0	25	6	24%	0.004	0.1	0	18	73	0.006	–	c	18	73	3.E-03	8.E-04	N	N
2-Butanone(MEK)	SED	78-93-3	24	4	17%	0.0115	0.0311	0.0311	2,700	19,000	0.12	–	n	2,700	19,000	NA	NA	NA	NA
2-Methylnaphthalene	SED	91-57-6	25	6	24%	0.0059	0.1	0	24	300	0.019	–	n	24	300	4.E-03	3.E-04	N	N
Acetone	SED	67-64-1	24	18	75%	0.0217	0.738	0.738	6,100	67,000	0.29	–	n	6,100	67,000	1.E-04	1.E-05	N	N
Chloroform	SED	67-66-3	24	4	17%	0.0043	0.0091	0.0091	0.32	1.4	0.000061	0.022	c	0.32	1.4	3.E-02	7.E-03	N	N
Dibenzofuran	SED	132-64-9	25	1	4%	0.242	0.242	0.242	7.8	120	0.015	–	n	7.8	120	3.E-02	2.E-03	N	N
Methylene chloride	SED	75-09-2	24	4	17%	0.0141	0.0623	0.0623	35	320	0.0027	0.0013	n	35	320	2.E-03	2.E-04	N	N
p-Isopropyltoluene	SED	99-87-6	24	2	8%	0.0052	0.0233	0.0233	–	–	–	–	–	–	–	NA	NA	NA	NA
4-Methyl-2-pentanone (MIBK)	SED	108-10-1	24	2	8%	0.0105	0.012	0.012	3,300	14,000	0.14	–	–	3,300	14,000	4.E-06	9.E-07	N	N
bis(2-Ethylhexyl)phthalate	SED	117-81-7	25	1	4%	0.246	0.246	0.246	39	160	1.3	1.4	c**	39	160	6.E-03	2.E-03	N	N
Styrene	SED	100-42-5	24	1	4%	0.0027	0.0027	0.0027	600	3,500	0.13	0.11	n	600	3,500	5.E-06	8.E-07	N	N

*Data evaluated includes data from 1st quarter 2019 to 2nd quarter 2020, unless otherwise noted

Prepared by: KCS Checked by: HES

Notes:

BTEX - benzene, toluene, ethylbenzene and xylene chemicals

c - Cancerous

CAS - Chemical Abstracts Service

COPC - Constituent of Potential Concern

HI - Hazard index

MCL - Maximum Contaminant Level

mg/kg - milligram per kilogram

n - non-cancerous

NA - Not Applicable

ND - Non Detect

PAHs - Polyaromatic hydrocarbons

SSL - Soil Screening Level

sVOC - semi volatile organ compounds

VOC - volatile organic compounds

1) USEPA Regional Screening Levels (November 2019). Summary Table THQ=0.1. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>

TABLE 2-6
HUMAN HEALTH SCREENING - SURFACE WATER- REEDY RIVER - OFFSITE
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	Exposure Source	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection		Concentration Used for Screening	MCL / RSL ¹ HI=0.1 (µg / L)		SC DHEC ² MCL (µg / L)	c / n	SC DHEC ² HH Consumption of:		Screening Value Used (µg / L)	Hazard Quotient	HH COPC?
						Min	Max						Water & Organism (µg / L)	Organism Only (µg / L)			
Benzene	GW	71-43-2	12	0	0%	NA	NA	ND	5	MCL	5	c	2.2	51	5	NA	N
Ethylbenzene	GW	100-41-4	12	0	0%	NA	NA	ND	700	MCL	700	c	530	2,100	700	NA	N
Chloromethane	GW	74-87-3	12	0	0%	NA	NA	ND	19	RSL Tap	NA	n	NA	NA	19	NA	N

*Data evaluated includes data from 4th quarter 2018 to 1st quarter 2020, unless otherwise noted

Prepared by: KCS Checked by: HES

Notes:

C - Cancerous

MCL - Maximum Contaminant Level

ND - Non Detect

COPC - Constituent of Potential Concern n - non-cancerous

RSL - Regional Screening Level

HI - Hazard index

NA - Not Applicable

SC DHEC - South Carolina Department of Health and Environmental Control

1) USEPA Regional Screening Levels calculator (November 2019). RSL Tap Water HI=0.1. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>

2) SC DHEC R.61-88. Water Classification and Standards. 2014. https://www.scdhec.gov/sites/default/files/media/document/R.61-68_0.pdf

TABLE 2-7
HUMAN HEALTH SCREENING - SURFACE WATER - ONSITE
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	Exposure Source	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection		Concentration Used for Screening	MCL/RSL ¹ HI=0.1 (µg/L)		SC DHEC ² MCL (µg/L)	c/n	SC DHEC ² HH Consumption of:		Screening Value Used (µg/L)	Hazard Quotient	HH COPC?
						Min	Max						Water & Organism (µg/L)	Organism Only (µg/L)			
Benzene	GW	71-43-2	10	1	10%	2.3	2.3	2.3	5	MCL	5	c	2.2	51	5	4.60E-01	N
Ethylbenzene	GW	100-41-4	10	1	10%	0.5	0.5	0.5	700	MCL	700	c	530	2100	700	7.14E-04	N
Chloromethane	GW	74-87-3	10	3	30%	4.4	13.2	13.2	19	RSL Tap	NA	n	NA	NA	19	6.95E-01	N

*Data evaluated includes data from 1st quarter 2019 to 1st quarter 2020, unless otherwise noted

Prepared by: KCS Checked by: HES

Notes:

c - Cancerous

COPC - Constituent of Potential Concern

HI - Hazard index

MCL - Maximum Contaminant Level

n - non-cancerous

NA - Not Applicable

ND - Non Detect

RSL - Regional Screening Level

SC DHEC - South Carolina Department of Health and Environmental Control

1) USEPA Regional Screening Levels calculator (November 2019). RSL Tap Water HI=0.1. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>

2) SC DHEC R.61-58. State Primary Drinking Water Regulations. 2014. <https://www.scdhec.gov/sites/default/files/Library/Regulations/R.61-58.pdf>

ATTACHMENT 3

HUMAN HEALTH EPC SUMMARY

ATTACHMENT 3
TABLE 3-1
SUMMARY OF EXPOSURE POINT CONCENTRATIONS
HUMAN HEALTH - GROUNDWATER
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Constituent	Reporting Units	Number of Samples	Number of Detections	Minimum Detected Concentration	Maximum Detected Concentration	Mean Detected Concentration ^(a)	UCL Selected	UCL ^(b)	Exposure Point Concentration ^(c)	Exposure Point Concentration (mg/L)
Naphthalene	(µg/L)	59	26	0.38	3200	682.8	97.5% KM (Chebyshev) UCL	918	918	0.9182
Benzene	(µg/L)	59	15	0.37	1680	359.8	97.5% KM (Chebyshev) UCL	337	337	0.337
1-Methylnaphthalene	(µg/L)	59	14	2.2	491	140.5	95% KM Approximate Gamma UCL	72.39	72	0.07239
2,4-Dinitrotoluene	(µg/L)	59	1	5.3	5.3	5.3	---	---	5.3	0.0053
2-Methylnaphthalene	(µg/L)	59	11	5.5	479	191	95% KM (t) UCL	63.77	63.77	0.06377
Dibenzofuran	(µg/L)	59	8	2	23.2	11.56	95% KM (t) UCL	9.048	9.048	0.009048

Prepared by: KCS Checked by: ALL

Notes:

--- - No UCL

mg/L - milligrams per liter

µg/L - micrograms per liter

UCL - Upper Confidence Limit

^(a) Mean calculated by ProUCL using the Kaplan-Meier (KM) estimation method for non-detect values: only given for datasets with FOD less than 100% and that met the minimum sample size and FOD requirements for use with ProUCL.

^(b) The UCL values are calculated using the ProUCL software (V. 5.1; USEPA, 2016). The ProUCL software performs a goodness-of-fit test. The software then determines the distribution of the data set for which the EPC is being derived (e.g., normal, lognormal, gamma, or non-discernable), and then calculates a conservative and stable UCL value in accordance with the framework described in "Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites" (USEPA, 2002b). The software includes numerous algorithms for calculating UCL values, and provides a recommended UCL value based on the algorithm that is most applicable to the statistical distribution of the data set. The UCL shown is the one recommended by ProUCL. If more than one UCL was recommended, the higher UCL was selected.

^(c) Sample size was greater than or equal to 10 and the number of detected values was greater than or equal to 6, therefore, a UCL was calculated. If the conditions required by ProUCL to calculate a meaningful UCL are not met, the maximum detected concentration is used as the EPC. If there are no detected concentrations for a constituent, half of the reporting limit is used as the EPC. Otherwise the EPC is the recommended UCL.

ATTACHMENT 4

HUMAN HEALTH RISK CALCULATIONS

ATTACHMENT 4
TABLE 4-1
HUMAN HEALTH RISK CALCULATIONS - GROUNDWATER - CONSTRUCTION WORKER
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Exposure Media	Receptor	Exposure Route	COPC		EPC (mg/L)	Cancer Risk Calculations			Non-cancer Risk Calculations										
						Intake/Exposure Concentration (mg/kg-day)	CSF (1/mg/kg-day)	Cancer Risk (ELCR)	Intake/Exposure Concentration (mg/kg-day)	RfD	Hazard Quotient								
GW	Construction Worker	Ingestion	Naphthalene	c	0.9182	2.08E-07	0.12	2.49E-08	1.45E-05	0.6	2.42E-05								
			Benzene	c	0.337	7.63E-08	0.055	4.19E-09	5.34E-06	0.01	5.34E-04								
			1-Methylnaphthalene	c	0.07239	1.64E-08	0.029	4.75E-10	1.15E-06	0.07	1.64E-05								
			2,4-Dinitrotoluene	c	0.0053	1.20E-09	0.31	3.72E-10	8.39E-08	0.007	1.20E-05								
			2-Methylnaphthalene	n	0.06377	NA	NA	NA	1.01E-06	0.004	2.53E-04								
			Dibenzofuran	n	0.009048	NA	NA	NA	1.43E-07	0.004	3.58E-05								
			Exposure route total					3.00E-08			8.75E-04								
		Exposure Route	COPC		EPC (mg/L)	Cancer Risk Calculations			Non-cancer Risk Calculations										
						DAD (mg/kg-day)	CSF (calc) (1/mg/kg-day)	Cancer Risk (ELCR)	DAD (mg/kg-day)	RfD (calc)	Hazard Quotient								
		Dermal	Naphthalene	c	0.9182	3.46E-05	0.12	4.15E-06	2.42E-03	0.6	4.04E-03								
			Benzene	c	0.337	3.50E-06	0.055	1.93E-07	2.45E-04	0.01	2.45E-02								
			1-Methylnaphthalene	c	0.07239	6.47E-06	0.029	1.88E-07	4.53E-04	0.07	6.47E-03								
			2,4-Dinitrotoluene	c	0.0053	1.59E-08	0.31	4.93E-09	1.11E-06	0.007	1.59E-04								
			2-Methylnaphthalene	n	0.06377	NA	NA	NA	3.92E-04	0.004	9.80E-02								
			Dibenzofuran	n	0.009048	NA	NA	NA	7.52E-05	0.004	1.88E-02								
			Exposure route total					4.54E-06			1.52E-01								
		Inhalation	Exposure route total					VURAM model output			1.87E-04			VURAM model output			1.21E+02		
		Exposure media total risk					1.92E-04			1.21E+02									

Prepared by: KCS Checked by: TCP

Notes:

Calc - calculated RfD or CSF for dermal exposure, EPA RAGs E, 2004

CSF - cancer slope factor

DAD - dermal absorbed dose

ELCR - excess lifetime cancer risk

EPC - exposure point concentration

GW - groundwater

mg/kg/day - milligram/ kilogram/ day

NA - not available

RfD - reference dose, subchronic Tox values will be used when available, if not available the chronic tox value will be used in its place

VURAM model - Virginia Department of Environmental Quality trench air risk model, report is available upon request

Equations:

Ingestion Cancer Risk = lifetime average daily dose * CSF

Dermal cancer Risk = DAD * CSF

Ingestion Hazard Quotient = Intake / RfD

Dermal Hazard Quotient = DAD/ RfD (calc)

Inhalation - VURAM Model

ATTACHMENT 4
TABLE 4-2
CONSTRUCTION WORKER EXPOSURE FACTORS
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Construction Worker Exposure Parameters		Unit	Default Value	Source
BW	Body weight	Kg	80	USEPA, 2014 (1)
ED	Exposure duration	Years	1	Site specific
ATnc	Non-carcinogenic averaging time	Days	365	USEPA, 2014 (1,5)
ATc	Carcinogenic averaging time	Days	25,550	USEPA, 2014 Lifetime (LT) (1,5)
EPCw	Exposure concentration in water	mg/L	Site specific	NA
EF	Exposure frequency	Days/year	125	VADEQ default (2)
Incidental Ingestion Dose				
IRw	Water ingestion rate	Liters/day	0.0037	USEPA , 2011 (3)
Dermal Absorbed Dose				
SA	Exposed skin surface area	cm ²	2550	USEPA, 2011 (hands + forearms) (3)
EV	Events per day	Events/day	1	Assumption
Kp	dermal permeability coefficient	cm/hr	Chemical specific	USEPA RSL - Generic Tables, 2019 (4)
FA	Fraction absorbed	dimensionless	Chemical specific	USEPA RSL - Generic Tables, 2019 (4)
t*	Time to reach steady state = 2.4 tevent	hr	Chemical specific	USEPA RSL - Generic Tables, 2019 (4)
B	Ratio of permeability coefficient of compound through skin	dimensionless	Chemical specific	USEPA RSL - Generic Tables, 2019 (4)
tevent	Lag time per event	hr/event	Chemical specific	USEPA RSL - Generic Tables, 2019 (4)
tevent	Event duration	hr/event	4	Half of the 8 hr workday, site specific
Inhalation Dose		Virginia Department of Environmental Quality default values (VURAM model) (2)		

Prepared by: KCS Checked by: TCP

Notes:

- 1) USEPA, 2014 - https://www.epa.gov/sites/production/files/2015-11/documents/oswer_directive_9200.1-120_exposurefactors_corrected2.pdf
- 2) VADEQ, VURAM User Guide - <https://www.deq.virginia.gov/Portals/0/DEQ/Land/RemediationPrograms/VRPRisk/Risk/VURAMUserGuide2.1.pdf?ver=2018-10-11-094557-773>
- 3) USEPA, 2011 Exposure Factors Handbook (wading/splashing activity)- <https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252>
- 4) USEPA RSL- Generic Tables, Chemical Specific Parameters, 2019 <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>
- 5) The averaging time (ATc) for cancer risk is the expected lifespan of 70 years expressed in days (70 years * 365 days/year). The averaging time (Atnc) for non-cancer risk is the total exposure period expressed in days (ED * 365 days/year)

ATTACHMENT 4
TABLE 4-3
TOXICITY CHEMICAL SPECIFIC FACTORS
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

COI	CAS	Chronic/ Subchronic RfDo	Carcinogenic/ Non- carcinogenic	Type of Carcinogen		Uncertainty Factor	Critical Effect Systems		SFO (mg/kg-day)-1	IUR (µg/m3)-1	RfDo (mg/kg-day)	RfCi (mg/m3)	GIABS	B (unitless)	revent (hr/event)	t* (hr)	Kp (cm/hr)
Naphthalene	91-20-3	subchronic	c	Group C - Possible human carcinogen	IRIS	3,000	Nervous / Respiratory	IRIS	0.12	0.000034	0.6	0.003	1	0.202918995	0.549106709	1.317856101	0.0466
Benzene	71-43-2	subchronic	c	Category A - Known human carcinogen	IRIS	300	Immune / Hematologic	IRIS	0.055	0.0000078	0.01	0.03	1	0.05065008	0.287933867	0.69104128	0.0149
1-Methylnaphthalene	90-12-0	chronic	c	Not identified	ATSDR	1,000	Respiratory	ATSDR	0.029	NA	0.07	NA	1	0.426998285	0.657913427	1.578992224	0.0931
2,4-Dinitrotoluene	121-14-2	subchronic	c	Not identified	IRIS	100	Nervous / Hepatic / Hematologic	IRIS	0.31	0.000089	0.007	NA	1	0.015987481	1.101115179	2.64267643	0.00308
2-Methylnaphthalene	91-57-6	subchronic	n	Not identified	IRIS	1,000	Respiratory	IRIS	NA	NA	0.004	NA	1	0.420577259	0.657913427	1.578992224	0.0917
Dibenzofuran	132-64-9	subchronic	n	Group D - Not classifiable as to human carcinogenicity	PPRTV	3,000	Whole Body Effects	PPRTV	NA	NA	0.004	NA	1	0.486344785	0.919959587	2.207903009	0.0975

Prepared by: KCS Checked by: TCP

Notes:

B- Ratio of permeability
c- carcinogenic
GIABS- Absorption factor
IUR- Inhalation unit risk

Kp- Dermal permeability constant
n- non-carcinogenic
NA- value not available
RfC- Reference concentration

RfDo- Reference dose oral
SFO- Cancer slope factor
revent - lag time per event
t*- time to reach steady state

Values in table can be found under:

USEPA RSL- Generic Tables, 2019- <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>
IRIS- https://cfpub.epa.gov/ncea/iris_drafts/atoz.cfm?list_type=alpha
ATSDR- <https://www.atsdr.cdc.gov/ToxProfiles/tp67.pdf>
PPRTV- https://cfpub.epa.gov/ncea/pprtv/chemicalLanding.cfm?pprtv_sub_id=1669

VURAM

Virginia Unified Risk Assessment Model

VERSION: 3.0

Construction Worker Quantitative Risk Assessment Report

Site Name: Bramlette

Program: Voluntary Remediation Program

Total Hazard Index/Risk for All Media

Non-Cancer Adult

Total: 1.21E+02

Exceeds Hazard Index!

Cancer

Total: 1.87E-04

Exceeds Cumulative Risk!

Risk Based Performance Criteria

Default Hazard Index

1

Default Cumulative Risk-All Chemicals

1.00E-04

Contact Depth to Groundwater: Direct Less than 15ft

All Report Pages are Required for Risk Assessment Submission
DETAILED REPORT FOLLOWS

Site Name: **Bramlette****Construction**Program: **Voluntary Remediation Program**Risk Based Performance Criteria

Default Hazard Index

Default Risk Individual Chemical

Default Cumulative Risk-All Chemicals

1

1.00E-06

1.00E-04

Contact Depth to Groundwater: Direct Less than 15ft

Groundwater

Analyte: **Benzene**CAS: **71-43-2**

Concentration ug/L :	3.37E+02
RfDo:	1.00E-02
RfCi:	8.00E-02
SFO:	5.50E-02
IUR:	7.80E-06
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	3.01E-03	Ingestion:	2.27E-08
Dermal:	3.49E-02	Dermal:	2.63E-07
Inhalation:	2.34E+00	Inhalation:	2.00E-05
Total:	2.38E+00	Total:	2.03E-05

% Contribution to Media Risk

1.96%

10.87%

Exceeds Hazard! Exceeds Risk!Analyte: **Dibenzofuran**CAS: **132-64-9**

Concentration ug/L :	9.05E+00
RfDo:	4.00E-03
RfCi:	
SFO:	
IUR:	
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	2.02E-04	Ingestion:	
Dermal:	1.85E-02	Dermal:	
Inhalation:		Inhalation:	
Total:	1.87E-02	Total:	0.00E+00

% Contribution to Media Risk

0.02%

0.00%

Analyte: **Dinitrotoluene, 2,4-**CAS: **121-14-2**

Concentration ug/L :	5.30E+00
RfDo:	7.00E-03
RfCi:	
SFO:	3.10E-01
IUR:	8.90E-05
Mutagen:	
VOC:	

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	6.76E-05	Ingestion:	2.01E-09
Dermal:	2.27E-04	Dermal:	6.74E-09
Inhalation:		Inhalation:	
Total:	2.94E-04	Total:	8.75E-09

% Contribution to Media Risk

0.00%

0.00%

Site Name: Bramlette

Construction

Program: Voluntary Remediation Program

Risk Based Performance Criteria

Default Hazard Index

1

Default Risk Individual Chemical

1.00E-06

Default Cumulative Risk-All Chemicals

1.00E-04

Contact Depth to Groundwater: Direct Less than 15ft

Groundwater

Analyte: Methylnaphthalene, 1-

CAS: 90-12-0

Concentration ug/L :	7.20E+01
RfDo:	7.00E-02
RfCi:	
SFO:	2.90E-02
IUR:	
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	9.18E-05	Ingestion:	2.55E-09
Dermal:	6.98E-03	Dermal:	1.94E-07
Inhalation:		Inhalation:	
Total:	7.07E-03	Total:	1.97E-07

% Contribution to Media Risk

0.01%

0.11%

Analyte: Methylnaphthalene, 2-

CAS: 91-57-6

Concentration ug/L :	6.38E+01
RfDo:	4.00E-03
RfCi:	
SFO:	
IUR:	
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	1.42E-03	Ingestion:	
Dermal:	1.07E-01	Dermal:	
Inhalation:		Inhalation:	
Total:	1.08E-01	Total:	0.00E+00

% Contribution to Media Risk

0.09%

0.00%

Analyte: Naphthalene

CAS: 91-20-3

Concentration ug/L :	9.18E+02
RfDo:	6.00E-01
RfCi:	3.00E-03
SFO:	
IUR:	3.40E-05
Mutagen:	
VOC:	Y

Calculated Hazard Quotient/Risk

Non-Cancer Adult		Cancer	
Ingestion:	1.37E-04	Ingestion:	
Dermal:	5.21E-03	Dermal:	
Inhalation:	1.19E+02	Inhalation:	1.66E-04
Total:	1.19E+02	Total:	1.66E-04

% Contribution to Media Risk

97.93%

89.02%

Exceeds Hazard! Exceeds Risk!

Site Name: Bramlette

Program: Voluntary Remediation Program

Risk Based Performance Criteria

Default Hazard Index

1

Default Risk Individual Chemical

1.00E-06

Default Cumulative Risk-All Chemicals

1.00E-04

Contact Depth to Groundwater: Direct Less than 15ft

Groundwater

Total Calculated Hazard Index/Risk For Media: Groundwater

Non-Cancer Adult		Cancer	
Ingestion:	4.93E-03	Ingestion:	2.72E-08
Dermal:	1.73E-01	Dermal:	4.64E-07
Inhalation:	1.21E+02	Inhalation:	1.86E-04
Total:	1.21E+02	Total:	1.87E-04

Risk Based Performance Criteria

Default Hazard Index	Default Risk Individual Chemical	Default Cumulative Risk-All Chemicals
1	1.00E-06	1.00E-04

Contact Depth to Groundwater: Direct Less than 15ft

Total Hazard Index/Risk for All Media

Non-Cancer Adult		Cancer	
Ingestion:	4.93E-03	Ingestion:	2.72E-08
Dermal:	1.73E-01	Dermal:	4.64E-07
Inhalation:	1.21E+02	Inhalation:	1.86E-04
Total:	1.21E+02	Total:	1.87E-04
Exceeds Hazard Index!		Exceeds Cumulative Risk!	

Site Name: **Bramlette**

Construction

Program: **Voluntary Remediation Program**

Risk Based Performance Criteria

Default Hazard Index

1

Default Risk Individual Chemical

1.00E-06

Default Cumulative Risk-All Chemicals

1.00E-04

Contact Depth to Groundwater: Direct Less than 15ft

Construction Exposure Default Values

Symbol	Description	Value	Units
A	Construction Worker Soil Inhalation Dispersion Constant - Philadelphia	14.0111	(unitless)
AFcw	Construction Worker Soil Adherence Factor	0.3	(mg/cm2)
As	Areal extent of the site or contamination	0.5	(acres)
ATcw	Construction Worker Averaging Time: 365 x LT	25550	(days)
ATcw	Construction Worker Averaging Time	365	(days/yr)
ATcw-a	Construction Worker Averaging Time: EWcw x 7 x EDcw	350	(days)
B	Construction Worker Soil Inhalation Dispersion Constant - Philadelphia	19.6154	(unitless)
BWcw	Construction Worker Body Weight	80	(kg)
C	Construction Worker Soil Inhalation Dispersion Constant - Philadelphia	225.3397	(unitless)
DWcw	Construction Worker Days Worked	5	(days/week)
EDcw	Construction Worker Exposure Duration	1	(yrs)
EFcw	Construction Worker Exposure Frequency	250	(days/yr)
EFcw-a	Construction Worker Air Exposure Frequency	250	(days/yr)
EFcw-s	Construction Worker Soil Exposure Frequency	250	(days/yr)
EFcw-vrp	Construction Worker Soil Exposure Frequency - VRP ONLY - Virginia DEQ	125	(days/yr)
ETcw	Construction Worker Exposure Time	8	(hrs/day)
ETcw-s	Construction Worker Soil Exposure Time	8	(hrs/day)
EWcw	Construction Worker Weeks Worked	50	(weeks/yr)
F(x)	Function Dependent on $0.886 \times (Ut/Um)$	0.194	(unitless)
Fd	Dispersion Correction Factor	0.185	(unitless)
IRcw	Construction Worker Soil Ingestion Rate	330	(mg/day)
n	Total soil porosity: $1-(pb/ps)$	0.433962264150943	(unitless)
PEFsc	Particulate Emission Factor Subchronic - Virginia DEQ calculated	1266503136.97919	(m3/kg)

Site Name: **Bramlette**

Construction

Program: **Voluntary Remediation Program**

Risk Based Performance Criteria

Default Hazard Index

Default Risk Individual Chemical

Default Cumulative Risk-All Chemicals

1

1.00E-06

1.00E-04

Contact Depth to Groundwater: Direct Less than 15ft

Q/C	Inverse of the ratio of the 1-h geometric mean concentration to the emission flux along a straight road segment bisecting a square site - Virginia DEQ	87.3689772162309	(g/m ² -s per kg/m)
SACw	Construction Worker Surface Area	3527	(cm ² /day)
Tc	Total time over which construction occurs: EDcw*EWcw*7days/wk*24hrs/day*3600s/hr	30240000	(s)
TR-ACH	Trench Air Changes per Hour - Virginia DEQ	2	(h)-1
TR-ACvad	Trench Advection Coefficient Groundwater greater than 15ft - Virginia DEQ	0.25	(cm ³ /cm ³)
TR-CF1	Trench Conversion Factor-1	0.001	(L/cm ³)
TR-CF2	Trench Conversion Factor-2	10000	(cm ² /m ²)
TR-CF3	Trench Conversion Factor-3	3600	(s/hr)
TR-CF4	Trench Conversion Factor-4	1000000	(cm ³ /m ³)
TR-D-dir	Trench Depth - groundwater less Than 15ft - Virginia DEQ	2.44	(m)
TR-D-ind	Trench Depth - groundwater greater than 15ft - Virginia DEQ	4.57	(m)
TR-Dsg	Trench - Depth to soil gas vapor source - Virginia DEQ	1	(cm)
TR-EFcw	Trench Construction Worker Exposure Frequency - Virginia DEQ	125	(days/yr)
TR-ETcw	Trench Construction Worker Exposure Time - Virginia DEQ	4	(hrs/day)
TR-EVcw	Trench Construction Worker Events - Virginia DEQ	1	(events/day)
TR-F	Trench Fraction of floor through which contaminant can enter - Virginia DEQ	1	(unitless)
TR-HV	Trench Thickness of Vadose Zone - groundwater greater than 15 ft - Virginia DEQ	30	(cm)
TR-IRcw	Trench Construction Worker Groundwater Ingestion Rate - Virginia DEQ	0.02	(L/day)
TR-KGH2O	Trench Gas-phase mass transfer coefficient of water vapor at 25deg C - Virginia DEQ	0.833	(cm/s)
TR-KLO2	Trench Liquid-phase mass transfer coefficient of oxygen at 25deg C - Virginia DEQ	0.002	(cm/s)
TR-L	Trench Length - Virginia DEQ	2.44	(m)
TR-Lgw	Trench Depth to groundwater - Virginia DEQ	488	(cm)
TR-MWH2O	Trench Molecular Weight of Water - Virginia DEQ	18	(unitless)
TR-MWO2	Trench Molecular Weight of Oxygen - Virginia DEQ	32	(unitless)
TR-Porvad	Trench Porosity in Vadose Zone - groundwater greater than 15ft - Virginia DEQ	0.44	(cm ³ /cm ³)
TR-R	Trench Ideal Gas Constant - Virginia DEQ	0.000082	(atm-m ³ /mol-K)

Site Name: **Bramlette**

Construction

Program: **Voluntary Remediation Program**

Risk Based Performance Criteria

Default Hazard Index

Default Risk Individual Chemical

Default Cumulative Risk-All Chemicals

1

1.00E-06

1.00E-04

Contact Depth to Groundwater: Direct Less than 15ft

TR-Temp-F	Trench Temperature Fahrenheit - Virginia DEQ	77	(F)
TR-Temp-K	Trench Temperature - Virginia DEQ	298	(K)
TR-W	Trench Width - Virginia DEQ	0.91	(m)
TR-W/D	Trench Width to Depth Ratio - Virginia DEQ	0.38	(unitless)
Um	Mean Annual Wind Speed	4.69	(m/s)
Ut	Equivalent Threshold Value of Wind Speed at 7m	11.32	(m/s)
V	V Fraction of Vegetative Cover	0.5	(unitless)
Θa	Air filled soil porosity: n-Θw	0.133962264150943	(unitless)
Θw	Water filled soil porosity	0.3	(unitless)
ρb	Dry soil bulk density	1.5	(kg/L)
ρs	Soil particle density	2.65	(kg/L)

END OF REPORT

ATTACHMENT 5

ECOLOGICAL CHECKLISTS

CHECKLIST FOR ECOLOGICAL ASSESSMENT/SAMPLING

Introduction

The checklist that follows provides guidance in making observations for an ecological assessment. It is not intended for limited or emergency response actions (e.g., removal of a few drums) or for purely industrial settings with no discharges. The checklist is a screening tool for preliminary site evaluation and may also be useful in planning more extensive site investigations. It must be completed as thoroughly as time allows. The results of the checklist will serve as a starting point for the collection of appropriate biological data to be used in developing a response action. It is recognized that certain questions in this checklist are not universally applicable and that site-specific conditions will influence interpretation. Therefore, a site synopsis is requested to facilitate final review of the checklist by a trained ecologist.

Checklist

The checklist has been divided into sections that correspond to data collection methods and ecosystem types. These sections are:

- I Site Description
 - IA. Summary of Observations and Site Setting
- II Terrestrial Habitat Checklist
 - IIA. Wooded
 - IIB. Shrub/Scrub
 - IIC. Open Field
 - IID. Miscellaneous
- III Aquatic Habitat Checklist – Non-Flowing Systems
- IV Aquatic Habitat Checklist – Flowing Systems
- V Wetlands Habitat Checklist

Checklist for Ecological Assessment/Sampling

I. SITE DESCRIPTION

1. Site Name: _____
Location: _____

County: _____ City: _____ State: _____
2. Latitude: _____ Longitude: _____
3. What is the approximate area of the site: _____
4. Is this the first site visit? 9 Yes 9 No. If no, attach trip report of previous site visit(s), if available.
Date(s) of previous site visit(s): _____
5. Please attach to the checklist USGS topographic map(s) of the site, if available.
6. Are aerial or other site photographs available? 9 Yes 9 No. If yes, please attach any available photo(s) to the site map at the conclusion of this section.

7. The land use of the site is: Industrial

The area surrounding the site is:

0.5 mile radius

_____ % Urban

_____ % Urban

_____ % Rural

_____ % Rural

_____ % Residential

_____ % Residential

_____ % Industrial (___ light ___ heavy)

_____ % Industrial (___ light ___ heavy)

_____ % Agricultural

_____ % Agricultural

(Crops: _____)

(Crops: _____)

_____ % Recreational

_____ % Recreational

(Describe: note if it is a park etc.)

(Describe: note if it is a park, etc.)

_____ % Undisturbed

_____ % Undisturbed

_____ % Other

_____ % Other

8. Has any movement of soil taken place at the site? 9 ___ Yes 9 ___ No. If yes, please identify the most likely cause of this disturbance:

9 Agricultural Use

9 Heavy Equipment

9 Mining

9 Natural Events

9 Erosion

9 Other

Please describe:

9. Do any potential sensitive environmental areas exist adjacent to or in proximity to the site, e.g., Federal and State parks, National and State monuments, wetlands, prairie potholes?
Remember, flood plains and wetlands are not always obvious; do not answer "no" without confirming information.

Please provide the source(s) of the information used to identify these sensitive areas, and indicate their general location on the site map.

10. What type of facility is located at the site?

☐ Chemical

☐ Manufacturing

☐ Mixing

☐ Waste disposal

☐ Other (specify) _____

11. What are the suspected contaminants of concern at the site? If known, what are the maximum concentration levels?

12. Check any potential routes of off-site migration of contaminants observed at the site:

☐ Swales

☐ Depressions

☐ Drainage ditches

☐ Runoff

☐ Windblown particulates

☐ Vehicular traffic

☐ Other (specify) _____

13. If known, what is the approximate depth to the water table? _____

14. Is the direction of surface runoff apparent from site observations? ☐ yes ☐ no. If yes, to which of the following does the surface runoff discharge? Indicate all that apply.

☐ Surface water

☐ Groundwater

☐ Sewer

☐ Collection impoundment

15. Is there a navigable waterbody or tributary to a navigable waterbody? ☐ yes ☐ no

16. Is there a waterbody anywhere on or in the vicinity of the site? If yes, also complete Section III: Aquatic Habitat Checklist – Non-Flowing Systems and/or Section IV: Aquatic Habitat Checklist – Flowing Systems.

9 yes (approx. distance _____) 9 no

17. Is there evidence of flooding? 9 yes 9 no *Wetlands and flood plains are not always obvious; do not answer "no" without confirming information.* If yes, complete Section V: Wetland Habitat Checklist.

18. If a field guide was used to aid any of the identifications, please provide a reference. Also, estimate the time spent identifying fauna. [Use a blank sheet if additional space is needed for text.]

19. Are any threatened and/or endangered species (plant or animal) known to inhabit the area of the site? 9 yes 9 no *If yes, you are required to verify this information with the U.S. Fish and Wildlife Service.* If species' identities are known, please list them next.

20. Record weather conditions at the time this checklist was prepared:

Date: _____

_____ Temperature (EC/EF)

_____ Normal daily high temperature

_____ Wind (direction/speed)

_____ Precipitation (rain,snow)

_____ Cloud cover

IA. SUMMARY OF OBSERVATIONS AND SITE SETTING

Completed by _____ Affiliation _____

Additional Preparers _____

Site Manager _____

Date _____

II TERRESTRIAL HABITAT CHECKLIST

IIA. WOODED

1. Are there any wooded areas at the site? 9 yes 9 no If no, go to Section IIB: Shrub/Scrub.
2. What percentage or area of the site is wooded? (_____ % _____ acres). Indicate the wooded area on the site map which is attached to a copy of this checklist. Please identify what information was used to determine the wooded area of the site.
3. What is the dominant type of vegetation in the wooded area? (Circle one: Evergreen/Deciduous/Mixed) Provide a photograph, if available.

Dominant plant, if known: _____
4. What is the predominant size of the trees at the site? Use diameter at breast height.

9 0 - 6 in. 9 6 - 12 in. 9 >12 in.
5. Specify type of understory present, if known. Provide a photograph, if available.

IIB. SCHRUB/SCRUB

1. Is shrub/scrub vegetation present at the site? 9 yes 9 no If no, go to Section IIC: Open Field.
2. What percentage of the site is covered by scrub/shrub vegetation? (_____ % _____ acres). Indicate the areas of shrub/scrub on the site map. Please identify what information was used to determine this area.
3. What is the dominant type of scrub/shrub vegetation, if known? Provide a photograph, if available.
4. What is the approximate average height of the scrub/shrub vegetation?

9 0 - 2 ft. 9 2 - 5 ft. 9 > 5 ft.

5. Based on site observations, how dense is the scrub/shrub vegetation?

9 Dense

9 Patchy

9 Sparse

IIC. OPEN FIELD

1. Are there open (bare, barren) field areas present at the site? 9 yes 9 no If yes, please indicate the type below:

9 Prairie/plains

9 Savannah

9 Old field

9 Other (specify) _____

2. What percentage of the site is open field? (_____ % _____ acres). Indicate the open fields on the site map.

3. What is/are the dominant plant(s)? Provide a photograph, if available.

4. What is the approximate average height of the dominant plant? _____

5. Describe the vegetation cover: 9 Dense

9 Sparse

9 Patchy

IID. MISCELLANEOUS

1. Are other types of terrestrial habitats present at the site, other than woods, scrub/shrub, and open field? 9 yes 9 no If yes, identify and describe them below.

2. Describe the terrestrial miscellaneous habitat(s) and identify these area(s) on the site map.

3. What observations, if any, were made at the site regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
4. Review the questions in Section I to determine if any additional habitat checklists should be completed for this site.

III AQUATIC HABITAT CHECKLIST

Note: Aquatic systems are often associated with wetland habitats. Please refer to Section V, Wetland Habitat Checklist.

1. What type of open-water, non-flowing system is present at the site?

9 Natural (pond, lake)

9 Artificially created (lagoon, reservoir, canal, impoundment)

2. If known, what is the name(s) of the waterbody(ies) on or adjacent to the site?

3. If a waterbody is present, what are its known uses (e.g., recreation, navigation, etc.)?

4. What is the approximate size of the waterbody(ies)? _____ acre(s).

5. Is any aquatic vegetation present? 9 yes 9 no If yes, please identify the type of vegetation present if known.

9 Emergent

9 Submergent

9 Floating

6. If known, what is the depth of the water? _____

7. What is the general composition of the substrate? Check all that apply.

9 Bedrock

9 Sand (coarse)

9 Muck (find/black)

9 Boulder (>10 in.)

9 Silt (fine)

9 Debris

9 Cobble (2.5 - 10 in.)

9 Marl (shells)

9 Detritus

9 Gravel (0.1 - 2.5 in.)

9 Clay (slick)

9 Concrete

9 Other (specify) _____

8. What is the source of water in the waterbody?

9 River/Stream/Creek

9 Groundwater

9 Industrial discharge

9 Surface runoff

9 Other (specify) _____

9. Is there a discharge from the site to the waterbody? ☐ yes ☐ no If yes, please describe this discharge and its path.

10. Is there a discharge from the waterbody? ☐ yes ☐ no. If yes, and the information is available, identify from the list below the environment into which the waterbody discharges.

☐ River/Stream/Creek ☐ onsite ☐ offsite Distance _____

☐ Groundwater ☐ onsite ☐ offsite

☐ Wetland ☐ onsite ☐ offsite Distance _____

☐ Impoundment ☐ onsite ☐ offsite

11. Identify any field measurements and observations of water quality that were made. For those parameters for which data were collected provide the measurement and the units of measure below:

_____ Area

_____ Depth (average)

_____ Temperature (depth of the water at which the reading was taken) _____

_____ pH

_____ Dissolved oxygen

_____ Salinity

_____ Turbidity (clear, slightly turbid, turbid, opaque) (Secchi disk depth _____)

_____ Other (specify)

12. Describe observed color and area of coloration.

13. Mark the open-water, non-flowing system on the site map attached to this checklist.

14. What observations, if any, were made at the waterbody regarding the presence and/or absence of benthic macroinvertebrates, fish, birds, mammals, etc.?

IV AQUATIC HABITAT CHECKLIST – FLOWING SYSTEMS

Note: Aquatic systems are often associated with wetland habitats. Please refer to Section V, Wetland Habitat Checklist.

1. What type(s) of flowing water system(s) is (are) present at the site?

☐ River	☐ Stream	☐ Creek
☐ Dry wash	☐ Arroyo	☐ Brook
☐ Artificially created (ditch, etc.)	☐ Intermittent Stream	☐ Channeling
☐ Other (specify) _____		

2. If known, what is the name of the waterbody? _____

3. For natural systems, are there any indicators of physical alteration (e.g. channeling, debris, etc.)? ☐ yes ☐ no If yes, please describe indicators that were observed.

4. What is the general composition of the substrate? Check all that apply.

☐ Bedrock	☐ Sand (coarse)	☐ Muck (find/black)
☐ Boulder (>10 in.)	☐ Silt (fine)	☐ Debris
☐ Cobble (2.5 - 10 in.)	☐ Marl (shells)	☐ Detritus
☐ Gravel (0.1 - 2.5 in.)	☐ Clay (slick)	☐ Concrete
☐ Other (specify) _____		

5. What is the condition of the bank (e.g., height, slope, extent of vegetative cover)?

6. Is the system influenced by tides? ☐ yes ☐ no What information was used to make this determination?

7. Is the flow intermittent? 9 yes 9 no If yes, please note the information that was used in making this determination.
8. Is there a discharge from the site to the waterbody? 9 yes 9 no If yes, please describe the discharge and its path.
9. Is there a discharge from the waterbody? 9 yes 9 no If yes, and the information is available, please identify what the waterbody discharges to and whether the discharge is on site or off site.
10. Identify any field measurements and observations of water quality that were made. For those parameters for which data were collected, provide the measurement and the units of measure in the appropriate space below:

_____ Area

_____ Depth (average)

_____ Temperature (depth of the water at which the reading was taken) _____

_____ pH

_____ Dissolved oxygen

_____ Salinity

_____ Turbidity (clear, slightly turbid, turbid, opaque) (Secchi disk depth _____)

_____ Other (specify)

11. Describe observed color and area of coloration.
12. Is any aquatic vegetation present? ☐ yes ☐ no If yes, please identify the type of vegetation present, if know.
- ☐ Emergent ☐ Submergent ☐ Floating
13. Mark the flowing water system on the attached site map.
14. What observations were made at the waterbody regarding the presence and/or absence of benthic macroinvertebrates, fish, birds, mammals, etc.?

V. WETLAND HABITAT CHECKLIST

1. Based on observation and/or available information, are designated or known wetland definitely present at the site? 9 yes 9 no

Please note the sources of observations and information used (e.g., USGS Topographic Maps, National Wetland Inventory, Federal or State Agency, etc.) To make this determination.

2. Based on the location of the site (e.g., along a waterbody, in a floodplain) and site conditions (e.g. standing water, dark, wet soils; mud cracks; debris line; water marks), are wetland habitats suspected? 9 yes 9 no If yes, proceed with the remainder of the wetland habitat identification checklist.

3. What type(s) of vegetation are present in the wetland?

9 Submergent 9 Emergent 9 Scrub/Shrub 9 Wooded
9 Other (specify) _____

4. Provide a general description of the vegetation present in and around the wetland (height, color, etc.). Provide a photograph of the known or suspected wetlands, if available.

5. Is standing water present? 9 yes 9 no If yes, is water: 9 Fresh 9 Brackish
What is the approximate area of the water (sq. ft.) _____
Please complete questions 4, 11, 12 in Checklist III - Aquatic Habitat – Non-Flowing Systems.

6. Is there evidence of flooding at the site? What observations were noted?

9 Buttressing 9 Water marks 9 Mud cracks
9 Debris line 9 Other (describe below)

7. If known, what is the source of the water in the wetland?

9 Stream/River/Creek/Lake/Pond

9 Groundwater

9 Flooding

9 Surface Runoff

8. Is there a discharge from the site to a known or suspected wetland? 9 yes 9 no If yes, please describe.

9. Is there a discharge from the wetland? 9 yes 9 no If yes, to what waterbody is discharge released?

9 Surface Stream/River

9 Groundwater

9 Lake/Pond

9 Marine

10. If a soil sample was collected, describe the appearance of the soil in the wetland area. Circle or write in the best response.

Color (blue/grey, brown, black, mottled) _____

Water content (dry, wet, saturated/unsaturated) _____

11. Mark the observed area(s) on the attached site map.

CHECKLIST FOR ECOLOGICAL ASSESSMENT/SAMPLING

Introduction

The checklist that follows provides guidance in making observations for an ecological assessment. It is not intended for limited or emergency response actions (e.g., removal of a few drums) or for purely industrial settings with no discharges. The checklist is a screening tool for preliminary site evaluation and may also be useful in planning more extensive site investigations. It must be completed as thoroughly as time allows. The results of the checklist will serve as a starting point for the collection of appropriate biological data to be used in developing a response action. It is recognized that certain questions in this checklist are not universally applicable and that site-specific conditions will influence interpretation. Therefore, a site synopsis is requested to facilitate final review of the checklist by a trained ecologist.

Checklist

The checklist has been divided into sections that correspond to data collection methods and ecosystem types. These sections are:

- I Site Description
 - IA. Summary of Observations and Site Setting
- II Terrestrial Habitat Checklist
 - IIA. Wooded
 - IIB. Shrub/Scrub
 - IIC. Open Field
 - IID. Miscellaneous
- III Aquatic Habitat Checklist – Non-Flowing Systems
- IV Aquatic Habitat Checklist – Flowing Systems
- V Wetlands Habitat Checklist

Checklist for Ecological Assessment/Sampling

I. SITE DESCRIPTION

1. Site Name: _____
Location: _____

County: _____ City: _____ State: _____
2. Latitude: _____ Longitude: _____
3. What is the approximate area of the site: _____
4. Is this the first site visit? 9 Yes 9 No. If no, attach trip report of previous site visit(s), if available.
Date(s) of previous site visit(s): _____
5. Please attach to the checklist USGS topographic map(s) of the site, if available.
6. Are aerial or other site photographs available? 9 Yes 9 No. If yes, please attach any available photo(s) to the site map at the conclusion of this section.

7. The land use of the site is: Industrial

The area surrounding the site is:

0.5 mile radius

_____ % Urban

_____ % Urban

_____ % Rural

_____ % Rural

_____ % Residential

_____ % Residential

_____ % Industrial (___ light ___ heavy)

_____ % Industrial (___ light ___ heavy)

_____ % Agricultural

_____ % Agricultural

(Crops: _____)

(Crops: _____)

_____ % Recreational

_____ % Recreational

(Describe: note if it is a park etc.)

(Describe: note if it is a park, etc.)

_____ % Undisturbed

_____ % Undisturbed

_____ % Other

_____ % Other

8. Has any movement of soil taken place at the site? 9 ___ Yes 9 ___ No. If yes, please identify the most likely cause of this disturbance:

9 Agricultural Use

9 Heavy Equipment

9 Mining

9 Natural Events

9 Erosion

9 Other

Please describe:

9. Do any potential sensitive environmental areas exist adjacent to or in proximity to the site, e.g., Federal and State parks, National and State monuments, wetlands, prairie potholes?
Remember, flood plains and wetlands are not always obvious; do not answer "no" without confirming information.

Please provide the source(s) of the information used to identify these sensitive areas, and indicate their general location on the site map.

10. What type of facility is located at the site?

☐ Chemical

☐ Manufacturing

☐ Mixing

☐ Waste disposal

☐ Other (specify) _____

11. What are the suspected contaminants of concern at the site? If known, what are the maximum concentration levels?

12. Check any potential routes of off-site migration of contaminants observed at the site:

☐ Swales

☐ Depressions

☐ Drainage ditches

☐ Runoff

☐ Windblown particulates

☐ Vehicular traffic

☐ Other (specify) _____

13. If known, what is the approximate depth to the water table? _____

14. Is the direction of surface runoff apparent from site observations? ☐ yes ☐ no. If yes, to which of the following does the surface runoff discharge? Indicate all that apply.

☐ Surface water

☐ Groundwater

☐ Sewer

☐ Collection impoundment

15. Is there a navigable waterbody or tributary to a navigable waterbody? ☐ yes ☐ no

16. Is there a waterbody anywhere on or in the vicinity of the site? If yes, also complete Section III: Aquatic Habitat Checklist – Non-Flowing Systems and/or Section IV: Aquatic Habitat Checklist – Flowing Systems.

9 yes (approx. distance _____) 9 no

17. Is there evidence of flooding? 9 yes 9 no *Wetlands and flood plains are not always obvious; do not answer "no" without confirming information.* If yes, complete Section V: Wetland Habitat Checklist.

18. If a field guide was used to aid any of the identifications, please provide a reference. Also, estimate the time spent identifying fauna. [Use a blank sheet if additional space is needed for text.]

19. Are any threatened and/or endangered species (plant or animal) known to inhabit the area of the site? 9 yes 9 no *If yes, you are required to verify this information with the U.S. Fish and Wildlife Service.* If species' identities are known, please list them next.

20. Record weather conditions at the time this checklist was prepared:

Date: _____

_____ Temperature (EC/EF)

_____ Normal daily high temperature

_____ Wind (direction/speed)

_____ Precipitation (rain,snow)

_____ Cloud cover

IA. SUMMARY OF OBSERVATIONS AND SITE SETTING

Completed by _____ Affiliation _____

Additional Preparers _____

Site Manager _____

Date _____

II TERRESTRIAL HABITAT CHECKLIST

IIA. WOODED

1. Are there any wooded areas at the site? 9 yes 9 no If no, go to Section IIB: Shrub/Scrub.
2. What percentage or area of the site is wooded? (_____ % _____ acres). Indicate the wooded area on the site map which is attached to a copy of this checklist. Please identify what information was used to determine the wooded area of the site.
3. What is the dominant type of vegetation in the wooded area? (Circle one: Evergreen/Deciduous/Mixed) Provide a photograph, if available.

Dominant plant, if known: _____
4. What is the predominant size of the trees at the site? Use diameter at breast height.

9 0 - 6 in. 9 6 - 12 in. 9 >12 in.
5. Specify type of understory present, if known. Provide a photograph, if available.

IIB. SCHRUB/SCRUB

1. Is shrub/scrub vegetation present at the site? 9 yes 9 no If no, go to Section IIC: Open Field.
2. What percentage of the site is covered by scrub/shrub vegetation? (_____ % _____ acres). Indicate the areas of shrub/scrub on the site map. Please identify what information was used to determine this area.
3. What is the dominant type of scrub/shrub vegetation, if known? Provide a photograph, if available.
4. What is the approximate average height of the scrub/shrub vegetation?

9 0 - 2 ft. 9 2 - 5 ft. 9 > 5 ft.

5. Based on site observations, how dense is the scrub/shrub vegetation?

9 Dense

9 Patchy

9 Sparse

IIC. OPEN FIELD

1. Are there open (bare, barren) field areas present at the site? 9 yes 9 no If yes, please indicate the type below:

9 Prairie/plains

9 Savannah

9 Old field

9 Other (specify) _____

2. What percentage of the site is open field? (_____ % _____ acres). Indicate the open fields on the site map.

3. What is/are the dominant plant(s)? Provide a photograph, if available.

4. What is the approximate average height of the dominant plant? _____

5. Describe the vegetation cover: 9 Dense

9 Sparse

9 Patchy

IID. MISCELLANEOUS

1. Are other types of terrestrial habitats present at the site, other than woods, scrub/shrub, and open field? 9 yes 9 no If yes, identify and describe them below.

2. Describe the terrestrial miscellaneous habitat(s) and identify these area(s) on the site map.

3. What observations, if any, were made at the site regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
4. Review the questions in Section I to determine if any additional habitat checklists should be completed for this site.

III AQUATIC HABITAT CHECKLIST

Note: Aquatic systems are often associated with wetland habitats. Please refer to Section V, Wetland Habitat Checklist.

1. What type of open-water, non-flowing system is present at the site?

9 Natural (pond, lake)

9 Artificially created (lagoon, reservoir, canal, impoundment)

2. If known, what is the name(s) of the waterbody(ies) on or adjacent to the site?

3. If a waterbody is present, what are its known uses (e.g., recreation, navigation, etc.)?

4. What is the approximate size of the waterbody(ies)? _____ acre(s).

5. Is any aquatic vegetation present? 9 yes 9 no If yes, please identify the type of vegetation present if known.

9 Emergent

9 Submergent

9 Floating

6. If known, what is the depth of the water? _____

7. What is the general composition of the substrate? Check all that apply.

9 Bedrock

9 Sand (coarse)

9 Muck (find/black)

9 Boulder (>10 in.)

9 Silt (fine)

9 Debris

9 Cobble (2.5 - 10 in.)

9 Marl (shells)

9 Detritus

9 Gravel (0.1 - 2.5 in.)

9 Clay (slick)

9 Concrete

9 Other (specify) _____

8. What is the source of water in the waterbody?

9 River/Stream/Creek

9 Groundwater

9 Industrial discharge

9 Surface runoff

9 Other (specify) _____

9. Is there a discharge from the site to the waterbody? ☐ yes ☐ no If yes, please describe this discharge and its path.

10. Is there a discharge from the waterbody? ☐ yes ☐ no. If yes, and the information is available, identify from the list below the environment into which the waterbody discharges.

☐ River/Stream/Creek ☐ onsite ☐ offsite Distance _____

☐ Groundwater ☐ onsite ☐ offsite

☐ Wetland ☐ onsite ☐ offsite Distance _____

☐ Impoundment ☐ onsite ☐ offsite

11. Identify any field measurements and observations of water quality that were made. For those parameters for which data were collected provide the measurement and the units of measure below:

_____ Area

_____ Depth (average)

_____ Temperature (depth of the water at which the reading was taken) _____

_____ pH

_____ Dissolved oxygen

_____ Salinity

_____ Turbidity (clear, slightly turbid, turbid, opaque) (Secchi disk depth _____)

_____ Other (specify)

12. Describe observed color and area of coloration.

13. Mark the open-water, non-flowing system on the site map attached to this checklist.

14. What observations, if any, were made at the waterbody regarding the presence and/or absence of benthic macroinvertebrates, fish, birds, mammals, etc.?

IV AQUATIC HABITAT CHECKLIST – FLOWING SYSTEMS

Note: Aquatic systems are often associated with wetland habitats. Please refer to Section V, Wetland Habitat Checklist.

1. What type(s) of flowing water system(s) is (are) present at the site?

☐ River	☐ Stream	☐ Creek
☐ Dry wash	☐ Arroyo	☐ Brook
☐ Artificially created (ditch, etc.)	☐ Intermittent Stream	☐ Channeling
☐ Other (specify) _____		

2. If known, what is the name of the waterbody? _____

3. For natural systems, are there any indicators of physical alteration (e.g. channeling, debris, etc.)? ☐ yes ☐ no If yes, please describe indicators that were observed.

4. What is the general composition of the substrate? Check all that apply.

☐ Bedrock	☐ Sand (coarse)	☐ Muck (find/black)
☐ Boulder (>10 in.)	☐ Silt (fine)	☐ Debris
☐ Cobble (2.5 - 10 in.)	☐ Marl (shells)	☐ Detritus
☐ Gravel (0.1 - 2.5 in.)	☐ Clay (slick)	☐ Concrete
☐ Other (specify) _____		

5. What is the condition of the bank (e.g., height, slope, extent of vegetative cover)?

6. Is the system influenced by tides? ☐ yes ☐ no What information was used to make this determination?

7. Is the flow intermittent? 9 yes 9 no If yes, please note the information that was used in making this determination.
8. Is there a discharge from the site to the waterbody? 9 yes 9 no If yes, please describe the discharge and its path.
9. Is there a discharge from the waterbody? 9 yes 9 no If yes, and the information is available, please identify what the waterbody discharges to and whether the discharge is on site or off site.
10. Identify any field measurements and observations of water quality that were made. For those parameters for which data were collected, provide the measurement and the units of measure in the appropriate space below:

_____ Area

_____ Depth (average)

_____ Temperature (depth of the water at which the reading was taken) _____

_____ pH

_____ Dissolved oxygen

_____ Salinity

_____ Turbidity (clear, slightly turbid, turbid, opaque) (Secchi disk depth _____)

_____ Other (specify)

11. Describe observed color and area of coloration.
12. Is any aquatic vegetation present? ☐ yes ☐ no If yes, please identify the type of vegetation present, if know.
- ☐ Emergent ☐ Submergent ☐ Floating
13. Mark the flowing water system on the attached site map.
14. What observations were made at the waterbody regarding the presence and/or absence of benthic macroinvertebrates, fish, birds, mammals, etc.?

V. WETLAND HABITAT CHECKLIST

1. Based on observation and/or available information, are designated or known wetland definitely present at the site? 9 yes 9 no

Please note the sources of observations and information used (e.g., USGS Topographic Maps, National Wetland Inventory, Federal or State Agency, etc.) To make this determination.

2. Based on the location of the site (e.g., along a waterbody, in a floodplain) and site conditions (e.g. standing water, dark, wet soils; mud cracks; debris line; water marks), are wetland habitats suspected? 9 yes 9 no If yes, proceed with the remainder of the wetland habitat identification checklist.

3. What type(s) of vegetation are present in the wetland?

9 Submergent 9 Emergent 9 Scrub/Shrub 9 Wooded
9 Other (specify) _____

4. Provide a general description of the vegetation present in and around the wetland (height, color, etc.). Provide a photograph of the known or suspected wetlands, if available.

5. Is standing water present? 9 yes 9 no If yes, is water: 9 Fresh 9 Brackish
What is the approximate area of the water (sq. ft.) _____
Please complete questions 4, 11, 12 in Checklist III - Aquatic Habitat – Non-Flowing Systems.

6. Is there evidence of flooding at the site? What observations were noted?

9 Buttressing 9 Water marks 9 Mud cracks
9 Debris line 9 Other (describe below)

7. If known, what is the source of the water in the wetland?

9 Stream/River/Creek/Lake/Pond

9 Groundwater

9 Flooding

9 Surface Runoff

8. Is there a discharge from the site to a known or suspected wetland? 9 yes 9 no If yes, please describe.

9. Is there a discharge from the wetland? 9 yes 9 no If yes, to what waterbody is discharge released?

9 Surface Stream/River

9 Groundwater

9 Lake/Pond

9 Marine

10. If a soil sample was collected, describe the appearance of the soil in the wetland area. Circle or write in the best response.

Color (blue/grey, brown, black, mottled) _____

Water content (dry, wet, saturated/unsaturated) _____

11. Mark the observed area(s) on the attached site map.

CHECKLIST FOR ECOLOGICAL ASSESSMENT/SAMPLING

Introduction

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- III Aquatic Habitat Checklist – Non-Flowing Systems
- IV Aquatic Habitat Checklist – Flowing Systems
- V Wetlands Habitat Checklist

Checklist for Ecological Assessment/Sampling

I. SITE DESCRIPTION

1. Site Name: _____
Location: _____

County: _____ City: _____ State: _____
2. Latitude: _____ Longitude: _____
3. What is the approximate area of the site: _____
4. Is this the first site visit? 9 Yes 9 No. If no, attach trip report of previous site visit(s), if available.
Date(s) of previous site visit(s): _____
5. Please attach to the checklist USGS topographic map(s) of the site, if available.
6. Are aerial or other site photographs available? 9 Yes 9 No. If yes, please attach any available photo(s) to the site map at the conclusion of this section.

7. The land use of the site is: Industrial

The area surrounding the site is:

0.5 mile radius

_____ % Urban

_____ % Urban

_____ % Rural

_____ % Rural

_____ % Residential

_____ % Residential

_____ % Industrial (___ light ___ heavy)

_____ % Industrial (___ light ___ heavy)

_____ % Agricultural

_____ % Agricultural

(Crops: _____)

(Crops: _____)

_____ % Recreational

_____ % Recreational

(Describe: note if it is a park etc.)

(Describe: note if it is a park, etc.)

_____ % Undisturbed

_____ % Undisturbed

_____ % Other

_____ % Other

8. Has any movement of soil taken place at the site? 9 ___ Yes 9 ___ No. If yes, please identify the most likely cause of this disturbance:

9 Agricultural Use

9 Heavy Equipment

9 Mining

9 Natural Events

9 Erosion

9 Other

Please describe:

9. Do any potential sensitive environmental areas exist adjacent to or in proximity to the site, e.g., Federal and State parks, National and State monuments, wetlands, prairie potholes?
Remember, flood plains and wetlands are not always obvious; do not answer "no" without confirming information.

Please provide the source(s) of the information used to identify these sensitive areas, and indicate their general location on the site map.

10. What type of facility is located at the site?

☐ Chemical

☐ Manufacturing

☐ Mixing

☐ Waste disposal

☐ Other (specify) _____

11. What are the suspected contaminants of concern at the site? If known, what are the maximum concentration levels?

12. Check any potential routes of off-site migration of contaminants observed at the site:

☐ Swales

☐ Depressions

☐ Drainage ditches

☐ Runoff

☐ Windblown particulates

☐ Vehicular traffic

☐ Other (specify) _____

13. If known, what is the approximate depth to the water table? _____

14. Is the direction of surface runoff apparent from site observations? ☐ yes ☐ no. If yes, to which of the following does the surface runoff discharge? Indicate all that apply.

☐ Surface water

☐ Groundwater

☐ Sewer

☐ Collection impoundment

15. Is there a navigable waterbody or tributary to a navigable waterbody? ☐ yes ☐ no

16. Is there a waterbody anywhere on or in the vicinity of the site? If yes, also complete Section III: Aquatic Habitat Checklist – Non-Flowing Systems and/or Section IV: Aquatic Habitat Checklist – Flowing Systems.

9 yes (approx. distance _____) 9 no

17. Is there evidence of flooding? 9 yes 9 no *Wetlands and flood plains are not always obvious; do not answer "no" without confirming information.* If yes, complete Section V: Wetland Habitat Checklist.

18. If a field guide was used to aid any of the identifications, please provide a reference. Also, estimate the time spent identifying fauna. [Use a blank sheet if additional space is needed for text.]

19. Are any threatened and/or endangered species (plant or animal) known to inhabit the area of the site? 9 yes 9 no *If yes, you are required to verify this information with the U.S. Fish and Wildlife Service.* If species' identities are known, please list them next.

20. Record weather conditions at the time this checklist was prepared:

Date: _____

_____ Temperature (EC/EF)

_____ Normal daily high temperature

_____ Wind (direction/speed)

_____ Precipitation (rain,snow)

_____ Cloud cover

IA. SUMMARY OF OBSERVATIONS AND SITE SETTING

Completed by _____ Affiliation _____

Additional Preparers _____

Site Manager _____

Date _____

II TERRESTRIAL HABITAT CHECKLIST

IIA. WOODED

1. Are there any wooded areas at the site? 9 yes 9 no If no, go to Section IIB: Shrub/Scrub.
2. What percentage or area of the site is wooded? (_____ % _____ acres). Indicate the wooded area on the site map which is attached to a copy of this checklist. Please identify what information was used to determine the wooded area of the site.
3. What is the dominant type of vegetation in the wooded area? (Circle one: Evergreen/Deciduous/Mixed) Provide a photograph, if available.

Dominant plant, if known: _____
4. What is the predominant size of the trees at the site? Use diameter at breast height.

9 0 - 6 in. 9 6 - 12 in. 9 >12 in.
5. Specify type of understory present, if known. Provide a photograph, if available.

IIB. SCHRUB/SCRUB

1. Is shrub/scrub vegetation present at the site? 9 yes 9 no If no, go to Section IIC: Open Field.
2. What percentage of the site is covered by scrub/shrub vegetation? (_____ % _____ acres). Indicate the areas of shrub/scrub on the site map. Please identify what information was used to determine this area.
3. What is the dominant type of scrub/shrub vegetation, if known? Provide a photograph, if available.
4. What is the approximate average height of the scrub/shrub vegetation?

9 0 - 2 ft. 9 2 - 5 ft. 9 > 5 ft.

5. Based on site observations, how dense is the scrub/shrub vegetation?

9 Dense

9 Patchy

9 Sparse

IIC. OPEN FIELD

1. Are there open (bare, barren) field areas present at the site? 9 yes 9 no If yes, please indicate the type below:

9 Prairie/plains

9 Savannah

9 Old field

9 Other (specify) _____

2. What percentage of the site is open field? (_____ % _____ acres). Indicate the open fields on the site map.

3. What is/are the dominant plant(s)? Provide a photograph, if available.

4. What is the approximate average height of the dominant plant? _____

5. Describe the vegetation cover: 9 Dense

9 Sparse

9 Patchy

IID. MISCELLANEOUS

1. Are other types of terrestrial habitats present at the site, other than woods, scrub/shrub, and open field? 9 yes 9 no If yes, identify and describe them below.

2. Describe the terrestrial miscellaneous habitat(s) and identify these area(s) on the site map.

3. What observations, if any, were made at the site regarding the presence and/or absence of insects, fish, birds, mammals, etc.?
4. Review the questions in Section I to determine if any additional habitat checklists should be completed for this site.

III AQUATIC HABITAT CHECKLIST

Note: Aquatic systems are often associated with wetland habitats. Please refer to Section V, Wetland Habitat Checklist.

1. What type of open-water, non-flowing system is present at the site?

9 Natural (pond, lake)

9 Artificially created (lagoon, reservoir, canal, impoundment)

2. If known, what is the name(s) of the waterbody(ies) on or adjacent to the site?

3. If a waterbody is present, what are its known uses (e.g., recreation, navigation, etc.)?

4. What is the approximate size of the waterbody(ies)? _____ acre(s).

5. Is any aquatic vegetation present? 9 yes 9 no If yes, please identify the type of vegetation present if known.

9 Emergent

9 Submergent

9 Floating

6. If known, what is the depth of the water? _____

7. What is the general composition of the substrate? Check all that apply.

9 Bedrock

9 Sand (coarse)

9 Muck (find/black)

9 Boulder (>10 in.)

9 Silt (fine)

9 Debris

9 Cobble (2.5 - 10 in.)

9 Marl (shells)

9 Detritus

9 Gravel (0.1 - 2.5 in.)

9 Clay (slick)

9 Concrete

9 Other (specify) _____

8. What is the source of water in the waterbody?

9 River/Stream/Creek

9 Groundwater

9 Industrial discharge

9 Surface runoff

9 Other (specify) _____

9. Is there a discharge from the site to the waterbody? ☐ yes ☐ no If yes, please describe this discharge and its path.

10. Is there a discharge from the waterbody? ☐ yes ☐ no. If yes, and the information is available, identify from the list below the environment into which the waterbody discharges.

☐ River/Stream/Creek ☐ onsite ☐ offsite Distance _____

☐ Groundwater ☐ onsite ☐ offsite

☐ Wetland ☐ onsite ☐ offsite Distance _____

☐ Impoundment ☐ onsite ☐ offsite

11. Identify any field measurements and observations of water quality that were made. For those parameters for which data were collected provide the measurement and the units of measure below:

_____ Area

_____ Depth (average)

_____ Temperature (depth of the water at which the reading was taken) _____

_____ pH

_____ Dissolved oxygen

_____ Salinity

_____ Turbidity (clear, slightly turbid, turbid, opaque) (Secchi disk depth _____)

_____ Other (specify)

12. Describe observed color and area of coloration.

13. Mark the open-water, non-flowing system on the site map attached to this checklist.

14. What observations, if any, were made at the waterbody regarding the presence and/or absence of benthic macroinvertebrates, fish, birds, mammals, etc.?

IV AQUATIC HABITAT CHECKLIST – FLOWING SYSTEMS

Note: Aquatic systems are often associated with wetland habitats. Please refer to Section V, Wetland Habitat Checklist.

1. What type(s) of flowing water system(s) is (are) present at the site?

☐ River	☐ Stream	☐ Creek
☐ Dry wash	☐ Arroyo	☐ Brook
☐ Artificially created (ditch, etc.)	☐ Intermittent Stream	☐ Channeling
☐ Other (specify) _____		

2. If known, what is the name of the waterbody? _____

3. For natural systems, are there any indicators of physical alteration (e.g. channeling, debris, etc.)? ☐ yes ☐ no If yes, please describe indicators that were observed.

4. What is the general composition of the substrate? Check all that apply.

☐ Bedrock	☐ Sand (coarse)	☐ Muck (find/black)
☐ Boulder (>10 in.)	☐ Silt (fine)	☐ Debris
☐ Cobble (2.5 - 10 in.)	☐ Marl (shells)	☐ Detritus
☐ Gravel (0.1 - 2.5 in.)	☐ Clay (slick)	☐ Concrete
☐ Other (specify) _____		

5. What is the condition of the bank (e.g., height, slope, extent of vegetative cover)?

6. Is the system influenced by tides? ☐ yes ☐ no What information was used to make this determination?

7. Is the flow intermittent? 9 yes 9 no If yes, please note the information that was used in making this determination.
8. Is there a discharge from the site to the waterbody? 9 yes 9 no If yes, please describe the discharge and its path.
9. Is there a discharge from the waterbody? 9 yes 9 no If yes, and the information is available, please identify what the waterbody discharges to and whether the discharge is on site or off site.
10. Identify any field measurements and observations of water quality that were made. For those parameters for which data were collected, provide the measurement and the units of measure in the appropriate space below:

_____ Area

_____ Depth (average)

_____ Temperature (depth of the water at which the reading was taken) _____

_____ pH

_____ Dissolved oxygen

_____ Salinity

_____ Turbidity (clear, slightly turbid, turbid, opaque) (Secchi disk depth _____)

_____ Other (specify)

11. Describe observed color and area of coloration.
12. Is any aquatic vegetation present? ☐ yes ☐ no If yes, please identify the type of vegetation present, if know.
- ☐ Emergent ☐ Submergent ☐ Floating
13. Mark the flowing water system on the attached site map.
14. What observations were made at the waterbody regarding the presence and/or absence of benthic macroinvertebrates, fish, birds, mammals, etc.?

V. WETLAND HABITAT CHECKLIST

1. Based on observation and/or available information, are designated or known wetland definitely present at the site? 9 yes 9 no

Please note the sources of observations and information used (e.g., USGS Topographic Maps, National Wetland Inventory, Federal or State Agency, etc.) To make this determination.

2. Based on the location of the site (e.g., along a waterbody, in a floodplain) and site conditions (e.g. standing water, dark, wet soils; mud cracks; debris line; water marks), are wetland habitats suspected? 9 yes 9 no If yes, proceed with the remainder of the wetland habitat identification checklist.

3. What type(s) of vegetation are present in the wetland?

9 Submergent 9 Emergent 9 Scrub/Shrub 9 Wooded
9 Other (specify) _____

4. Provide a general description of the vegetation present in and around the wetland (height, color, etc.). Provide a photograph of the known or suspected wetlands, if available.

5. Is standing water present? 9 yes 9 no If yes, is water: 9 Fresh 9 Brackish
What is the approximate area of the water (sq. ft.) _____
Please complete questions 4, 11, 12 in Checklist III - Aquatic Habitat – Non-Flowing Systems.

6. Is there evidence of flooding at the site? What observations were noted?

9 Buttressing 9 Water marks 9 Mud cracks
9 Debris line 9 Other (describe below)

7. If known, what is the source of the water in the wetland?

9 Stream/River/Creek/Lake/Pond

9 Groundwater

9 Flooding

9 Surface Runoff

8. Is there a discharge from the site to a known or suspected wetland? 9 yes 9 no If yes, please describe.

9. Is there a discharge from the wetland? 9 yes 9 no If yes, to what waterbody is discharge released?

9 Surface Stream/River

9 Groundwater

9 Lake/Pond

9 Marine

10. If a soil sample was collected, describe the appearance of the soil in the wetland area. Circle or write in the best response.

Color (blue/grey, brown, black, mottled) _____

Water content (dry, wet, saturated/unsaturated) _____

11. Mark the observed area(s) on the attached site map.

PHOTOGRAPHIC LOG



Photograph 1: Parcel 1- Upper extent of historical ditch from former MGP Site.



Photograph 2: Parcel 1- Upper extent of historical ditch from former MGP Site.



Photograph 3: Parcel 1- Upper extent of historical ditch from former MGP Site.



Photograph 4: Parcel 1- Wooded area in western corner.



Photograph 5: Parcel 2



Photograph 6: Parcel 2



Photograph 7: Parcel 3 Vaughn Landfill



Photograph 8: Parcel 3 Vaughn Landfill



Photograph 9: Parcel 3 Vaughn Landfill



Photograph 10: Parcel 3- Stormwater drainage ditch downgradient of Vaughn Landfill



Photograph 11: Parcel 3- Wetlands area upgradient of Vaughn Landfill – view from Bramlette Road.



Photograph 12: Parcel 3- Stormwater drainage ditch downgradient of Vaughn Landfill



Photograph 13: Parcel 3- Wetlands ditch downgradient of Vaughn Landfill



Photograph 14: Stormwater Drain from Parcel 2 into Parcel 3 wetlands





Photograph 15: Vaughn Landfill



Photograph 16: General views of interior Vaughn Landfill



Photograph 17: General views of interior Vaughn Landfill



Photograph 18: Outfall from wetlands upgradient of Vaughn Landfill into wetlands downgradient of landfill



Photograph 19: Parcel 4



Photograph 20: Parcel 4



Photograph 21: Parcel 4



Photograph 22: Parcel 4



Photograph 23: Parcel 4



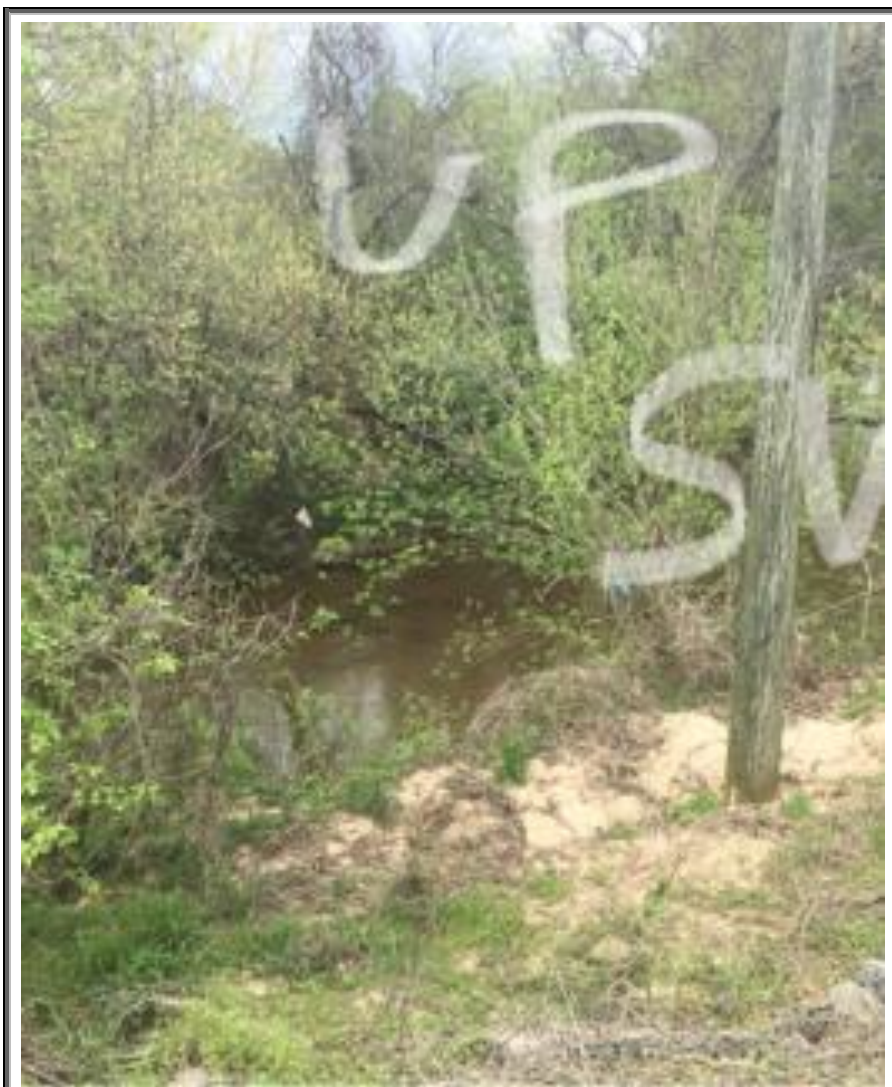
Photograph 24: Parcel 4



Photograph 25: Outfall Downgradient of Parcel 5



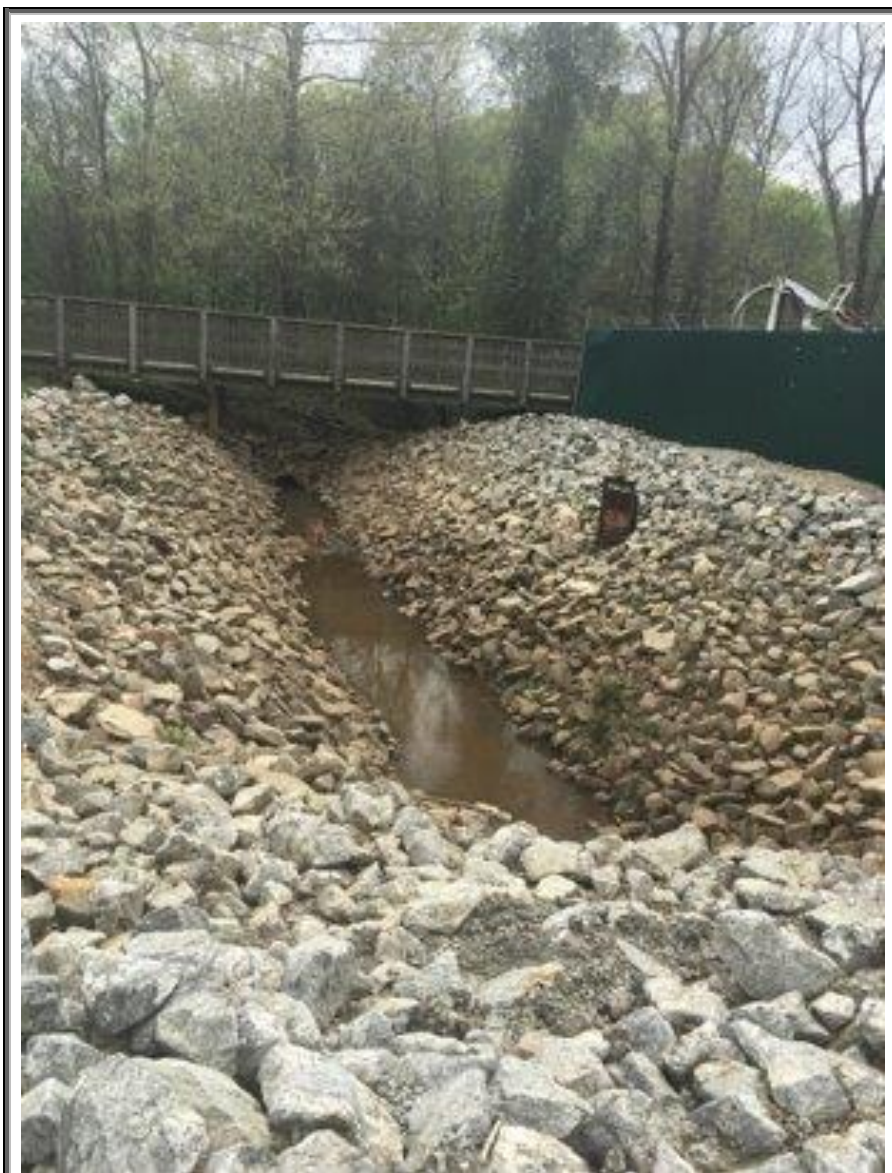
Photograph 26: Outfall Downgradient of Parcel 5



Photograph 27: Outfall Downgradient of Parcel 5



Photograph 28: Historical ditch outfall near Willard St



Photograph 29: Historical ditch outfall near Willard St

ATTACHMENT 6

ECOLOGICAL SCREENING

ATTACHMENT 6
TABLE 6-1
ECOLOGICAL SCREENING - SURFACE SOIL (0-0.5 FEET)
EXPOSURE AREA 1
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection (mg/kg)		Concentration Used for Screening (a) (mg/kg)	USEPA Region 4 Soil Screening (b)(c) Benchmark (mg/kg)	Eco-SSL Invertebrate Soil Screening Benchmark (mg/kg)	Eco-SSL Mammalian Soil Screening Benchmark (mg/kg)	Eco-SSL Plants Soil Screening Benchmark (mg/kg)	Eco-SSL Avian Soil Screening Benchmark (mg/kg)	Screening Value Used (b) (mg/kg)	Hazard Quotient	Preliminary COPC?					
					Min	Max														
PAH																				
Acenaphthene	83-32-9	47	29	62%	0.00061	1.28	1.28	29	f	0.38	e	130	d			29	4.41E-02	N		
Acenaphthylene	208-96-8	47	38	81%	0.00054	1.45	1.45	29	f	0.34	e	120	d			29	5.00E-02	N		
Anthracene	120-12-7	47	41	87%	0.00052	3.25	3.25	29	f	0.0015	e	210	d	6.8	d	29	1.12E-01	N		
Benzo(a)anthracene	56-55-3	47	44	94%	0.00083	6.47	6.47	1.1	f	4.69	e	3.4	d	18	d	0.73	d	1.1	5.88E+00	Y
Benzo(a)pyrene	50-32-8	47	44	94%	0.00072	5.89	5.89	1.1	f	0.13	e	62	d			1.1		5.35E+00	Y	
Benzo(b)fluoranthene	205-99-2	47	44	94%	0.0011	7.7	7.7	1.1	f	2.7	e	44	d	18	d	1.1		7.00E+00	Y	
Benzo(g,h,i)perylene	191-24-2	47	40	85%	0.0027	3	3	1.1	f	0.07	e	25	d			1.1		2.73E+00	Y	
Benzo(k)fluoranthene	207-08-9	47	43	91%	0.00063	2.94	2.94	1.1	f	0.13	e	71	d			1.1		2.67E+00	Y	
Chrysene	218-01-9	47	44	94%	0.00065	6.23	6.23	1.1	f	5.18	e	3.1	d			1.1		5.66E+00	Y	
Dibenz(a,h)anthracene	53-70-3	47	38	81%	0.0014	1.08	1.08	1.1	f	0.06	e	14	d			1.1		9.82E-01	N	
Fluoranthene	206-44-0	47	41	87%	0.0026	11	11	1.1	f	10	d	22	d			1.1		1.00E+01	Y	
Fluorene	86-73-7	47	37	79%	0.00068	1.86	1.86	29	f	3.7	d	250	d			29		6.41E-02	N	
Indeno(1,2,3-cd)pyrene	193-39-5	47	40	85%	0.0022	2.72	2.72	1.1	f	0.08	e	71	d			1.1		2.47E+00	Y	
Naphthalene	91-20-3	44	13	30%	0.00093	0.0852	0.0852	29	f	0.16	e	9.6	d	1	d	3.4	d	29	2.94E-03	N
Phenanthrene	85-01-8	47	41	87%	0.0016	9.41	9.41	29	f	5.5	d	11	d			29		3.24E-01	N	
Pyrene	129-00-0	47	43	91%	0.0013	9.67	9.67	1.1	f	10	d	23	d		33	d	1.1	8.79E+00	Y	
1-Methylnaphthalene	90-12-0	47	38	81%	0.0011	1.02	1.02	29	f	0.14	e					29		3.52E-02	N	
2-Methylnaphthalene	91-57-6	47	39	83%	0.00077	1.25	1.25	29	f	0.11	e	16	d			29		4.31E-02	N	
BTEX																				
Benzene	71-43-2	44	0	0%	ND	ND	NA	0.12	e	0.12	e	24	d			0.12	NA	N		
Ethylbenzene	100-41-4	44	0	0%	ND	ND	NA	0.27	e	0.27	e	5.16	g			0.27	NA	N		
VOC/sVOC																				
1,2,4-Trichlorobenzene	120-82-1	44	1	2%	0.0555	0.0555	0.0555	0.27	d	1.2	d	0.27				0.27	2.06E-01	N		
1,2,4-Trimethylbenzene	95-63-3	44	0	0%	ND	ND	NA	0.09	e	0.09	e					0.09	NA	N		
1,3,5-Trimethylbenzene	108-67-8	44	0	0%	ND	ND	NA	0.16	e	0.16	e					0.16	NA	N		
2-Butanone (MEK)	78-93-3	44	1	2%	0.0039	0.0039	0.0039	1	e	1	e	350	d			1	3.90E-03	N		
2-Hexanone	591-78-6	44	6	14%	0.0046	0.0821	0.0821	0.36	d	2.5	e	5.4	d		0.36	d	0.36	2.28E-01	N	
4-Bromophenylphenyl ether	101-55-3	47	1	2%	0.108	0.108	0.108	NA		NA		NA		NA		NA	NA	NA	N	
Acetone	67-64-1	44	11	25%	0.0113	0.168	0.168	1.2	d	0.04	e	1.2	d		7.5	d	1.2	1.40E-01	N	
Bromomethane	74-83-9	44	0	0%	ND	ND	NA	0.002	e	0.002	e	0.24	g			0.002	NA	N		
Dibenzofuran	132-64-9	47	9	19%	0.0756	0.432	0.432	0.15	e	0.15	e		6.1	d		0.15	2.88E+00	Y		
Methylene chloride	75-09-2	44	2	5%	0.502	0.628	0.628	0.21	e	0.21	e	2.6	d	1,600	d		0.21	2.99E+00	Y	
p-Isopropyltoluene	99-87-6	44	1	2%	0.0055	0.0055	0.0055	0.18	e	0.18	e					0.18	3.06E-02	N		

*Data evaluated includes data from 1st quarter 2019 to 4th quarter 2019, unless otherwise noted

Prepared by: KCS Checked by: TCP

Notes:

BTEX - benzene, toluene, ethylbenzene, and xylene
CAS - Chemical Abstracts Service
COPC - Constituent of Potential Concern
HH - Human Health

HI - Hazard Index
mg/kg - milligrams/kilogram
NA - Not Available
ND - Not detected in surface soil but is detected in subsurface

PAH - Poly aromatic hydrocarbon
USEPA - United States Environmental Protection Agency
VOC/sVOC - Volatile organic compounds/ semi-volatile organic compounds

- (a) The concentration used for screening is the maximum detected value for parcel 1
(b) The screening value used is the USEPA Region 4 Soil Screening Benchmark when available. If the Region 4 Soil Screening Benchmark is not available, the most conservative ECO-SSL or LANL value is used.
(c) USEPA Region 4, 2018. Region 4 Ecological Risk Assessment Supplemental Guidance, Table 3 March 2018 Update. https://www.epa.gov/sites/production/files/2018-03/documents/era_regional_supplemental_guidance_report-march-2018_update.pdf
(d) Los Alamos National Laboratory (LANL). 2017. ECORISK Database Release 4.1. September 2017. <http://www.lanl.gov/environment/protection/eco-risk-assessment.php> (µg/kg dw)
(e) ECOSAR & Region 4 soil model. See text Section 6.3
(f) Total LMWPAHs (low molecular weight PAH) or HMWPAHs (high molecular weight PAH)
(g) EPA Region 5 RCRA Ecological Screening Levels (2003)

ATTACHMENT 6
TABLE 6-2
ECOLOGICAL SCREENING - SUBSURFACE SOIL (0-5.5 FEET)
EXPOSURE AREA 1
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection (mg/kg)		Concentration Used for Screening (a) (mg/kg)	USEPA Region 4 Soil Screening (b)(c) Benchmark (mg/kg)		Eco-SSL Invertebrate Soil Screening Benchmark (mg/kg)		Eco-SSL Mammalian Soil Screening Benchmark (mg/kg)		Eco-SSL Plants Soil Screening Benchmark (mg/kg)		Eco-SSL Avian Soil Screening Benchmark (mg/kg)		Screening Value Used (b) (mg/kg)	Hazard Quotient	Preliminary COPC?
					Min	Max														
PAH																				
Acenaphthene	83-32-9	93	55	59%	0.00061	1.28	1.28	29	f	0.38	e	130	d					29	4.41E-02	N
Acenaphthylene	208-96-8	93	68	73%	0.00054	4.38	4.38	29	f	0.34	e	120	d					29	1.51E-01	N
Anthracene	120-12-7	93	78	84%	0.00052	21.1	21.1	29	f	0.0015	e	210	d	6.8	d			29	7.28E-01	N
Benzo(a)anthracene	56-55-3	93	81	87%	0.00083	27.9	27.9	1.1	f	4.69	e	3.4	d	18	d	0.73	d	1.1	2.54E+01	Y
Benzo(a)pyrene	50-32-8	93	81	87%	0.00072	21.5	21.5	1.1	f	0.13	e	62	d					1.1	1.95E+01	Y
Benzo(b)fluoranthene	205-99-2	93	81	87%	0.0011	27.2	27.2	1.1	f	2.7	e	44	d	18	d			1.1	2.47E+01	Y
Benzo(g,h,i)perylene	191-24-2	93	77	83%	0.0014	12.3	12.3	1.1	f	0.07	e	25	d					1.1	1.12E+01	Y
Benzo(k)fluoranthene	207-08-9	93	80	86%	0.00063	12.1	12.1	1.1	f	0.13	e	71	d					1.1	1.10E+01	Y
Chrysene	218-01-9	93	82	88%	0.00062	24	24	1.1	f	5.18	e	3.1	d					1.1	2.18E+01	Y
Dibenz(a,h)anthracene	53-70-3	93	68	73%	0.0014	2.17	2.17	1.1	f	0.06	e	14	d					1.1	1.97E+00	Y
Fluoranthene	206-44-0	93	77	83%	0.0025	63.3	63.3	1.1	f	10	d	22	d					1.1	5.75E+01	Y
Fluorene	86-73-7	93	69	74%	0.00068	8.84	8.84	29	f	3.7	d	250	d					29	3.05E-01	N
Indeno(1,2,3-cd)pyrene	193-39-5	93	76	82%	0.0017	11	11	1.1	f	0.08	e	71	d					1.1	1.00E+01	Y
Naphthalene	91-20-3	90	32	36%	0.00093	27.3	27.3	29	f	0.16	e	9.6	d	1	d	3.4	d	29	9.41E-01	N
Phenanthrene	85-01-8	93	77	83%	0.0015	77.7	77.7	29	f	5.5	d	11	d					29	2.68E+00	Y
Pyrene	129-00-0	93	80	86%	0.0012	50.3	50.3	1.1	f	10	d	23	d			33	d	1.1	4.57E+01	Y
1-Methylnaphthalene	90-12-0	93	73	78%	0.00083	3.38	3.38	29	f	0.14	e							29	1.17E-01	N
2-Methylnaphthalene	91-57-6	93	74	80%	0.00077	6.46	6.46	29	f	0.11	e	16	d					29	2.23E-01	N
BTEX																				
Benzene	71-43-2	90	1	1%	0.0711	0.0711	0.0711	0.12	e	0.12	e	24	d					0.12	5.93E-01	N
Ethylbenzene	100-41-4	90	1	1%	0.003	0.003	0.003	0.27	e	0.27	e	5.16	g					0.27	1.11E-02	N
VOC/sVOC																				
1,2,4-Trichlorobenzene	120-82-1	90	1	1%	0.0555	0.0555	0.0555	0.27	d	1.2	d	0.27						0.27	2.06E-01	N
1,2,4-Trimethylbenzene	95-63-3	90	2	2%	0.0042	1.06	1.06	0.09	e	0.09	e							0.09	1.18E+01	Y
1,3,5-Trimethylbenzene	108-67-8	90	2	2%	0.0015	0.428	0.428	0.16	e	0.16	e							0.16	2.68E+00	Y
2-Butanone (MEK)	78-93-3	90	1	1%	0.0039	0.0039	0.0039	1	e	1	e	350	d					1	3.90E-03	N
2-Hexanone	591-78-6	90	6	7%	0.0046	0.0821	0.0821	0.36	d	2.5	e	5.4	d			0.36	d	0.36	2.28E-01	N
4-Bromophenylphenyl ether	101-55-3	93	1	1%	0.108	0.108	0.108	NA		NA		NA		NA		NA		NA	NA	N
Acetone	67-64-1	90	23	26%	0.0081	0.168	0.168	1.2	d	0.04	e	1.2	d			7.5	d	1.2	1.40E-01	N
Bromomethane	74-83-9	90	1	1%	0.278	0.278	0.278	0.002	e	0.002	e	0.24	g					0.002	1.39E+02	Y
Dibenzofuran	132-64-9	93	22	24%	0.072	0.804	0.804	0.15	e	0.15	e			6.1	d			0.15	5.36E+00	Y
Methylene chloride	75-09-2	90	4	4%	0.295	0.81	0.81	0.21	e	0.21	e	2.6	d	1,600	d			0.21	3.86E+00	Y
p-Isopropyltoluene	99-87-6	90	2	2%	0.0023	0.0055	0.0055	0.18	e	0.18	e							0.18	3.06E-02	N

*Data evaluated includes data from 1st quarter 2019 to 4th quarter 2019, unless otherwise noted

Prepared by: KCS Checked by: TCP

Notes:

BTEX - benzene, toluene, ethylbenzene, and xylene
CAS - Chemical Abstracts Service
COPC - Constituent of Potential Concern

HI - Hazard Index
mg/kg - milligrams/kilogram
NA - Not Available

PAH - Poly aromatic hydrocarbon
USEPA - United States Environmental Protection Agency
VOC/sVOC - Volatile organic compounds/ semi-volatile organic compounds

- (a) The concentration used for screening is the maximum detected value for parcel 1
(b) The screening value used is the USEPA Region 4 Soil Screening Benchmark when available. If the Region 4 Soil Screening Benchmark is not available, the most conservative ECO-SSL or LANL value is used.
(c) USEPA Region 4, 2018. Region 4 Ecological Risk Assessment Supplemental Guidance, Table 3 March 2018 Update. https://www.epa.gov/sites/production/files/2018-03/documents/era_regional_supplemental_guidance_report-march-2018_update.pdf
(d) Los Alamos National Laboratory (LANL). 2017. ECORISK Database Release 4.1. September 2017. <http://www.lanl.gov/environment/protection/eco-risk-assessment.php> (µg/kg dw)
(e) ECOSAR & Region 4 soil model. See text Section 6.3
(f) Total LMWPAHs (low molecular weight PAH) or HMWPAHs (high molecular weight PAH)
(g) EPA Region 5 RCRA Ecological Screening Levels (2003)

ATTACHMENT 6
TABLE 6-3
ECOLOGICAL SCREENING - SEDIMENT - REEDY RIVER - OFF-SITE
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection (µg/kg)		Concentration Used for Screening (d)	USEPA Region 4 Sediment Screening Values (µg/kg)				Screening Value Used (e)	Hazard Quotient	COPC?
					min	max		ESV		RSV				
PAH														
Acenaphthylene	208-96-8	6	1	17%	106	106	106	5.9	b	600	a	5.9	1.80E+01	Y
Anthracene	120-12-7	6	1	17%	167	167	167	57	b	600	a	57	2.93E+00	Y
Benzo(a)anthracene	56-55-3	6	1	17%	503	503	503	108	b	1,610	a,b	108	4.66E+00	Y
Benzo(a)pyrene	50-32-8	6	1	17%	435	435	435	150	b	1,610	a,b	150	2.90E+00	Y
Benzo(b)fluoranthene	205-99-2	6	1	17%	562	562	562	190	c	1,610	a,b	190	2.96E+00	Y
Benzo(g,h,i)perylene	191-24-2	6	1	17%	183	183	183	170	c	1,610	a,b	170	1.08E+00	Y
Benzo(k)fluoranthene	207-08-9	6	1	17%	236	236	236	240	c	1,610	a,b	240	9.83E-01	N
Chrysene	218-01-9	6	1	17%	490	490	490	166	b	1,610	a,b	166	2.95E+00	Y
Fluoranthene	206-44-0	6	2	33%	106	822	822	423	b	1,610	a,b	423	1.94E+00	Y
Indeno(1,2,3-cd)pyrene	193-39-5	6	1	17%	186	186	186	200	c	1,610	a,b	200	9.30E-01	N
Phenanthrene	85-01-8	6	1	17%	217	217	217	204	b	600	a	204	1.06E+00	Y
Pyrene	129-00-0	6	2	33%	90	791	791	195	b	1,610	b	195	4.06E+00	Y

*Data evaluated includes data from 4th quarter 2018, unless otherwise noted

Prepared by: KCS Checked by: HES

Notes:

CAS - Chemical Abstracts Service

HH - Human Health

µg/kg - micrograms/kilogram

COPC - Constituent of Potential Concern

PAH - Poly aromatic hydrocarbon

USEPA - United States Environmental Protection Agency

ESV - Ecological screening value

RSV - Refinement screening value

(a) total LMWPAH or HMWPAH from USEPA Region 4 Sediment screening tables 2b.

https://www.epa.gov/sites/production/files/2018-03/documents/era_regional_supplemental_guidance_report-march-2018_update.pdf

(b) MacDonald, D.D.; Ingersoll, C.G.; Smorong, D.E.; Lindskoog, R.A.; Sloane, G; and T. Biernacki. 2003. Development and Evaluation of Numerical Sediment Quality Assessment Guidelines for Florida Inland Waters. Florida Department of Environmental Protection, Tallahassee, FL. Development and Evaluation of Numerical Sediment Quality Assessment Guidelines for Florida Inland Waters. Used threshold effect concentration (TEC) for ESV. (µg/kg dw)

(c) Los Alamos National Laboratory ECORISK Database, 2017. <http://www.lanl.gov/environment/protection/eco-risk-assessment.php> (µg/kg dw)

(d) Concentration used is maximum concentration from the Reedy River

(e) Screening value used is based on EPA Region 4 guidance to use ESV if available.

https://www.epa.gov/sites/production/files/2018-03/documents/era_regional_supplemental_guidance_report-march-2018_update.pdf

ATTACHMENT 6
TABLE 6-4
ECOLOGICAL SCREENING - SEDIMENT - ON-SITE
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection (µg/kg)		Concentration Used for Screening (f)	USEPA Region 4 Sediment Screening Values (µg/kg)				Screening Value Used (g)	Hazard Quotient	COPC?
					min	max		ESV		RSV				
PAH														
1-Methylnaphthalene	90-12-0	25	6	24%	4	57.2	57.2	141	a	600	b	141	4.06E-01	N
2-Methylnaphthalene	91-57-6	25	6	24%	5.9	90.5	90.5	20.2	c	600	b	20.2	4.48E+00	Y
Acenaphthene	83-32-9	25	5	20%	2.5	218	218	6.7	d	600	b	6.7	3.25E+01	Y
Acenaphthylene	208-96-8	25	12	48%	15	3360	3360	5.9	d	600	b	5.9	5.69E+02	Y
Anthracene	120-12-7	25	11	44%	15.4	10500	10500	57	d	600	b	57	1.84E+02	Y
Benzo(a)anthracene	56-55-3	25	16	64%	63.9	22800	22800	108	d	1,610	b,d	108	2.11E+02	Y
Benzo(a)pyrene	50-32-8	25	15	60%	61.5	20800	20800	150	d	1,610	b,d	150	1.39E+02	Y
Benzo(b)fluoranthene	205-99-2	25	15	60%	77.7	23200	23200	190	e	1,610	b,d	190	1.22E+02	Y
Benzo(g,h,i)perylene	191-24-2	25	13	52%	27.4	11400	11400	170	e	1,610	b,d	170	6.71E+01	Y
Benzo(k)fluoranthene	207-08-9	25	13	52%	31.4	8810	8810	240	e	1,610	b,d	240	3.67E+01	Y
Chrysene	218-01-9	25	16	64%	66.5	19700	19700	166	d	1,610	b,d	166	1.19E+02	Y
Dibenz(a,h)anthracene	53-70-3	25	6	24%	9.7	256	256	33	d	1,610	b,d	33	7.76E+00	Y
Fluoranthene	206-44-0	25	17	68%	90.2	44500	44500	423	d	1,610	b,d	423	1.05E+02	Y
Fluorene	86-73-7	25	10	40%	3.8	3230	3230	77	d	600	b	77	4.19E+01	Y
Indeno(1,2,3-cd)pyrene	193-39-5	25	13	52%	26.6	10400	10400	200	e	1,610	b,d	200	5.20E+01	Y
Naphthalene	91-20-3	25	9	36%	2.7	2180	2180	176	d	600	b	176	1.24E+01	Y
Phenanthrene	85-01-8	25	15	60%	32.9	28600	28600	204	d	600	b	204	1.40E+02	Y
Pyrene	129-00-0	25	17	68%	88.2	43400	43400	195	d	1,610	d	195	2.23E+02	Y
VOC/sVOC														
2-Butanone (MEK)	78-93-3	24	4	17%	11.5	31.1	31.1	7,604	a	22,707	a	7604	4.09E-03	N
4-Methyl-2-pentanone (MIBK)	108-10-1	24	2	8%	10.5	12	12	73	a	8,165	a	73	1.64E-01	N
Acetone	67-64-1	24	18	75%	21.7	738	738	65	e	38,133	a	65	1.14E+01	Y
bis(2-Ethylhexyl)phthalate	117-81-7	25	1	4%	246	246	246	180	d	2,600	d	180	1.37E+00	Y
Chloroform	67-66-3	24	4	17%	4.3	9.1	9.1	87	a	3,352	a	87	1.05E-01	N
Dibenzofuran	132-64-9	25	1	4%	242	242	242	510	e	2,313	a	510	4.75E-01	N
Methylene chloride	75-09-2	24	4	17%	14.1	62.3	62.3	18	e	2,404	a	18	3.46E+00	Y
p-Isopropyltoluene	99-87-6	24	2	8%	5.2	23.3	23.3	184	a	242	a	184	1.27E-01	N
Styrene	100-42-5	24	1	4%	2.7	2.7	2.7	126	a	1,621	a	126	2.14E-02	N

*Data evaluated includes data from 1st quarter 2019 to 2nd quarter 2020, unless otherwise noted

Prepared by: KCS Checked by: HES

Notes:

CAS - Chemical Abstracts Service

COPC - Constituent of Potential Concern

ESV - Ecological screening value

PAH - Poly aromatic hydrocarbon

RSV - Refinement screening value

µg/kg - micrograms/kilogram

USEPA - United States Environmental Protection Agency

VOC/sVOC- Volatile organic compounds/ semi-volatile organic compounds

- (a) Region 4 Sediment Model based, https://www.epa.gov/sites/production/files/2018-03/documents/era_regional_supplemental_guidance_report-march-2018_update.pdf
- (b) total LMWPAH or HMWPAH from USEPA Region 4 Sediment screening tables 2b
- (c) CCME (Canadian Council of Ministers of the Environment). 2003. Canadian Environmental Quality Guidelines: Summary Table December 2003. Canadian Council of Ministers of the Environment, Winnipeg, Manitoba.
Available at <http://www.ccme.ca/publications/ce> (µg/kg dw)
- (d) MacDonald, D.D.; Ingersoll, C.G.; Smorong, D.E.; Lindskoog, R.A.; Sloane, G; and T. Biernacki. 2003. Development and Evaluation of Numerical Sediment Quality Assessment Guidelines for Florida Inland Waters.
Florida Department of Environmental Protection, Tallahassee, FL. Development and Evaluation of Numerical Sediment Quality Assessment Guidelines for Florida Inland Waters. Used threshold effect concentration (TEC) for ESV. (µg/kg dw)
- (e) Los Alamos National Laboratory ECORISK Database, 2017. <http://www.lanl.gov/environment/protection/eco-risk-assessment.php> (µg/kg dw)
- (f) Concentration used is maximum concentration from onsite wetland
- (g) Screening value used is based on EPA Region 4 guidance to use ESV if available

ATTACHMENT 6
TABLE 6-5
ECOLOGICAL SCREENING - SURFACE WATER - REEDY RIVER - OFF-SITE
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection		Concentration Used for Screening (c) (µg/L)	USEPA Region 4 Freshwater Chronic Screening Value (µg/L)		SCDHEC Freshwater Aquatic Life (b) Chronic Screening Values (µg/L)	Screening Value Used (a) (µg/L)	Hazard Quotient	COPC?
					Min	Max							
BTEX / VOC													
Benzene	71-43-2	12	0	0%	NA	NA	ND	160	a	NA	160	NA	N
Ethylbenzene	100-41-4	12	0	0%	NA	NA	ND	61	a	NA	61	NA	N
Chloromethane	74-87-3	12	0	0%	NA	NA	ND	NA		NA	NA	NA	N

*Data evaluated includes data from 4th quarter 2018 to 1st quarter 2020, unless otherwise noted

Prepared by: KCS Checked by: HES

Notes:

BTEX - benzene, toluene, ethylbenzene, and xylene

NA - Not Available

µg/L - micrograms/ liter

CAS - Chemical Abstracts Service

ND - Non-detect

USEPA - United States Environmental Protection Agency

COPC - Constituent of Potential Concern

SCDHEC - South Carolina Department of Health and Environmental Control VOC - Volatile organic compounds

(a) Great Lakes Initiative (GLI) Clearinghouse resources Tier II criteria revised 2013. <http://www2.epa.gov/gliclearinghouse/>. From US EPA Region 4 Surface Water Screening Values Table 1a

(b) SCDHEC R.61-68 Freshwater Aquatic Life <https://live-sc-dhec.pantheonsite.io/sites/default/files/media/document/R.61-68.pdf>

(c) Concentration used for screening is maximum concentration from the Reedy River

ATTACHMENT 6
TABLE 6-6
ECOLOGICAL SCREENING - SURFACE WATER - REEDY RIVER - OFFSITE
HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT
FORMER BRAMLETTE MGP SITE
DUKE ENERGY CAROLINAS, LLC, GREENVILLE, SC

Analyte	CAS	Number of Samples	Number of Detections	Frequency of Detection	Range of Detection		Concentration Used for Screening (c) (µg/L)	USEPA Region 4 Freshwater Chronic Screening Value (µg/L)		SCDHEC Freshwater Aquatic Life (b) Chronic Screening Values (µg/L)	Screening value Used (a) (µg/L)	Hazard Quotient	COPC?
					Min	Max							
BTEX / VOC													
Benzene	71-43-2	10	1	10%	2.3	2.3	2.3	160	a	NA	160	1.44E-02	N
Ethylbenzene	100-41-4	10	1	10%	0.5	0.5	0.5	61	a	NA	61	8.20E-03	N
Chloromethane	74-87-3	10	3	30%	4.4	13.2	13.2	NA		NA	NA	NA	N

*Data evaluated includes data from 1st quarter 2019 to 1st quarter 2020, unless otherwise noted

Prepared by: KCS. Checked by: HES

Notes:

BTEX - benzene, toluene, ethylbenzene, and xylene

NA - Not Available

USEPA - United States Environmental Protection Agency

CAS - Chemical Abstracts Service

SCDHEC - South Carolina Department of Health and Environmental Control

VOC - Volatile organic compounds

COPC - Constituent of Potential Concern

µg/L - micrograms/ liter

(a) Great Lakes Initiative (GLI) Clearinghouse resources Tier II criteria revised 2013 <http://www2.epa.gov/gliclearinghouse/>. From US EPA Region 4 Surface Water Screening Values Table 1a

(b) SCDHEC R.61-68 Freshwater Aquatic Life <https://live-sc-dhec.pantheonsite.io/sites/default/files/media/document/R.61-68.pdf>

(c) Concentration used for screening is maximum concentration from onsite wetland