SITE CHARACTERIZATION REPORT

for

FULTON GAS WORKS 3301 WILLIAMSBURG AVENUE RICHMOND, VIRGINIA

VRP #00676

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LIST OF ACRONYMS

ASTM American Society of Testing and Materials

bsg below surface grade

DEQ Department of Environmental Quality
DNAPL Dense Non-Aqueous Phase Liquid
ESA Environmental Site Assessment

FGW Fulton Gas Works ft/d feet per day

HRECs historic recognized environmental condition

K hydraulic conductivity

K_{ow} octanol-water partition coefficient

MGP manufactured gas plants

ml milliliters
MS matrix spike

MSD matrix spike duplicate MW monitoring well

PAHs polycyclic aromatic hydrocarbons

PCBs polychlorinated biphenyls
PID photoionization detector
PPL priority pollutant list (metals)
QA/QC quality assurance/quality control
RECs recognized environmental condition

SB soil boring

SCR site characterization report SVOC semi-volatile organic compounds

UVIF- CPT ultraviolet-induced fluorescence – cone penetration test

VOCs volatile organic compounds
VGS Virginia Geotechnical Services
VRP voluntary remediation program



1.0 BACKGROUND

Fulton Gas Works (FGW), located at 3301 Williamsburg Avenue, was a manufactured gas plant that burned coal and heavy oil to derive volatiles (natural gas) for use as a residential and industrial fuel source. The plant operated from approximately 1856 through the 1950's. Based on the history of the facility, as identified through the completion of an ASTM Standard E 1527-13 Phase I ESA, Timmons Group identified a combination of recognized environmental conditions (RECs) and historical recognized environmental conditions (HRECs) for the "Subject Property" including: hazardous substances and/or petroleum products, storage tanks, subsurface conditions favorable to vapor migration, the potential presence of polychlorinated biphenyls (PCBs), stained soil/pavement and/or stressed vegetation, odors, and railroad activity. As a function of the historical research conducted in conjunction with the Phase I ESA, Sanborn maps were secured for the parcel (Appendix A). These maps have proved especially useful for identifying former buildings associated with the gas plant that, since closure, have been demolished, yet still provide information regarding the potential for historic sources of environmental impact.

The results of the Phase I ESA recommended the completion of a Phase II ESA to physically assess the degree of potential environmental impact. The Phase II ESA was executed in two phases that included: 1) the collection of soil and groundwater samples from 12 locations across the site, and 2) the collection of shallow soil gas samples from 19 locations across the site. The analytical results confirmed the presence of adsorbed, dissolved, and vapor phase concentrations of volatiles and semi-volatiles associated with light and heavy fractions of petroleum hydrocarbons with adsorbed and dissolved concentrations of metals also detected. Furthermore, the presence of free product was initially identified through the Phase II ESA.

As a result of the Phase II ESA findings, an application was filed with the Virginia Department of Environmental Quality (DEQ) to enroll FGW (located at 3301 Williamsburg Avenue) into the DEQ Voluntary Remediation Program (VRP). The VRP application also included three adjoining properties located at 3100, 3110, and 3200 East Main Street for which Phase I and limited Phase II ESA studies have likewise recently been conducted. All parcels were formally accepted into the VRP program on March 25, 2016, under VRP site number 00676 (i.e., VRP #00676). A site map illustrating the local property boundaries and the limits of the VRP study area is included in Appendix A. After reporting to DEQ on the level of assessment completed to date, the determination was made that a further and more comprehensive assessment was needed to fulfill VRP site characterization requirements.

2.0 PREVIOUS ASSESSMENTS

Timmons Group was provided with previously-completed assessments for FGW and adjoining properties whose review lent greater understanding to the site characteristics. The following documents were reviewed in the completion of this SCR, and all have previously been provided to VDEQ:

- Schnabel Engineering (May 2000) Virginia Department of Transportation (VDOT) project to connect Main Street and Williamsburg Avenue
- Earth Tech (September 2001) Property Evaluation Report in September 2001 to identify cleanup costs
- Marshall Miller and Associates (December 2001) Site Investigation Report prepared for VDOT to study feasibility of roadway improvements of Main Street and Williamsburg Avenue
- Virginia Geotechnical Services (January March 2006) Preliminary Environmental Assessment and Preliminary Environmental Assessment Addendum to detail concentrations of contamination onsite.

It should be noted that all regulatory contaminant exceedances reported in the previous studies were to the standards applicable at the time of their publication.

The Schnabel report did not offer an extensive narrative, but did include analytical results for lead and polycyclic aromatic hydrocarbons (PAHs) from the soil at FGW and the surrounding properties. Boring logs



for eight drill locations were included with detailed descriptions of the subsurface conditions. Notably, detectable photoionization detector (PID) measurements and remarks on the odor of the subsurface were noted for six of the boring locations.

Earth Tech conducted a physical analysis of the property without any analytical investigations to formulate an estimate of cleanup costs. Field observations including: depth to water, PID readings, and comments on visual notations were included for a total of 22 test excavations across FGW and the adjoining properties. A varied groundwater table was measured with depths ranging from 2-15 feet below ground surface (bgs), and an opinion was offered that the contaminants of concern likely affected the direction of groundwater flow. Though analytical tests were not completed as a part of the property evaluation report, information regarding chemical compounds typically found at manufactured gas plant (MGP) sites was included as a groundwork for understanding potential contaminants of concern at the site. Observations regarding the type of contamination typical at MGP sites, interpreted to FGW based on visual observations, was offered; most specifically, the presence of free tars and oils within the subsurface and purifier wastes in surface soils were described. From these observations, comments regarding the remediation process were offered, including an outline of the source removal process. An estimate of the costs for remediation was offered at \$1.5-2.5 million. A map of test pit locations, a conceptual cross section, and boring logs were also included with this report.

Marshall Miller and Associates published a Site Investigation Report to evaluate potential environmental impacts for a proposed Route 5/Main Street improvement. Analytical and visual analyses were conducted to determine the feasibility of the project. From FGW and the surrounding areas, samples from the soil, groundwater, sediment and surface water were collected for analysis. Benzene, toluene, ethylene, and xylene (BTEX), PAHs, and lead concentrations were detected within soils at FGW and described in summary format; a complete copy of the analytical report was not included within the obtained text. Sediment samples were collected upstream and downstream of FGW from within Gillies Creek and sampled for PAHs and lead. Concentrations were detected for multiple contaminants in both samples; however, an increase in the amount of PAHs was noted downstream of FGW with the opinion that "contaminants associated with past activities have significantly affected the sediment downstream" (Marshall Miller & Associates, 2001). Up-and down-stream surface water sampling for PAHs, lead, mercury and arsenic was all below detectable limits.

A Preliminary Environmental Assessment was completed by Virginia Geotechnical Services in January 2006. Multiple tasks were covered in this report, including a wetland delineation, geotechnical assessment, and an environmental assessment. Extensive site history, including annual reports from the Department of Public Utilities dated 1935, 1937, and 1947 were included in the report. Detailed information regarding building usage, rebuilding efforts, quantities of materials present on the site, and other functional information was provided from these documents.

VGS retained ConeTec Inc. to conduct ultraviolet-induced fluorescence (UVIF) cone penetration tests (CPTs) as part of their 2006 assessment to produce in-situ data regarding material type and rudimentary characterization of PAHs present in the subsurface. A total of 17 locations were subjected to UVIF-CPT across the site for which the following results were noted:

- Subsurface contamination primarily occurs within the first 15 feet bgs, but extends in cases to up to 20 feet bgs;
- In the southern portion of the Study Area, results generally showed the absence or minimal presence of PAHs;
- Soil types were observed as non-homogenous, with a range of clay, sand, and silt mixtures;
- Two locations located near the northern area of the property near Williamsburg Road indicated strong subsurface contamination from approximately five feet bgs to 13 feet bgs;
- Converse to the previous, two locations likewise located in the northern area of the site indicated subsurface contamination through the entire profiled subsurface

The Preliminary Environmental Assessment Addendum completed by Virginia Geotechnical Services (VGS) in March 2006 included the advancement of two soil borings within the boundaries of FGW, and four



from adjoining properties, from which corresponding soil and groundwater samples were collected for analysis. The analytical results reflected multiple DEQ VRP Tier II exceedances of Semi-Volatile Organic Compound (SVOC) concentrations and arsenic in the soil, in addition to multiple SVOCs, benzene, metals and pesticides in the groundwater. VGS likewise advanced one soil boring outside of the presently defined VRP site boundaries to the southwest from which one soil and one groundwater sample were collected for analysis. The analytical results reflected multiple DEQ VRP Tier II exceedances of multiple SVOCs, pesticides, and arsenic in the soil, and multiple SVOCs and metals exceedances in the groundwater.

3.0 SITE INVESTIGATION WORKPLAN

Based on the studies completed to date in conjunction with DEQ VRP SCR requirements, Timmons Group developed and implemented a work plan for site characterization with input and concurrence by DEQ as presented by this report. As determined in part through the results of the Phase II ESAs, the VRP site was divided into four study areas to offer a sequential approach to assessment by highlighting areas of emphasis and de-emphasis (Appendix A). Overall, the following table details the chronology of sampling events:

	December 7-8, 2015	groundwater samples from across Areas I and IV Soil gas survey completed in Areas I and IV using a Geoprobe® for vapor point installation; surface soil samples					
Phase II ESA	June 2-3, 2016						
		collected in Area III using a hand auger					
	October 3-4, 2016	Test excavations dug in Areas I, II and IV to top of the					
		surficial water table in association with site characterization					
	October 25, 2016	Groundwater sample collected from remnant VGS well					
Site	,	onsite for site characterization					
Characterization	November 30, 2016	Geoprobe® borings installed in Areas I, II, and III for					
		downgradient delineation					
	January 4-13, 2017	Permanent monitoring wells installed using hollow-stem					
	-	augers					

Study Area I

During completion of the Phase II ESA, a total of nine soil borings were proposed for advancement into the subsurface of Study Area I using a Geoprobe® in accordance with ASTM and industry standards. However, of the nine proposed soil boring locations, only seven were able to be completed as a result of refusal. Following the completion of soil sampling, the borings were converted to monitoring wells to facilitate the collection of groundwater samples. In addition, ten vapor points were advanced in Study Area I to facilitate the collection of shallow soil gas samples that were analyzed for vapor concentrations using EPA Method TO-15.

Duplicating earlier testing by Earth Tech, execution of the site characterization procedures included the excavation of eight test excavations - seven from within the boundaries of Study Area I, and one from outside of the property boundary towards Gillies Creek. Excavation was accomplished using a backhoe, which enabled the evaluation of subsurface conditions from surface grade to the top of the surficial water table. During excavation, displaced soils were stockpiled within an area of containment on plastic sheeting to minimize the potential for runoff. Furthermore, after the water table had stabilized in each excavation, a soil sample was collected from the profile immediately above the water table for laboratory analysis. At the conclusion of excavation, the pits were backfilled with the previously removed material and the disturbed areas were covered with straw.

Using the data gained from the previous exercises, three 4-inch and five 2-inch diameter groundwater monitoring wells were installed within Study Area I using hollow stem augers. The larger diameter wells served three purposes: to compliment the previously installed Geoprobe® wells; to provide a mechanism



to delineate lateral and vertical extents of soil contamination, as able; and to accommodate future groundwater monitoring, sampling, and remediation requirements.

Study Area II

No work was completed within Study Area II by Timmons Group prior to the site characterization phase.

Continuing the duplication of earlier activity by Earth Tech, two test excavations were dug in Study Area II to further evaluate subsurface conditions in the perceived downgradient direction. As with Study Area I, displaced soils were stockpiled on plastic sheeting within an area of containment to minimize the potential for runoff and soil samples were collected from each excavation for analysis. At the conclusion of the exercise, the pits were backfilled with the previously removed material and the disturbed areas were covered with straw.

In addition, a total of five Geoprobe® borings were installed within Study Area II for the collection of soil samples. Following the completion of soil sampling, four of the boring locations were converted to monitoring wells to facilitate groundwater sampling. The fifth location was not able to be converted to a groundwater monitoring well as a result of boring rejection at ten feet bgs due to shrink-swell clays.

Study Area III

Timmons Group collected 12 surface soil samples from Study Area III for the analysis of priority pollutant list (PPL) metals in association with the completion of a limited Phase II ESA. The selection of PPL metals for analysis was based on distance from the main FGW site and proximity to the bordering railroad trestle in conjunction with scheduled roadway improvements to East Main Street.

One of the monitoring wells installed by VGS during their 2006 study was identified within Study Area III and sampled by Timmons Group to evaluate the presence of groundwater contamination.

Two Geoprobe® borings were advanced into the subsurface within Study Area III on November 30, 2016. Following the collection of soil samples, one of the borings was converted to a monitoring well to facilitate groundwater sampling; the other boring was positioned in close proximity to the previously installed VGS groundwater monitoring well referenced above.

Study Area IV

Five soil borings were advanced into the subsurface of the Study Area IV on December 7-8, 2015, using a Geoprobe® direct-push hydraulic sampler in association with the completion of the Phase II ESA. Following soil sample collection, the borings were converted to monitoring wells to facilitate the collection of groundwater samples. Nine vapor points were also installed within Study Area IV on June 2-3, 2016, to facilitate the collection of shallow soil gas samples that were analyzed for vapor concentrations in conjunction with the Phase II ESA.

Two test pits were excavated within Study Area IV on October 3-4, 2016, to further evaluate subsurface conditions. As in the other study areas, displaced soils were stockpiled on plastic sheeting within an area of containment to minimize the potential for runoff, and soil samples were collected from each excavation for analysis. At the conclusion of the exercise, the pits were backfilled with the previously removed material and the disturbed areas were covered with straw.

In addition, Timmons Group installed one 4-inch diameter groundwater monitoring well in Study Area IV to analyze the lateral extent of soil contamination, to continue to monitor groundwater conditions, and to serve as a possible mechanism for future potential remediation efforts.



3.1 Identification of Source Area

Based on the descriptions above, Areas I and IV are considered to comprise the primary and secondary source areas, respectively. Area I generally encompasses the historic boundary of the original coal gasification facility and Area IV represents the area of facility expansion that occurred in the late 19th century, as reflected by a historical resource review that was submitted under separate cover.

4.0 PHYSICAL SETTING

General geology, hydrogeology, and surface drainage characteristics for the region are described below as collected from available resource data.

4.1 Geology

As described in the Phase I ESAs completed for the various parcels that constitute the VRP site, the entire property is located within the Coastal Plain Physiographic Province in close proximity to the Fall Line, which is the boundary separating the Coastal Plain Province and the westward Piedmont Physiographic Province. In general, the Coastal Plain is underlain by a wedge of unconsolidated to semi-consolidated, predominantly clastic sedimentary rocks that consist of mostly sand, silt, and clay with lesser amounts of gravel and limestone. Coastal plain formations thicken seaward from a feather edge at their updip limit along the Fall Line, where they overlie older metamorphic, igneous, and consolidated sedimentary rocks of the Piedmont Province, and attain thicknesses ranging from approximately 3,500 to 6,500 feet along the coast (Meisler and Miller, 1988).

According to the Geologic Map of Virginia (1993), the site is underlain by the Chesapeake Group, Potomac Formation and Lower Tertiary Deposits which are described below:

- Chesapeake Group (map label Tc): may include the following formations within the area of the site Yorktown, Eastover, Choptank, and Calvert; overall fine-to coarse-grained guartzose sand, silt, and clay; variably shelly and diatomaceous.
- Lower Tertiary Deposits (map label TI): Glauconitic quartz sand and clay-silt, shelly in part, minor sandy limestone and limey sand; may include the following formations: Brightseat, Aquia, Marlboro-Nanjemoy, and Piney Point (Pamunkey Group); and Old Church.
- Potomac Formation (map label Kp): Light-gray to pinkish- and greenish-gray quartzo-feldspathic sand, fine- to coarse-grained, pebbly, poorly sorted, commonly thick-bedded and trough cross-bedded. Sand is interbedded with gray to green, massive to thick-bedded sandy clay and silt, commonly mottled red or reddish-brown. Includes lesser amounts of clay-clast conglomerate and thin-bedded to laminated, carbonaceous clay and silt. In some downdip areas, uppermost part of unit may be of earliest Late Cretaceous age. Thickness ranges from a feather-edge at western limit of outcrop to more than 3,500 feet in subsurface of outermost Coastal Plain.

Below these geologic units, the site is expectedly underlain by the Petersburg Granite of the Piedmont Physiographic Province, which is generally described as pink to blue faintly foliated coarse-grained granite with a high relative hardness.

4.2 Hydrogeology

As demonstrated by the Geologic Map of Virginia in conjunction with applicable published resource data (McFarland and Bruce, 2006), the site is underlain by a mix of formations that each lends to the complex framework of Coastal Plain hydrogeology at its western terminus along the fall line. Furthermore, studies to date indicate that a majority of the site has received deposits of artificial fill or has otherwise been



manipulated, resulting in the obscuring of what otherwise could be measured as natural hydrogeologic characteristics.

Of perhaps the greatest relevance to the site is the presence of the Potomac Formation, which thickens eastward and forms the aquifer that is the largest, deepest and most widely used in the source of groundwater in the Virginia Coastal Plain. The Potomac aquifer is overlain across most all of its extent by the Potomac confining zone (unit). Locally incised areas are projected as narrow belts crossing the fall zone along the Potomac, Rappahannock, James, and Nottaway Rivers and Rowanty Creek in eastern Dinwiddie County. The Potomac aquifer crops out across the steepest slopes of these incised areas but is mostly covered by several feet or more of flood plain, terrace, and channel fill sediments that compose the surficial aquifer (McFarland and Bruce, 2006).

Differentiation along the Fall Zone of the Potomac confining zone from the overlying Nanjemoy-Marlboro, Calvert, and/or St. Mary's confining units and from the Yorktown confining unit can be relatively obscured because all of these hydrogeologic units are relatively thin and have indistinct borehole geophysical log signatures (McFarland and Bruce, 2006).

Although the Potomac confining zone is regionally extensive, it impedes groundwater flow primarily at a local scale. Potomac Formation clays generally exhibit small scale published vertical hydraulic conductivities ranging anywhere from 0.0000019 to 0.000081 feet per day (ft/d). Comparatively, published vertical conductivities through the overlying Nanjemoy-Marlboro confining unit range from 0.0000022 to 0.0000363 ft/d (McFarland and Bruce, 2006). Although positioned between the Potomac and Nanjemoy-Marlboro confining units, measurements of vertical conductivity in the Aquia formation are not published.

Published Horizontal hydraulic conductivities for the three formations of interest are as follows:

Hydrogeologic Unit	Lateral Hydraulic Conductivity (K)
Surficial Aquifer	50-100 ft/d
Nanjemoy-Marlboro Confining Unit	0.000035 ft/d
Aquia Aquifer	50 ft/d
Potomac confining unit	0.0001 to 0.003 ft/d

Where each of the above was determined by groundwater model calibration (McFarland, 1999).

4.3 Site Drainage

U.S. Geological Survey (USGS) 7.5 Minute topographic maps for the Richmond, Virginia Quadrangle were reviewed to extrapolate general groundwater characteristics for the VRP site. Groundwater is expected to flow towards the James River, which is situated at a distance less than approximately 600 feet from FGW to the west. Accordingly, groundwater is expected to flow from the site to the southwest.

FGW and some of the adjoining properties included in this study are bordered to the south and west by Gillies Creek which empties into the James River immediately beyond East Main Street. Research completed in association with this assessment also indicates that Bloody Run, a former tributary of Gillies Creek, previously bisected FGW and converged with Gillies Creek along the southern boundary of the site.

4.3.1 James River

The James River is located on average 600 feet west of the designated source areas of FGW and less than 400 feet from Area III of the overall project site.



4.3.2 Gillies Creek

According to research, the flow of Gillies Creek historically migrated across the southern extent of the site before being rechanneled and lined with concrete sometime between 1968 and 1972 as a response to historic flooding events. As part of the realignment project, the channel was also deepened to a 15-year flood level but with the ability to also accommodate 100-year flood events. As a result of the concrete lining of the channel, Gillies Creek is suspected to offer no direct effect on groundwater flow across FGW.

4.3.3 Bloody Run

Previously stated, Bloody Run was a former tributary of Gillies Creek that bisected FGW. The creek was filled in 1884 in conjunction with the westward expansion of the FGW facilities. Prior to 1884, the immediate area west of Bloody Run was comprised of single-family residences.

5.0 SAMPLING AND ANALYTICAL PROCEDURES

Timmons Group implemented detailed and uniform sampling and analytical procedures for the purpose of ensuring the collection of representative site data from which the extent of environmental impact could be characterized across the site. All samples collected to date have followed this methodology, and all samples collected in the future will likewise follow these procedures as the sampling objective is to collect and analyze samples in accordance with ASTM and industry standards that produce representative results.

5.1 Field Procedures QA/QC

To minimize any potential bias in the sampling and analytical results, standardized procedures were employed for field activities including material usage, equipment calibration, sample collection, sample packaging, and equipment decontamination. The specifics of each procedure are detailed below.

5.1.1 Material Usage

Sampling and monitoring materials utilized for the project were identified prior to work scope implementation and coincided with industry and ASTM Standards as acceptable materials. Disposable sampling equipment was used as available (e.g., dedicated bailers and disposable tubing) to minimize risks of cross contamination during sample collection.

5.1.2 Equipment Calibration

Measurements of pH and temperature were used as a benchmark to evaluate groundwater stability prior to sample collection. Accordingly, calibration of the pH meter occurred daily prior to the start of groundwater sampling as outlined in the operation and field manual that accompanies the device. Calibration records were entered into the field log.

PIDs were employed by an Industrial Hygienist during all subsurface monitoring and sampling activity to monitor ambient air concentrations of benzene and VOCs. Accordingly, the PIDs were calibrated prior to the start of monitoring per the manufacturers operational manual.

5.1.3 Sample Collection:

Sample collection was completed in accordance with ASTM and industry standards with samplers wearing nitrile gloves and using dedicated sampling materials at each location to ensure sample integrity and prevent cross contamination. Sample containers were either commercially sterilized by the manufacturer and/or prepared by the laboratory.



5.1.4 Sample Packaging

General cleanliness was employed in the areas of sample preparation to minimize potential risks of sample contamination. All soil and groundwater samples were packaged in appropriately sized and preserved containers that were coincidental with the analyte(s) being evaluated. Following collection, the soil and groundwater samples were packed in ice-filled coolers and cooled to 4°C for (additional) preservation and delivery to the laboratory under a chain of custody. Samples were maintained on ice at 4°C following collection pending delivery to the laboratory within the method specified holding time. Additional sampling quality assurance/quality control (QA/QC) procedures are detailed in Section 5.6.

5.1.5 Equipment Decontamination

All field equipment that came into direct contact with sampled materials was decontaminated prior to use to prevent cross-contamination. Field equipment decontamination proceeded in the following manner:

- 1. Rinse with distilled water,
- 2. Scrub with a (minimum) 9:1 water-Liqui-Nox® solution,
- 3. Rinse with distilled water, and
- 4. Air dry.

Decontamination procedures employed by the Geoprobe® operator and driller are detailed in the appropriate sections below.

5.2 Soil Sampling

Surface and subsurface soil samples were collected in association with both the site characterization investigation and the prefacing Phase II ESA to measure and delineate suspected contaminant concentrations across the site. A conceptual site model was produced and consulted to identify all possible mechanisms of transport and exposure of contaminants across the site, and was referenced in the development of the site sampling schema (Appendix B). Soils were identified to be a likely contaminant area, and soil sampling was identified as central to the site characterization process. Procedures included the collection of soil samples by hand auger, direct- push sampling, split spoon sampling, and from open excavations. During sampling activity, all attempts were made to characterize the nature and composition of the subsurface soils to the best of ability noting specifically soil texture, composition, and any indications of staining as noted by the soil logs.

Soil sampling accomplished both the collection of material for analytical analyses and the creation of a record of subsurface site conditions, as noted in soil boring logs (Appendix C).

5.2.1 Rationale for Soil Sampling

The selection of soil sampling locations, although largely random, was nonetheless based on several factors including information gained from previous studies detailing site usage history which alluded to areas of high probability. Sampling locations were further selected with the intent of providing sufficient coverage to enable comprehensive analysis of the site conditions.

Based on the continued and former presence of an extensive railroad network onsite and its potential as a source of environmental impact, metals were sampled from the uppermost levels of the soil horizons along with PCBs, pesticides, and herbicides. Pesticides and herbicides were analyzed due to suspected surface applications at FGW and in the surrounding vicinity. However, the presence of these analytes was not wholly expected based on the operational history of the facility.

Collected subsurface samples were analyzed for potential contaminants identified by reviewed resources and recommended by DEQ as common to manufactured gas plant sites. Areas of visible staining were notably sampled during the advancement of soil borings and/or exploratory excavations. The depth to static



groundwater was also measured and noted during soil sampling activities with the intention of collecting all soil samples above the phreatic zone.

5.2.2 Soil Sampling

Soil specimens were collected as grab samples using either a hand auger, direct-push machinery, split spoon samplers or by physically collecting the sample from an excavator bucket. For each method, sample collectors were clean, disposable nitrile gloves for sample collection, which was completed in such a fashion as to not introduce any bias. Soil samples were likewise uniformly retained in appropriate, commercially prepared/sterilized containers that were provided by the contracted laboratory. Furthermore, all samples were packed according to method requirements and upon sealing were appropriately labeled and preserved for transportation to the laboratory for analysis. Sampling methods utilized during the site characterization assessment are as follows:

5.2.2.1 Soil Sample Collection by Stainless Steel Hand Auger

Prior to the collection of a soil sample, the hand auger is washed in an Liqui-Nox® solution and rinsed with distilled water after which the hand auger is advanced into the ground for sample collection. Upon achieving the desired depth, the hand auger is retrieved from the subsurface where the sampled material is collected from the bottom of the hand auger and transferred to the appropriate pre-cleaned sample jar for packaging and delivery to the laboratory for analysis with a chain-of-custody.

As detailed by the previously prepared Limited Phase II ESA submitted to the City of Richmond dated September 2, 2016, soil samples collected by hand auger originated from the three East Main Street parcels where the focus was on evaluating the presence of suspected heavy metals concentrations derived from fallout associated with the bordering elevated railroad trestle.

In addition, due to observed site conditions, two additional surface soil samples were collected on January 13, 2017, for analysis of PCBs. The two samples were collected in close proximity to an overturned transformer near the east-central portion of the property. One sample was collected in a visibly stained location in close proximity to the transformer, and another was collected just outside of the visibly stained area originating from the transformer.

5.2.2.2 Soil Sample Collection by Excavation

During the completion of the exploratory excavations, soil samples were collected directly from the center of the excavator bucket being careful to only retain unbiased material representative of the active excavation. Samples were only collected after a determination had been made as to the depth of the water table to ensure the collection of dry samples. At the conclusion of sampling and excavation at each location, any obvious indication of contamination that offered the potential to bias the succeeding sample was addressed by spraying the excavator bucket with a concentrated Liqui-Nox® solution.

5.2.2.3 Soil Sample Collection by Geoprobe®

Soil sampling activity completed using a Geoprobe® was accomplished using a 2-inch diameter by five-foot long continuous Macrocore sampler in accordance with the following protocol:

Prior to advancement into the subsurface, the continuous core sampler is washed in a Liqui-Nox® solution and rinsed with clean water after which a new acetate liner is inserted into the sampler. The sampler is then positioned beneath the drive head of the continuous core sampler and advanced into the subsurface to the desired depth. Upon attaining the desired depth, the continuous core sampler is withdrawn from the subsurface for sample retrieval at which time the cutting shoe is unthreaded from the continuous core sampler and the filled acetate liner separated from the cutting shoe. The acetate liner is then opened to enable access to the soil sample for inspection and collection.



Upon accessing the collected sample, site personnel inspected the soils, noting the physical properties of the material and visually identifying the presence of any suspect environmental contamination.

5.2.2.4 Soil Sample Collection by Hollow-Stem Auger

Soil samples were collected during hollow-stem auger drilling that preceded 2-inch and 4-inch (diameter) monitoring well installation using a 2-inch diameter by two-foot long split-spoon sampler in accordance with the following protocol:

At the desired depth interval, the rotation of the auger is interrupted and the drive head disconnected to enable the insertion of a clean split spoon sampler with an adequate length of drill rod into the stem of the auger for sample collection. The drill rod is then connected to the hammer which is used to drive the sampler completely into the subsurface for sample collection. Following sample collection, the split spoon is retrieved from the subsurface and head and shoe removed so that the split barrel can be opened for sample inspection and collection.

As with the Geoprobe® Macrocore sampler, once collected, site personnel inspected the soils, noting the physical properties of the material and visually identifying the presence of any suspect environmental contamination.

Following sample collection, the components of the split spoon were washed in an Liqui-Nox [®] solution and rinsed with clean water which was allowed to air dry before reuse. The flight of hollow-stem augers was withdrawn from the subsurface and after removing the bulk of soil material from the threads was decontaminated by steam cleaning.

5.3 Groundwater Monitoring Well Installation

Following the collection of soil samples through either direct push or hollow-stem auger drilling, the majority of the completed borings were converted to groundwater monitoring wells to facilitate the collection of samples for laboratory analysis of suspected dissolved phase contaminants.

5.3.1 Rationale for Monitoring Well Placement

As the placement of groundwater monitoring wells is a product of the selected locations of soil borings, as detailed in Section 5.2.1, the potential for encountering representative groundwater conditions was equally weighed to the potential for encountering representative soil conditions. Therefore, the selection of monitoring well locations, although largely random, was based on information gained from previous studies and the site usage history to identify high probability areas of potential impact in conjunction with providing sufficient coverage of the site to enable a comprehensive analysis of the site conditions.

5.3.2 Monitoring Well installation by Geoprobe®

Direct push borings were converted to 1-inch diameter monitoring wells using flush-joint threaded sections of schedule 40 polyvinyl chloride (PVC) pipe as indicated by the well diagrams presented in Appendix D.

In construction, the 1-inch diameter wells were backfilled with washed sand to an approximately one foot below grade with the remaining annulus backfilled with hydrated granulated bentonite to form a seal at the surface. The well heads were set above grade and capped with non-locking PVC slip-caps.

5.3.3 Monitoring Well installation by Hollow-Stem Auger Drilling

Monitoring wells installed in conjunction with hollow stem auger drilling were constructed of either 2-inch of 4-inch schedule 40 PVC piping. The completed wells consisted of varying lengths of 0.010 slotted screen as detailed by Appendix D.



Comparatively, the 2-inch and 4-inch diameter wells were backfilled with washed well gravel to approximately two feet below grade over which was placed a one-foot-thick bentonite seal that was hydrated before filling the remainder of the well annulus with Portland cement. Each of the 2-inch and 4-inch well-heads were finished above grade and encased within locking steel stick-ups that were set in the surficial concrete.

Following installation, the 2-inch and 4-inch diameter monitoring wells were developed by overpumping in combination with surging to remove silt and turbidity that may have been introduced during installation. Monitoring well development was considered complete when the discharge water was continually free of fine sediment. Based on the nature of the site, the well development discharge was contained in 55-gallon drums and stored onsite pending appropriate disposal.

5.3.4 Monitoring Well Survey

Following the completion of monitoring well installation across FGW, the elevations of the 1-inch, 2-inch and 4-inch diameter well heads were surveyed from a USGS benchmark to 0.01-foot accuracy so that the depths to groundwater in each well could be gauged relative to sea level. Using the survey data, the surface of the unconfined water table aquifer was delineated across the site to identify the shape of the water table and further delineate the direction(s) of groundwater flow beneath the site (Appendix E).

5.4 Groundwater Gauging/Sampling

At the beginning of groundwater sampling procedures, each monitoring well was first gauged with a groundwater interface probe and/or an oil-water interface probe to measure the depth to groundwater and evaluate the presence of free-phase hydrocarbons on the water table. After each instance of gauging, the probes were cleaned in a solution of Liqui-Nox® and distilled water and rinsed with distilled water to prevent cross-contamination among the wells. Following the collection of groundwater samples, an aquifer pump test was completed in one of the wells installed using hollow-stem augers to offer a means of evaluating the hydrogeologic properties of the subsurface materials.

5.4.1 Rationale for Groundwater Sampling

Groundwater samples were collected from the onsite and offsite groundwater monitoring wells to coincide with the collection of soil samples in evaluating the presence of contaminants identified by reviewed resources and recommended by DEQ as common to manufactured gas plant sites. Groundwater sampling was perceived to be necessary after consulting the conceptual site model, as contamination via the subsurface aquatic environment was perceived to be probable (Appendix B).

5.4.2 Monitoring Well Purging

Prior to collecting groundwater samples, each monitoring well was purged of a minimum of three (3) well volumes, or until dry, using either a peristaltic pump (for one-inch diameter wells), submersible pump, or by manual bailing (for 2-inch and 4-inch diameter wells). The required purge volumes were calculated for each monitoring well based on the height of the water column and the well diameter. At the start of purging, pH was additionally measured as a benchmark from which groundwater stability was measured prior to sample collection. As with the well development discharge, all purge water was contained in appropriately labeled liquid waste drums and temporarily stored onsite pending disposal. Groundwater samples were not collected until the monitoring wells recovered to at least 95% of their initial water level.

5.4.3 Groundwater Sampling

5.4.3.1 Low Flow Sampling with a Peristaltic Pump

With one exception, low flow techniques were utilized for the collection of groundwater samples from all monitoring wells using a peristaltic pump in accordance with the following procedures:



- The pump is fitted with dedicated, disposable, silicone and low-density polyethylene tubing.
- Water quality parameters are measured prior to sample collection to ensure groundwater stabilization.
- The water intake position remains constant throughout the sampling process. The sampling flow rate may be reduced but does not exceed the purging flow rate.
- Sample containers are filled directly from the pump discharge tubing.

5.4.3.2 Groundwater Sampling Using a Submersible Pump

The monitoring well installed by VGS (Timmons Group MW-28.1) was sampled using a 2-inch diameter Grundfos submersible pump fitted with 3/8-inch diameter polyethylene tubing which was used for both purging and sampling. In accordance with standard procedures, a minimum of three well volumes was purged prior to sample collection, at which time the flow rate was reduced for sample collection. Water quality parameters were measured at the advent of purging and prior to sample collection to ensure groundwater stabilization. As with the peristaltic pump, the sample was collected directly from the discharge tubing for the pump.

5.4.3.3 Aquifer Testing

To measure the hydrogeologic parameters of the underlying strata, Timmons Group conducted a one-well aquifer test in MW-16 on January 18, 2017 (Appendix F). Based on the volume of artificial fill observed across most of the site over the course of the investigation, in addition to the presence of subgrade facility piping and the presence of contaminated media, MW-16 was chosen based on its location along the western margin of the site in what was determined by the boring log to represent more native materials; furthermore, MW-16 demonstrated comparatively lower levels of contamination than the majority of the available wells which simplified the pumping conditions and management of the discharge water.

The aquifer test was completed as a groundwater recovery test based on a greater reliability in data quality, compared to pumping/drawdown tests, because recovery occurs at a constant rate and is not influenced by the erratic fluctuations that can be characteristic of pumping. Furthermore, drawdown in a pumped well has been shown to be influenced by well loss and well-bore storage which can skew the resulting data.

The construction details and pre-test measurements for MW-6 are detailed as follows:

- Monitoring well diameter = 4 inches
- Total length of casing = 20 feet (continued)
- Screen length = 15 feet
- Casing below grade = 16.36 feet
- Casing above grade = 3.62 feet
- Depth to groundwater = 6.03 feet
- Position of water table below grade = 2.41 feet
- Height of water column in well = 13.97 feet

The pumping action of the aquifer test was completed using a two-inch diameter Grundfos submersible pump fitted with 3/8-inch polyethylene tubing. Groundwater data was collected using a Levelogger downhole transducer that was preprogrammed to measure water table recovery according to the following schedule:

- Initial water level reading
- 30 seconds for five minutes = 10 readings
- one-minute for 15 minutes = 15 readings
- five minutes for 30 minutes = 6 readings
- 30 minutes for two-hours = 3 readings



The submersible pump was positioned at a calculated depth that was five feet above the bottom of the well while the Levelogger was placed in the bottom of the well so that sufficient starting head value would be able to be reflected by the recovery record. In addition to the Levelogger readings, groundwater recovery levels were also measured manually as backup using a groundwater interface probe.

Drawdown of the well occurred at a nearly constant rate for approximately 20 minutes at which time the water level was maintained to create steady state conditions. After gaining confidence in the steady state conditions, pumping was discontinued and the test began.

5.5 Surface Water Sampling

Surface water sampling was not completed in association with this site characterization investigation. Previous studies completed by others involved the collection of surface water samples from Gillies Creek both upstream and downstream of FGW for which the results showed no influx of contamination. The conceptual site model did not immediately indicate the need for surface water sampling.

5.6 Soil Vapor Sampling

5.6.1 Rationale for Soil Vapor Sampling

The selection of vapor sampling locations was based on several factors including information gained from previous studies detailing the site usage history, which identified high(er) probability areas of contamination. Sampling locations were further selected with the intent of providing sufficient coverage to enable comprehensive analysis of the site conditions. Vapor sampling was decidedly necessary after consulting the site conceptual model, which indicated a high probability of vapor migration occurring across this site (Appendix B).

Based on the mobility of VOCs within the subsurface, the initial round of vapor samples were analyzed solely for VOCs. Future sampling will measure for both VOCs and SVOCs, as necessary.

5.6.2 Soil Vapor Sampling

As detailed by the Soil Gas Survey prepared by Timmons Group and dated September 16, 2016, a total of 19 soil vapor points have been installed across FGW to depths generally ranging from two to four feet below surface grade, based on the depth to groundwater and with the intent of keeping the points above the phreatic zone. Based on the initial results which focused on volatile analysis, an additional suite of vapor samples may be collected for SVOC analysis in addition to confirmatory and comparative analysis of VOCs with the results submitted as an addendum.

5.7 Analytical Methodology

Air Water and Soil Laboratories (VELAP ID: 460021 – Appendix G) performed the analyses for all parameters. Media samples were analyzed according to methods detailed in the table on the following page according to the EPA SW-846 Compendium.

Based on the nature and extent of contamination across the Site, limitations in the analytical procedures became apparent throughout the investigative process. Sample dilutions were necessary in some cases to complete analysis, which influenced the limit of quantification and limit of detection for some samples. As a result for some parameters, the minimum, attainable quantification levels were beyond the conservative VRP screening levels (possible Type II error). These instances were cataloged and illustrated by Tables 1A-1D. Without incurring additional/extensive costs, further refinement of the detection limits was impossible at the Site due to the amount of contamination, which interfered with analytical procedures.



5.8 Analytical QA/QC

Analytical QA/QC methods were utilized according to laboratory-specified protocols to ensure data integrity. Samples were analyzed in accordance with standard EPA methodology. Details of analytical methods by parameter are found on the following page.

<u>Field Duplicate Samples</u>: Field duplicate samples were collected at a rate of one per sample collection method. The purpose of field duplicate samples is to evaluate laboratory performance by comparing the analytical results of two samples from the same location.

<u>Laboratory Quality Control Samples</u>: Three types of laboratory QA samples were collected during the sampling event: trip blanks, matrix spike/matrix spike duplicates (MS/MSD) samples, and temperature blanks.

- **Trip Blank Samples** Trip blanks are filled with analyte-free water by the laboratory, and remain unopened in the cooler during the sampling event. The 40 milliliter (ml) vials can help identify widespread contamination through shipping or environmental exposures.
- Matrix Spike/Matrix Spike Duplicates (MS/MSD) MS/MSD samples are collected as required by the laboratory to indicate sample matrix effects on the preparation and measurement methodology. MS/MSD samples are spikes and analyzed by the laboratory to identify effects of the particular matrix of interest on analytical results. Sample volumes will be collected for MS/MSD samples to be prepared for analysis at a rate of 5 percent, or one per sampling event, whichever is more frequent.
- Temperature Blanks: The laboratory fills 40 ml vials with deionized water that are included in the
 coolers holding groundwater samples to ensure that the liquids are appropriately cooled to 4°C
 upon delivery to the laboratory.

6.0 INVESTIGATIVE RESULTS

6.1 Subsurface Characteristics

6.1.1 Test Pit Observations

Twelve test pits were excavated using a backhoe on October 3-4, 2016. This method of exploration allowed for the broad visual characterization of the subsurface including soil conditions, areas of contamination, and observation of the static water table. Detailed field notes characterizing subsurface conditions by test pit are included in Appendix C, and observations from subsurface explorations, including test pit data, have been visually represented in the subsurface cross-sections included in Appendix H.

Layers of cobble suggesting a former roadbed were observed in Test Pits 1, 2, 9, and 11 within the top two feet. Brick layers were also observed in Test Pits 3, 9 and 12, again within the top two feet. Observed groundwater levels varied across the examined area, with depth to groundwater increasing towards the southern portions of the property. Evidence of contamination as staining and/or free product was observed in Test Pits 1, 3, 4, 5, 6, 7, 8, 9, and 11. Such widespread presence of contamination assists in more clearly characterizing the subsurface, but the amount of obvious contamination also suggests comprehensive contamination across much of the site.



Analytical Methodology per Analyte

Media	Contaminant Group	Contaminant	Analysis Method
	VOCs		SW8260B
	SVOCs		SW8270D
Soil	PPL Metals	Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Nickel Selenium Silver Thallium Zinc	SW6010C
		Mercury	SW7471B
	Cyanide		SW9012
	Hexavalent chromium		SW7196A
	Herbicides		SW8151A
	Pesticides		SW8081B
	TPH-ORO		SW8015C
	TPH-DRO		SW8015C
	PCBs	Arochlor	SW8082A
	VOCs		SW8260B
	SVOCs	2,3,7,8-TCDD (SIM)	SW8270D EPA625
Groundwater	PPL Metals	Arsenic Beryllium Cadmium Chromium Copper Lead Nickel Silver Zinc	EPA200.7, EPA 200.8, SW7010
		Antimony Selenium Thallium	EPA200.9
		Mercury	EPA245.1
	Cyanide		SW9012
	Hexavalent chromium		SW7196A
	Herbicides		SW8151A
	Pesticides		SW8081B
	TPH-ORO		SW8015C
	TPH-DRO		SW8015C
	PCBs	Aroclor	SW8082A
Vapor	VOCs		Compendium Method TO-15



The analytical results for samples collected from the test pits are described in Section 6.2.1 "Soils Data" below.

6.1.2 Boring Logs

Detailed boring logs were constructed for soil borings (SBs) 22-29 and are included as Appendix C. Because these logs were generated using the Geoprobe[®] continuous Macrocore sampler, they offer the most comprehensive record of the materials encountered from surface grade to the completion depth of the borings. For each boring, a soil description, comments, and depth to water are noted.

The resulting soil descriptions generated by this exercise provide insight as to the composition and texture of the underlying soils but more importantly details as to the occurrence of contamination within the subsurface horizons. For example, a notable layer of petroleum staining was observed at a depth of ten feet bgs in SB-23 immediately above a six-foot-thick layer of shrink-swell clay. Likewise, a layer of contamination layer was similarly observed above a one-foot thick clay-based confining layer in SB-24 between 2-6 feet bgs. Contamination was observed not only in the subsurface above confining layers but was also seen to exist within clay layers as noted in SB-25 and SB-28. In conjunction with the presence of a high degree of contamination, the degradation and/or absence of soil structure was noted in SB-26 and 27

6.1.3 Groundwater Elevation Data

The groundwater elevation data referenced in Section 5.3.4 served as the basis for constructing a contour map of the water table aquifer to identify the direction(s) of groundwater flow beneath the site. The resulting map is presented in Appendix E and generally illustrates a southwestern direction of groundwater flow with a drop in gradient of 12 to 14 feet from the northeastern boundary along Williamsburg Avenue to the elevated railroad trestle. An apparent groundwater divide also extends across the site from the northeast to the southwest and splits flow into a northern component that is more westerly and a southern component that is more southerly.

6.1.4 Presence of Free Product

Free product was detected in 13 of the onsite and offsite monitoring wells during groundwater gauging events that accompanied monitoring well installation and the collection of groundwater samples. In all instances of detection, free product was measured as thicknesses of dense non-aqueous phase liquid (DNAPL) in the bottom of the groundwater monitoring wells rather than light non-aqueous phase liquid (LNAPL) floating on the water table surface. When inspected, the product appeared as a highly viscous, black substance that was interpreted to be coal tar.

Over the course of the Phase II ESA and site characterization investigation, free product was detected in MW-5, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-19, MW-17, MW-26 and MW-27 with a maximum thickness of approximately eight inches measured in MW-12 on January 11, 2017. Based on the nature of the observed material, recovery was not feasible with the resources available at the time of detection.

6.1.5 Aquifer Test

The aquifer test results were analyzed using the Neuman solution method offered by Aqtesolv (HydroSOLVE, Inc.) which accounts for the following conditions:

- aquifer has infinite areal extent,
- · aquifer is homogeneous and of uniform thickness,
- control well is fully or partially penetrating,
- aquifer is unconfined with delayed gravity response,
- · flow is unsteady,
- diameter of a pumping well is very small so that storage in the well can be neglected.



The test results produced a hydraulic conductivity value (K) of 0.5909 ft/day which is much less that the lateral K values identified in Section 4.2 (Hydrogeology) for the aquifers that have been determined to lie beneath the site but also significantly above the identified lateral and vertical K values for the associated confining units. Transmissivity was measured at 8.254 ft²/day.

6.2 Analytical Results

6.2.1 Soil Data

6.2.1.1 Subsurface Soil Samples

Of the 29 soil borings and 12 test excavations completed across the site, 33 subsurface soil samples were collected for analysis. Two Geoprobe® borings were not completed as a result of refusal, and six hollow-stem auger borings were not collected as a result of the site conditions and adequate data coverage through previous efforts.

Subsurface sampling indicated varying levels of contamination across the property which can be broadly characterized as primarily belonging to volatile and semi-volatile organic groups. A complete list of detected contaminants, some of which also exceed corresponding regulatory limits, is included below.

List of Detected Contaminants in Soil

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- 2-Methylnaphthalene
- 4-Isopropyltoluene
- Acenaphthene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Benzo(g,h,i)perylene
- Benzo(k)fluoranthene
- Chrysene
- Cyanide
- Dibenz(a,h)anthracene
- Dibenzofuran
- Ethylbenzene
- Fluoranthene
- Fluorene
- Indeno(1,2,3-cd)pyrene

- Acenaphthylene
- Acetone
- Anthracene
- Benzene
- Benzo(a)anthracene
- Isopropylbenzene
- m+p-Cresols
- m+p-Xylenes
- Naphthalene
- n-Butylbenzene
- Oil-range organics (TPH)
- o-Xylene
- Phenanthrene
- Pyrene
- Styrene
- Toluene
- Xylenes, total

PAHs and VOCs were the most common analytes encountered on this site. A selected subset of contaminants and corresponding regulatory levels for each sampling location are presented in Table 2.

The highest number of Tier II and/or Tier III exceedances per soil boring locations resulted for benzo(a)anthracene (19 of 32 sampled locations exceeded screening levels, or 59%), benzo(b)fluoranthene (59%), benzo(a)pyrene (53%), and naphthalene (53%). Levels of other parameters also existed in high quantities across the site: indeno(1,2,3-cd)pyrene (11 of 32 sampled locations exceeded screening levels, or 34%), 1,2,4-trimethylbenzene (28%), benzene (22%), cyanide (22%), phenanthrene (22%), pyrene (22%), 1,3,5-trimethylbenzene (19%), and o-xylene (19%).

In addition to the above, concentrations of benzene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and naphthalene were measured in concentrations that are orders of magnitude above their corresponding regulatory Tier III screening levels. Likewise, concentrations of 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 2-methylnaphthalene, acenaphthalene, cyanide, fluorene,



dibenz(a,h)anthracene, dibenzofuran, indeno (1,2,3-cd) pyrene, o-xylene, phenanthrene, and pyrene were measured at levels an order of magnitude greater than their corresponding Tier II screening concentrations.

Contaminant isocontour maps depicting the spatial distribution of adsorbed phase concentrations are included as Appendix I, and screening level maps delineating areas of Tier II and Tier III exceedances for selected analytes are included as Appendix J.

6.2.1.2 Surface Soil Samples

From monitoring well installations, test pit excavations, and surficial samples, a total of 42 surface samples have been collected across the site and adjoining properties. A number of compounds have been detected within the first two feet of the surficial subsurface as detailed below.

List of Detected Contaminants in Surface Soil

Arsenic

Cadmium

Copper

Mercury

Beryllium

Chromium

Lead

Nickel

Among the collected surface soil samples, exceedances of the VRP Tier II Residential Screening Levels were observed for arsenic, cadmium, chromium, lead, and thallium, as well as exceedances of the VRP Tier III Residential Screening Levels for arsenic and thallium.

Of the 42 surface samples collected, 23 results exceeded the arsenic soil screening level of 3.4 mg/kg, and two samples also exceeded the Tier III screening level of 30 mg/kg.

Surface soils were sampled for chromium concentrations in the form of total chromium and hexavalent chromium. Soil samples collected from the excavated test pits were analyzed for hexavalent chromium via analytical method SW7196A. Results for hexavalent chromium in all 12 test pits indicated levels below detection limits. Based on the absence of hexavalent chromium, all additional soil samples were analyzed for total chromium via method SW6010C. Of the collected samples, all but one exceeded the Tier II screening level for total chromium of 3 mg/kg. A Tier III screening level does not presently exist for total chromium.

Four instances of exceedance of the VRP Tier II screening level for lead (270.03 mg/kg) were observed, along with four instances of samples that exceeded the Tier II and III screening levels for thallium (0.078 mg/kg and 1.2 mg/kg, respectively). One additional surface soil sample, TP-11, slightly exceeded the VRP Tier II RSL for cadmium of 7 mg/kg with a value of 7.26 mg/kg. Other metals whose presence was detected in the soil, but whose concentrations did not exceed applicable RSLs included: beryllium, copper, mercury, nickel, and zinc (Table 3).

Surficial soil samples collected on January 13, 2017, that were analyzed for PCBs via Method 8082A indicated no detects. Data tables for all results are presented at the end of the report in front of the appendices, and corresponding laboratory reports are included in Appendix K.

Contaminant isocontour maps depicting the spatial distribution of selected adsorbed phase concentrations within surface soils are included as Appendix I, and screening level maps delineating areas of Tier II and Tier III exceedances for selected analytes are included as Appendix J.

6.2.2 Groundwater Data



To date, each of the 23 monitoring wells that have been installed both onsite and on the adjoining properties have been sampled once for analysis.

The groundwater sampling results indicate varying levels of contamination across the property that can be broadly characterized as metals, VOCs and SVOCs. A complete list of the detected contaminants, some of which also exceed corresponding regulatory limits, is included below.

A selected subset of contaminants and corresponding regulatory levels for each sampling location are presented in Table 4. While some PAHs were observed in the groundwater, there were many compounds consisting of a single arene and many methylated groups.

List of Detected Contaminants in Groundwater

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- 2,4-Dimethylphenol
- 2-Methylnaphthalene
- 4-Isopropyltoluene
- Acenaphthene
- Acenaphthylene
- Acetone
- Anthracene
- Arsenic
- Benzene
- Benzo(a)anthracene
- Cadmium
- Chromium
- Chrysene
- Copper
- Cyanide
- Ethylbenzene
- Fluoranthene
- Fluorene

- Isopropylbenzene
- Lead
- m+p-Cresols
- m+p-Xylenes
- Mercury
- Methyl tert butyl ether
- Naphthalene
- Nickel
- n-Propylbenzene
- o-Xvlene
- Phenanthrene
- Pyrene
- sec-Butylbenzene
- Selenium
- Styrene
- Thallium
- Toluene
- Diesel-range organics (TPH)
- Xylenes, total
- Zinc

The highest number of Tier II and/or Tier III exceedances per monitoring well location were seen for naphthalene (16 of 23 sampled locations exceeded screening levels, or 70%), cyanide (65%), benzene (61%), lead (57%), 1,2,4-trimethylbenzene (52%), o-xylene (52%), cadmium (48%), ethylbenzene (48%),1,3,5-trimethylbenzene (43%), and arsenic (43%). Levels of other parameters also existed in moderate quantities across the site: 2-methylnaphthalene (seven of 23 sampled locations exceeded screening levels, or 30%), nickel (30%), and isopropylbenzene (22%).

In addition to the above, concentrations of 1,2,4-trimethylbenzene, benzene, cyanide, ethylbenzene, isopropylbenzene, mercury, naphthalene, n-propylbenzene, o-xylene, toluene, total xylenes were measured in concentrations that are orders of magnitude above their corresponding regulatory Tier III screening levels. Likewise, concentrations of 1,3,5-trimethylbenzene, 2,3-dimethylphenol, 2-methylnaphthalene, acenaphthene, acenaphthylene, benzo(a)anthracene, cadmium, fluoranthene, fluorene, lead, phenanthrene, pyrene, and zinc were measured at levels an order of magnitude greater than their corresponding Tier II screening concentrations.

Isocontour maps depicting the spatial distribution of dissolved phase concentrations are included as Appendix I, and screening level maps delineating areas of Tier II and Tier III exceedances for selected analytes are included as Appendix J.



6.2.3 Vapor Data

As discussed in the previously completed Soil Vapor Survey prepared by Timmons Group, vapor phase data indicate the presence of multiple compounds in the shallow gas/vadose zone (less than three feet). A complete list of detected contaminants, some of which also exceed corresponding regulatory limits, is displayed below.

A selected subset of contaminants and corresponding regulatory levels for each sampling location are presented at the end of the report (Table 5). Detected results were compared to the EPA RSL Resident Air and Construction Worker Air screening levels with a target hazard quotient of 0.1, based on the presence of multiple contaminants. Some of the most frequently occurring compounds at FGW do not have a corresponding EPA RSL value; however, of those compounds that do, the following exceeded both the resident air and construction worker air screening levels: benzene, 1,2-butadience, chloroform, ethylbenzene, and naphthalene.

List of Detected Contaminants in Soil Vapor

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- 1,3-Butadiene
- 2-Butanone
- Benzene
- Carbon Disulfide
- Chloroform
- Chloromethane
- Cyclohexane
- Ethylbenzene
- Heptane

- Hexane
- Isopropylbenzene
- m+p-Xylenes
- Naphthalene
- o-Xylene
- Propylene
- Styrene
- Toluene
- Xylenes, total
- Hexane
- Isopropylbenzene

Benzene was the most commonly occurring compound onsite and was measured at levels exceeding the RSL value in 12 of 19 samples (63%). Exceedances were also observed for ethylbenzene (21%), naphthalene (21%), 1,3-butadiene (5%), and chloroform (5%).

Contaminant isocontour maps depicting the spatial distribution of select vapor phase concentrations are included as Appendix I, and screening level maps delineating areas of EPA RSL exceedances for selected analytes are included as Appendix J.

7.0 DISCUSSION OF RESULTS

The presence of measured soil, groundwater, and vapor phase concentrations in the subsurface originate from the documented, historical, direct application of coal and heavy oil by-products of the gasification process to the ground surface and subsurface. The results introduced a source of contamination that continues to occupy the subsurface horizons beneath the site with a moderate to high potential for offsite migration depending upon the volatility of the compounds.

7.1 Soil Interpretation

7.1.1. Subsurface Soil Samples

Soil concentrations of analyzed parameters from across the site indicate high levels of adsorbed phase contamination. Former MGP sites are well-characterized by available resource data as being heavily impacted by VOC and SVOC contaminants, particularly PAHs. These general characteristics were observed at the former FGW through the site investigations detailed by this report. As such, subsurface soil



samples were analyzed for the full suite of VOCs and SVOCs as allowed by their respective methodologies from which the results identified regulatory exceedances as noted in Section 6.2.1.1 and further detailed in Table 2.

To offer a means of explaining the presence of some compounds versus others, aside from the general statement that compounds onsite tend to be PAHs, the octanol-water partition coefficients (K_{ow}) for some of the most commonly occurring compounds are identified by the table below. K_{ow} , defined as the ratio of a chemical's concentration in the n-octanol phase to its concentration in the aqueous phase of a two phase n-octanol/water system, which is displayed in logarithmic format for ease of interpretation. K_{ow} is commonly used to predict the behavior of environmental contaminants, as low K_{ow} values tend to be hydrophobic.

Compound	Log K _{ow}
Benzene	2.05
Toluene	2.58
Ethylbenzene	3.11
o-Xylene	3.11
1,3,5-Trimethylbenzene	3.42
Naphthalene	3.51
Isopropylbenzene	3.59
1,2,4-Trimethylbenzene	3.78
2-Methylnaphthalene	3.99
Fluorene	4.38
Phenanthrene	4.52
Pyrene	5.32
Benzo(a)anthracene	5.91
Benzo(a)pyrene	6.06
Benzo(b)fluoranthene	6.57
Indeno (1,2,3-cd) pyrene	6.84

Given the length of time since the plant was in operation when compounds were generated and disposed of onsite, understanding the tendency for the contaminants to interact with groundwater versus behaving in a more stationary fashion helps predict their current location in the subsurface. Thus, compounds with lower K_{ow} values may interact with water and be influenced by groundwater flow across the site more so than compounds with higher K_{ow} values.

The adsorbed phase data set for this study indicate that more soil samples exceeded regulatory screening levels for benzo(a)anthracene (59%), benzo(b)fluoranthene (59%), and benzo(a)pyrene (53%) versus benzene (22%), which further indicates a strong trend for K_{ow} values to explain site behavior. A moderate association between K_{ow} and contaminant occurrence within the subsurface is supported by 2-methylnaphthalene (28%) and 1,2,4-trimethylbenzene (25%) results. However, the site data do not present a perfect fit as shown by soil samples that exceed regulatory values for indeno(1,2,3-cd)pyrene (34%) and pyrene (22%).

A strong association between log K_{ow} values for individual contaminants and their presence at FGW should not be assumed, but the data indicate that log K_{ow} can be used to project the presence of these compounds onsite versus their migration off-site. Molecular weight, density, and other descriptive information about the contaminants onsite can be used to help infer the presence and movement of compounds. Of course, the presence of compounds in the soil is also a function of the chemical composition of the original source product, and the results of any transformative processes that have occurred (i.e. degradation products).



The interpretation of isocontour and screening level exceedance maps prepared for this study lends greater understanding of the distribution of compounds, as certain groups of measured compounds behaved comparably onsite. Multi-ring compounds were observed to behave similarly onsite. For example, benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were measured in high concentrations in the southeastern portion of the site and in the off-site fringes before Gillies Creek turns to its confluence with the James River (Appendix J). Commonalities were also observed between many of the single-ring compounds, namely, benzene, trimethylbenzene, ethylbenzene, toluene, and xylenes. The greatest concentrations of these chemical analogues were measured in the southeastern portion of the site, and as with the PAHs, some concentrations were also measured just off-site before the confluence of Gillies Creek with the James River. Benzene and ethylbenzene in particular were measured in high concentrations in the southern portion of the site near the former twomillion cubic foot gasometer.

Two compounds in particular were observed at FGW that are characteristic of manufactured gas plants: naphthalene and cyanide. Naphthalene is the most common byproduct of the coal tar distillation process and has a distinct "mothball" odor easily detected by the human nose at low concentrations. As stated earlier, the compound was measured in multiple locations in the subsurface in concentrations exceeding the Tier II and Tier III screening levels, and in samples tested for the compound, 78% of soils showed regulatory exceedances for this compound. Those concentrations occur across the southern portion of the site in levels that are not uniform but that suggest certain areas of greater concentrations.

In addition, high levels of cyanide concentrations are typical at many former MGP sites. This contamination, indicated by blue staining of the soil, is a leftover visual relic of the impact of the purifier process waste. At FGW, soils were analyzed for cyanide via method SW9012, which provides total and amenable cyanide concentrations. Detectable cyanide concentrations in the soils were located in the southeast portion of the site (Appendix J) which correlated with visual observations of the characteristic Prussian blue soil staining. However, the literature shows that cyanide most commonly exists on former MGP sites in a complexed form, whose mobility within the subsurface and associated potential human impact is limited.

In characterizing the type of compounds present on the site, identifying the original materials generated onsite also provides insight into the persistence of certain compounds. High-density compounds, like were generated in the creation of manufactured gas, seem to have limited mobility through the soil and thus remain persistent today.

7.1.2 Surface Soil Samples

The observed surface soil samples that exceeded the VRP Tier II Screening levels for arsenic and chromium are considered to reflect in part the naturally occurring higher levels of these metals in the project area vicinity. According to resource data, background levels for the Richmond, Virginia area are known to have naturally occurring levels of arsenic and chromium (Shacklette and Boerngen, 1984) that exceed the Tier II screening levels. The literature also suggests that lead occurs at elevated levels in the vicinity of the project area. Given the small amounts by which RSLs are exceeded, and the relative few occurrences of exceedances for lead, concentrations observed onsite are considered to be associated with natural background levels.

The presence of other metals in detectable concentrations that do not exceed RSLs do not present a considerable concern to understanding site conditions and characteristics.

7.2 Groundwater Interpretation

As with the soil data, groundwater concentrations from across the site likewise indicate high levels of dissolved phase VOC and SVOC/PAH contamination, as historical activities with hydrocarbon compounds and their subsequent disposal techniques are the source of contamination.

Describing the movement of contamination within the water table depends on multiple factors, including the contaminants' sorptivity, rate of volatilization, and progression of abiotic and biotic transformations. A full



picture of subsurface interactions between contaminants, groundwater, and the surrounding environment may best be understood through modeling; here, a more simplistic presentation of the contaminants quantified in the subsurface and their locations are presented.

As described in Section 6.2.2, some major groups of chemical compounds were observed. Benzene, trimethylbenzene, and xylenes were seen quantified in the groundwater and are of similar structure. All three compounds were present in greatest concentrations in the south-central and southeastern portions of the site with trends generally following the flow of groundwater towards the southwest.

Naphthalene in the groundwater was widely observed across the site. High concentrations were measured in the north-central portion and southern portions of the site, and very high (>10,000 ug/L) concentrations were observed in the central portion of the site, and on the southern-adjoining parcels. A review of the Sanborn maps acquired by Timmons Group during the Phase I ESA (Appendix A) indicates multiple areas of tar extraction, pumping, and holding near the areas with greatest measured groundwater concentrations of naphthalene. These concentrations likely originate from the dissolution of source materials and the influence of groundwater flow.

To a lesser degree, 2-methylnapthalene was quantified in the south-central portion of the site, with concentrations extending off-site. The location of this compound within the subsurface appears well-correlated to the movement of groundwater flow.

Cyanide concentrations were greatest in the central southeastern portion of the site, with some concentrations extending off-site. Cyanide concentrations seem to align with historical information regarding disposal locations for purifier wastes, rather than groundwater direction.

7.3 Vapor Interpretation

The presence of compounds in the vadose zone are a direct reflection of the contamination levels within the soil and groundwater and the source areas of free product originating from FGW. One exception to the previous may be reflected by the dispersion of cyclohexane concentrations in the upgradient/northern area of the site, which potentially implies the migration from off-site sources onto the site (Appendix I). However, in considering that vapors migrate relative to variations in pressure gradients through the pathway of least resistance (i.e., along utility or pipeline trenches) versus coincidence with topographic or hydrostatic gradients, soil vapors may exhibit a potential for perceived upgradient migration. This may especially hold true for the measured concentrations of benzene and propylene which, when mapped, illustrate no particular trend relative to utilities, topography, or the calculated direction of groundwater flow. The presence of naphthalene, toluene, and xylenes are concentrated in the southeastern area of the site where the greatest concentrations of coal tar were observed onsite, as well as the greatest areas of contaminants measured in the soil and groundwater. The occurrence of these measured compounds in the area is also coincidental with groundwater flow.

7.4 Site Summary

The individual analyses of soil, groundwater, and soil vapor indicates the presence of surface and subsurface contamination both onsite and offsite. While a discussion on the potential for offsite migration may be speculative based on a limited number of offsite data points associated with this investigation, the likelihood nonetheless seems apparent.

Cross sections generated across the parcel offer a means of further understanding the interaction between the surface, groundwater, and contamination present within the subsurface. In the diagrams, the flow of groundwater is interpreted from the elevation of both the surface and groundwater tables, and the presence of contamination is shown in vapor, water, and soil.

Benzene and naphthalene were selected for analysis within the cross sections based on their widespread presence across the site and their differing characteristics. Examining their occurrence across all media



facilitated interpretation with respect to elevation and groundwater flow. For most of the monitoring points, the occurrence of benzene occurred in conjunction with naphthalene, where measured. In two instances depicted within the cross-sections, benzene only was present in the vapor phase, which correlates with known characteristics of its increased mobility in the subsurface. In four instances, naphthalene only was present in the soil samples, and in one instance, naphthalene only was present in a groundwater sample. In all other sampling locations shown in the cross-sections, the two compounds were present or absent together, though with some varying differences in concentrations when detected.

These findings support reference material that suggests PAHs are less mobile through the subsurface, and that lower molecular-weight compounds have greater mobility from the source area.

The former FGW facility, through its normal operations and standard practices for the day, generated high molecular weight hydrocarbons that were disposed of onsite according to conventions for the time. Field observations and analytical results confirmed that their widespread presence within the subsurface continues approximately 60 years after ceasing operations. Given the chemical characteristics of these compounds and the subsurface environment in which they reside, many remain somewhat stable and stationary. The presence of heavy compounds in the soils, and the presence of mid-weight and lighterweight compounds in the groundwater and soil vapor also suggests that the source material remains primarily onsite. Indeed, the presence of original source material (i.e. coal tar) was observed in multiple locations on the main parcel. Some migration of source material through the subsurface was observed south of the site, correlating to the direction of groundwater flow, but the area in which free product was observed seems to be contained (see Appendix A, I, and J for maps).

8.0 RECOMMENDATIONS FOR ADDITIONAL ACTIONS

The former FGW site is presently being evaluated for demolition and redevelopment but to date proposed usage has not been specified. Regardless, the demolition of the remaining structures and any subsequent construction will offer potential risks to construction/utility workers, so at a minimum, a corresponding risk assessment should be completed for that population. If as the project scope expands additional populations are identified, appropriate models should be applied to capture and evaluate further risk(s). Appropriately and accordingly, as decidedly necessary, additional groundwater and/or soil vapor monitoring and/or sampling may be necessary to increase the dataset through which exposure risks may be modeled and realized.

Within the primary source area, as defined in Section 3.1 and illustrated by the maps presented in Appendix A, in conjunction with the analytical dataset of the SCR, contaminant levels in Area I are greater than Area IV. As such, and with the delineated flow of groundwater to the southwest, risks associated with potential contaminant migration are greatest toward the adjoining properties identified in Section 3.0 as Area II. However, despite the potential for contaminant migration and instead considering the relative immobility of contaminants as discussed in Section 7.4, the primary source area presents a minimal risk to the three properties along East Main Street that collectively comprise Area III. Therefore, the primary risks associated with Area III are associated with surficial metals as detailed in Section 6.2.1.2. However, in comparison to naturally occurring background levels and VRP Screening Levels as detailed in Section 7.1.2, any perceived risks are demonstrated to be minimal. So in consideration of the above, Timmons Group recommends that the three parcels located along East Main Street be removed from the VRP with a corresponding certificate of satisfactory completion of remediation based on site characterization.

As reflected by the findings presented within this Site Characterization Report, multiple petroleum-based compounds were identified on the main Fulton parcel. Any prescribed actions to remediate the site should immediately focus on concentrations of PAHs, as their chemical characteristics present the greater challenge based on their persistence/resilience within the subsurface. Though other chemicals were identified through the site characterization process, focusing remediation efforts based on PAHs cleanup is anticipated to address the majority of the onsite contamination. To the previous, the proposed demolition of the remaining structures of the former facility will offer great advances toward site remediation by providing mechanisms for source removal.



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TABLE 1.a - Soil Screening Level Exceedances

					Instances of LOD>Tier II SL	Instances of LOD>Tier III SL
Parameter	Reference Method	LOD range	Tier II	Tier III	exceedences	exceedences
1,1,1,2-Tetrachloroethane	SW8260B	0.24-4.99	ng/kg 0.07245	88	25	0
	SW8260B SW8260B	0.24-4.99 2.5-4.99	1.98584	3600		
1,1,1-Trichloroethane					2	0
1,1,2,2-Tetrachloroethane	SW8260B	0.024-4.99	0.01226	27	26	0
1,1,2-Trichloroethane	SW8260B	0.24-4.99	0.04706	0.63	25	4
1,1-Dichloroethane	SW8260B	0.24-4.99	0.18058	160	25	0
1,1-Dichloroethylene	SW8260B	0.24-4.99	0.06901	100	25	0
1,2,3-Trichlorobenzene	SW8260B	0.24-4.99	0.11771	66	25	0
1,2,4,5-Tetrachlorobenzene	SW8270D	0.083-1000	0.04565	25	32	2
1,2,4-Trichlorobenzene	SW8270D	11.5-1000	5.8	26	6	2
1,2,4-Trimethylbenzene	SW8260B	0.24-4.99	0.115	24	25	0
1,2-Dibromo-3-chloropropane (DBCF		0.005-4.99	0.00318	0.64	32	4
1,2-Dibromoethane (EDB)	SW8260B	0.005-4.99	0.00036	1.6	32	2
1,2-Dichlorobenzene	SW8270D	81.7-1000	28.9471	930	2	1
1,2-Dichloroethane	SW8260B	0.24-4.99	0.03467	14	25	0
1,2-Dichloropropane	SW8260B	0.24-4.99	0.0486	6.6	25	0
1,3,5-Trimethylbenzene	SW8260B	0.957-27.1	0.90731	1200	4	0
1,3-Dichlorobenzene	SW8270D	11.5-1000	7.83294	110	6	1
1,4-Dichlorobenzene	SW8270D	3.72-1000	3.55568	110	15	1
2,3,4,6-Tetrachlorophenol	SW8270D	11.5-1000	8.59875	2500	6	0
2,4,5-Trichlorophenol	SW8270D	81.7-1000	25.8288	8200	2	0
2,4,6-Trichlorophenol	SW8270D	0.33-1000	0.25829	82	30	1
2,4-Dichlorophenol	SW8270D	0.33-1000	0.28068	250	30	1
2,4-Dimethylphenol	SW8270D	2.92-1000	2.19663	1600	23	0
2,4-Dinitrophenol	SW8270D	0.33-1000	0.22345	160	30	1
2,4-Dinitrotoluene	SW8270D	0.33-1000	0.17057	74	30	2
2,6-Dinitrotoluene	SW8270D	0.0833-1000	0.03479	15	32	4
2-Butanone (MEK)	SW8260B	2.5-4.99	1.428	19000	2	0
2-Chloronaphthalene	SW8270D	23.6-1000	22.4557	9300	3	0
2-Chlorophenol	SW8270D	1.4-1000	0.35291	580	29	1
2-Hexanone (MBK)	SW8260B	0.024-4.99	0.01449	130	26	0
2-Methylnaphthalene	SW8270D	1.4-1000	1.09958	300	29	1
2-Nitroaniline	SW8270D	0.33-1000	0.29176	800	30	1
3,3'-Dichlorobenzidine	SW8270D	1.4-1000	0.46176	51	29	2
4,6-Dinitro-2-methylphenol	SW8270D	0.0833-1000	0.01388	6.6	32	6
4-Chloroaniline	SW8270D	0.0833-1000	0.05589	120	32	1
4-Methyl-2-pentanone (MIBK)	SW8260B	0.5-4.99	0.424	5600	5	0
4-Nitroaniline	SW8270D	0.33-1000	0.11772	330	30	1
Acenaphthene	SW8270D	81.7-1000	32.0792	4500	2	0
Acenaphthylene	SW8270D	15.1-1000	14.4604	2300	5	0
Acetone	SW8260B	5-9.97	3.20321	67000	2	0
Acetophenone	SW8270D	1.63-1000	1.56249	12000	28	0
alpha-BHC	SW8081B	0.0263-0.0571	0.02408	3.7	3	0
Anthracene	SW8270D	1000.00	353.751	23000	1	0
Benzene	SW8260B	0.24-10	0.09768	42	25	0
Benzo (a) anthracene	SW8270D	1.63-1000	1.5	29	28	3
Benzo (a) pyrene	SW8270D	0.33-1000	0.15	2.9	30	23
Benzo (b) fluoranthene	SW8270D SW8270D	1.63-1000	1.5	2.9	28	3
Benzo (g,h,i) perylene	SW8270D SW8270D	1000.00	1.5	2300	1	0
· - · · · ·				2300 290		
Benzo (k) fluoranthene	SW8270D	15.1-1000	15 28 005		4	1
Benzoic acid	SW8270D	81.7-1000	28.995	330000	2	0

TABLE 1.a - Soil Screening Level Exceedances

					Instances of LOD>Tier II SL	
Parameter	Reference Method	LOD range	Tier II	Tier III	exceedences	exceedences
bis (2-Chloroethoxy) methane	SW8270D	0.0833-1000	0.02198	250	32	1
bis (2-Chloroethyl) ether	SW8270D	0.0833-1000	0.00082	10	32	6
bis (2-Chloroisopropyl) ether	SW8270D	0.0833-1000	0.04306	220	32	1
bis (2-Ethylhexyl) phthalate	SW8270D	1000.00	86.124	1600	1	0
Bromochloromethane	SW8260B	0.24-4.99	0.04012	63	25	0
Bromodichloromethane	SW8260B	0.5-4.99	0.49172	13	5	0
Bromoform	SW8260B	0.5-4.99	0.4721	1600	5	0
Bromomethane	SW8260B	0.0236-4.99	0.01121	3	26	1
Butyl benzyl phthalate	SW8270D	1000.00	137.696	12000	1	0
Carbon disulfide	SW8260B	0.957-4.99	0.55376	350	4	0
Carbon tetrachloride	SW8260B	0.24-4.99	0.0577	29	25	0
Chlorobenzene	SW8260B	4.99	3.05494	130	1	0
Chloroform	SW8260B	0.957-4.99	0.51092	14	4	0
Chloromethane	SW8260B	0.24-4.99	0.09408	46	25	0
Chrysene	SW8270D	1000.00	150	2900	1	0
cis-1,2-Dichloroethylene	SW8260B	0.957-4.99	0.51685	230	4	0
cis-1,3-Dichloropropene	SW8260B	0.24-4.99	0.04216	2300	25	0
Cyanide	SW9012	2.39-2.5	2.1	13	9	0
delta-BHC	SW8081B	0.0526-0.114	0.020	3.7	3	0
Dibenz (a,h) anthracene	SW8270D	0.33-1000	0.150	2.9	30	23
Dibenzofuran	SW8270D	1.4-1000	0.870	100	29	1
Dibromochloromethane	SW8260B	0.5-4.99	0.475	32	5	0
Dichlorodifluoromethane	SW8260B	2.5-4.99	1.207	37	2	0
Dieldrin	SW8081B	0.0526-0.114	0.041	14	3	0
Diethyl phthalate	SW8270D	23.6-1000	21.882	66000	3	0
Di-n-butyl phthalate	SW8270D	15.1-1000	12.676	8200	4	0
Di-n-octyl phthalate	SW8270D	81.7-1000	62.000	820	2	1
Fluoranthene	SW8270D	1000.00	230.000	3000	1	0
Fluorene	SW8270D	81.7-1000	31.935	3000	2	0
Heptachlor epoxide	SW8081B	0.12	0.080	1.1	1	0
Hexachlorobenzene	SW8270D	1.4-1000	0.746	14	29	4
Hexachlorobutadiene	SW8260B	0.0833-1000	0.068	82	25	0
Hexachlorocyclopentadiene	SW8270D	11.5-1000	8.739	490	6	1
Hexachloroethane	SW8270D	0.0833-1000	0.018	58	29	2
Indeno (1,2,3-cd) pyrene	SW8270D	1.63-1000	1.500	29	26	2
Isophorone	SW8270D	3.83-1000	3.731	16000	11	0
Isopropylbenzene	SW8260B	4.99	3.938	1100	1	0
Methylene chloride	SW8260B	0.0236-4.99	0.023	320	23	0
Methyl-t-butyl ether (MTBE)	SW8260B	2.5-4.99	0.487	2100	2	0
Naphthalene	SW8260B	0.24-49.9	0.114	59	23	0
Nitrobenzene	SW8270D	0.0833-1000	0.038	130	29	1
n-Nitrosodi-n-propylamine	SW8270D	0.0833-1000	0.001	3.3	29	16
n-Nitrosodiphenylamine	SW8270D	81.7-1000	17.436	4700	2	0
o-Cresol	SW8270D	3.72-1000	3.607	4100	12	0
o-Xylene	SW8260B	2.5-4.99	0.926	280	2	0
PCB as Aroclor 1016	SW8082A	1.02-1.91	0.400	5.2	3	0
PCB as Aroclor 1221	SW8082A	1.02-1.91	0.505	6.6	3	0
PCB as Aroclor 1232	SW8082A	1.02-1.91	0.505	6.6	3	0
PCB as Aroclor 1254	SW8082A	0.115-1.91	0.110	1.5	29	1
p-Chloro-m-cresol	SW8270D	11.5-1000	8.542	8200	4	0
Pentachlorophenol	SW8270D	1.63-1000	0.597	40	26	2

TABLE 1.a - Soil Screening Level Exceedances

Parameter	Reference Method	LOD range	Tier II	Tier III	Instances of LOD>Tier II SL exceedences	Instances of LOD>Tier III SL exceedences
Phenanthrene	SW8270D	81.7-1000	34.924	2300	2	0
Phenol	SW8270D	81.7-1000	14.189	25000	2	0
Pyrene	SW8270D	1000.00	90.323	23000	1	0
Tetrachloroethylene (PCE)	SW8260B	0.24-4.99	0.081	39	22	0
trans-1,2-Dichloroethylene	SW8260B	2.5-4.99	0.677	2300	2	0
trans-1,3-Dichloropropene	SW8260B	0.24-4.99	0.042	2300	22	0
Trichloroethylene	SW8260B	0.24-4.99	0.054	1.9	22	2
Trichlorofluoromethane	SW8260B	2.5-4.99	2.451	310	2	0
Vinyl chloride	SW8260B	0.0236-4.99	0.018	17	23	0

TABLE 1.b - Surface Soil Screening Level Exceedances

Parameter	Reference Method	LOD Range	Tier II mg/kg	Tier III	Instances of LOD>Tier II SL exceedences	Instances of LOD>Tier III SL exceedences
Antimony	SW6010C	5-49.7	3.1	47	42	5
Arsenic	SW6010C	9.41-9.9	3.4	30	4	0
Chromium	SW6010C	4.63-4.97	3	N/A	11	N/A
Selenium	SW6010C	11.6-24.9	5.1	580	18	0
Thallium	SW6010C	2.5-24.9	0.078	1.2	42	42

TABLE 1.c - Groundwater Screening Level Exceedances
Instances of Insta

Parameter	Reference Method	LOD range	Tier II	Tier III	Instances of LOD> Tier II SL exceedences	Instances of LOD> Tier III SL exceedences
			ug/L			
1,1,1,2-Tetrachloroethane	SW8260B	8-20	5.7	37.12	5	0
1,1,2,2-Tetrachloroethane	SW8260B	2-20	0.76	0.67	12	12
1,1,2-Trichloroethane	SW8260B	10-50	5	0.62	11	11
1,1-Dichloroethane	SW8260B	50	27	76.37	2	0
1,1-Dichloroethylene	SW8260B	10-50	7	19.55	11	5
1,2,3-Trichlorobenzene	SW8260B	1-50	0.7	N/A	22	N/A
1,2,4,5-Tetrachlorobenzene	SW8270D	10.4-5490	0.17	N/A	22	N/A
1,2,4-Trichlorobenzene	SW8270D	108-5490	70	3.59	11	11
1,2,4-Trimethylbenzene	SW8260B	5-50	1.5	2.90	12	12
1,2-Dibromo-3-chloropropane (DBCP)	SW8260B	4-200	0.2	0.27	22	22
1,2-Dibromoethane (EDB)	SW8260B	1-20	0.05	1.76	22	12
1,2-Dichlorobenzene	SW8270D	2220-5490	600	265.71	3	3
1,2-Dichloroethane	SW8260B	10-50	5	15.13	11	5
1,2-Dichloropropane	SW8260B	10-50	5	3.62	11	11
1,3,5-Trimethylbenzene	SW8260B	20-50	12	N/A	5	0
1,3-Dichlorobenzene	SW8270D	108-5490	75 75	N/A	11	0
1,4-Dichlorobenzene	SW8270D	108-5490 24.4-5490	75 24	25.91 N/A	11 17	11
2,3,4,6-Tetrachlorophenol	SW8270D		24 120	N/A N/A	9	N/A N/A
2,4,5-Trichlorophenol	SW8270D	211-5490				
2,4,6-Trichlorophenol	SW8270D	10.4-5490	1.2	85202.93 N/A	22	0
2,4-Dichlorophenol	SW8270D SW8270D	10.4-5490 111-275	4.6 36	N/A N/A	22 3	N/A N/A
2,4-Dimethylphenol		52.1-27500	3.9	N/A N/A	22	N/A N/A
2,4-Dinitrophenol 2.4-Dinitrotoluene	SW8270D SW8270D	10.4-5490	3.9 2.4	142895.79	22 22	N/A 0
2,4-Dirittotoluene	SW8270D SW8270D	10.4-5490	0.48	N/A	22	N/A
2-Chloronaphthalene	SW8270D SW8270D	10.4-5490	0.46 75	N/A	11	N/A N/A
2-Chlorophenol	SW8270D	10.4-5490	9.1	N/A	22	N/A
2-Hexanone (MBK)	SW8260B	5-250	3.8	821.08	22	0
2-Methylnaphthalene	SW8270D	10.4-1100	3.6	N/A	22	N/A
2-Nitroaniline	SW8270D	20.8-11000	19	2161.72	22	3
3,3'-Dichlorobenzidine	SW8270D	10.4-5490	1.2	503531.62	22	0
4,6-Dinitro-2-methylphenol	SW8270D	52.1-27,500	0.15	N/A	22	N/A
4-Chloroaniline	SW8270D	10.4-5,490	3.6	N/A	22	N/A
4-Methyl-2-pentanone (MIBK)	SW8260B	250	120	55452.44	2	0
4-Nitroaniline	SW8270D	20.8-11000	7.8	12146725.79	22	0
Acenaphthene	SW8270D	54.9-505	53	N/A	11	N/A
Acenaphthylene	SW8270D	22.5-2220	12	N/A	18	N/A
Acetophenone	SW8270D	215-11000	190	N/A	11	N/A
Aldrin	SW8081B	0.053-0.063	0.046	3.19	17	0
Anthracene	SW8270D	21-5490	180	N/A	7	N/A
Benzene	SW8260B	10-500	5	940.77	11	0
Benzo (a) anthracene	SW8270D	0.54-27.5	0.34	177.99	11	0
Benzo (a) pyrene	SW8270D	10.4-5490	0.2	46.70	22	11
Benzo (b) fluoranthene	SW8270D	10.4-5490	0.34	3246.12	22	2
Benzo (g,h,i) perylene	SW8270D	22.5-5490	12	N/A	18	N/A
Benzo (k) fluoranthene	SW8270D	10.4-5490	3.4	3653.58	22	2
Benzoic acid	SW8270D	11100-27500	7500	N/A	3	N/A
Beryllium	EPA200.7 Rev 4.4	20	4	N/A	7	N/A
bis (2-Chloroethoxy) methane	SW8270D	10.4-5490	5.9	N/A	22	N/A
bis (2-Chloroethyl) ether	SW8270D	10.4-5490	0.14	122.42	22	9
bis (2-Chloroisopropyl) ether	SW8270D	10.4-5490	3.6	925.56	22	3
bis (2-Ethylhexyl) phthalate	SW8270D	10.4-5490	6	1063519.81	22	0
Bromochloromethane	SW8260B	10-50	8.3	69.89	11	0
Bromomethane	SW8260B	1-50	0.75	0.17	22	22
Butyl benzyl phthalate	SW8270D	211-5490	160	N/A	9	N/A
Carbon disulfide	SW8260B	100-500	81	124.00	11	5
Carbon tetrachloride	SW8260B	10-50	5	4.15	11	11
Chloromethane	SW8260B	20-50	19	26.03	5	2
Chrysene	SW8270D	44-5490	34	4084.22	14	1
cis-1,3-Dichloropropene	SW8260B	5-50	3.9	52.27	12	0
Cyanide	SW9012	250	200	15.34	1	1
Dibenz (a,h) anthracene	SW8270D	10.4-5490	0.034	1388.57	22	3
Dibenzofuran	SW8270D	5.21-2750	0.79	N/A	22	0

TABLE 1.c - Groundwater Screening Level Exceedances

					Instances of	Instances of
					LOD> Tier II SL	LOD> Tier III SL
Parameter	Reference Method	LOD range	Tier II	Tier III	exceedences	exceedences
Dichlorodifluoromethane	SW8260B	50	20	0.74	2	2
Dieldrin	SW8081B	0.053-0.063	0.017	14.93	17	0
Diethyl phthalate	SW8270D	2220-5490	1500	N/A	3	N/A
Di-n-butyl phthalate	SW8270D	108-5490	90	N/A	11	N/A
Di-n-octyl phthalate	SW8270D	22.5-5490	20	N/A	18	N/A
Fluoranthene	SW8270D	108-5490	80	N/A	10	N/A
Fluorene	SW8270D	44-253	29	N/A	13	N/A
Hexachlorobenzene	SW8270D	1.04-549	1	0.88	22	22
Hexachlorobutadiene	SW8260B	1-50	0.65	3.03	22	12
Hexachlorocyclopentadiene	SW8270D	108-5490	50	0.02	11	11
Hexachloroethane	SW8270D	10.4-5490	0.69	16.05	22	18
Indeno (1,2,3-cd) pyrene	SW8270D	10.4-5490	0.34	1331.11	22	3
Isophorone	SW8270D	2220-5490	380	766806.72	3	0
Isopropylbenzene	SW8260B	50	45	88.72	2	0
Methylene chloride	SW8260B	20-200	5	19252.75	12	0
Naphthalene	SW8260B	1-200	0.61	17.39	22	9
o-Xylene	SW8260B	20-50	19	51.94	5	0
Tetrachloroethylene (PCE)	SW8260B	10-50	5	5.76	11	11
trans-1,3-Dichloropropene	SW8260B	5-50	3.9	52.27	12	0
Trichloroethylene	SW8260B	10-50	5	1.24	11	11
Vinyl chloride	SW8260B	2.5-25	2	1.47	12	12

TABLE 1.d - Vapor Screening Level Exceedances

	 	.u - vapor Scre	J	Instances of	Instances of
		EDA DOL Dest less	EPA RSL	LOQ>Resident	LOQ>Construction
Danamatan	1.00	EPA RSL Resident	Construction	Carcinogenic SL exceedences	Carcinogenic SL exceedences
Parameter	LOQ range	Carcinogenic SL ug/m3	Carcinogenic SL	exceedences	exceedences
1,1,1,2-Tetrachloroethane	4.3-340	0.38	1.70	19	19
1,1,2,2-Tetrachloroethane	4.3-340	0.05	0.21	19	19
1,1,2-Trichloroethane	3.4-270	0.18	0.77	19	19
1,1-Dichloroethane	2.5-200	1.80	7.70	19	17
1,2-Dibromoethane (EDB)	4.8-380	0.00	0.02	19	19
1,2-Dichloroethane	2.5-200	0.11	0.47	19	19
1,2-Dichloropropane	2.9-230	0.28	1.20	19	19
1.3-Butadiene	1.4-110	0.09	0.41	19	19
1,4-Dichlorobenzene	3.8-300	0.26	1.10	19	19
1,4-Dioxane	2.3-180	0.56	2.50	19	18
Allyl chloride	2-160	0.47	2.00	19	18
Benzene	2-400	0.36	1.60	19	19
Benzyl Chloride	3.2-260	0.06	0.25	19	19
Bromodichloromethane	4.2-340	0.08	0.33	19	19
Bromoform	6.5-520	2.60	11.00	19	18
Carbon Tetrachloride	3.9-310	0.47	2.00	19	19
Chloroform	3.1-240	0.12	0.53	19	19
Ethylbenzene	2.7-540	1.10	4.90	19	18
Methylene chloride	170-350	100.00	1,200	3	0
Methyl-t-butyl ether (MTBE)	12-180	11.00	47.00	16	3
Naphthalene	3.3-660	0.08	0.36	19	19
Tetrachloroethylene (PCE)	17-340	11.00	47.00	17	15
Trichloroethylene	3.4-270	0.48	3.00	19	19
Vinyl bromide	2.7-220	0.48	0.38	19	19
Vinyl chloride	1.6-130	0.09	2.80	19	18
NOTE: All vener complete or		U.17	2.00	19	10

NOTE: All vapor samples analyzed via method TO-15

TABLE 2 - Detected Soils Analytical Results (Concentrations Reported in mg/kg)

		1,2,4-	1,3,5-										
Sample	Sample	Trimethylben	Trimethylben	2-Methyl-		Acenaphther	1				Benzo (a)	Benzo (a)	Benzo (b)
Location	Depth (ft)	zene	zene	naphthalene	4-Isopropyltoluene	е	Acenaphthylene	Acetone	Anthracene	Benzene	anthracene	pyrene	fluoranthene
SB-1	2-6	< 0.005	< 0.005	<0.0833	< 0.005	<0.0833	<0.0833	<0.01	<0.0833	< 0.005	<0.0833	<0.0833	<0.0833
SB-2	<8	<0.005	< 0.005	< 0.33	<0.005	<0.33	<0.33	<0.01	<0.33	<0.005	<0.33	<0.33	<0.33
SB-3	<8	<0.005	<0.005	<3.31	<0.005	<3.31	<3.31	0.0227	<3.31	<0.005	16.50	24.40	29.80
SB-4	<8	<0.005	<0.005	<0.0833	<0.005	<0.0833	<0.0833	<0.01	<0.0833	<0.005	<0.0833	<0.0833	<0.0833
SB-5							not installe						
SB-6	<8	0.0263	0.0112	3.36	<0.005	<1.67	<1.67	0.0162	1.77	0.1	1.7	<1.67	<1.67
SB-7							not installe						
SB-8	<8	<0.0236	<0.0236	2.82	<0.0236	2.06	<1.63	<0.0472	5.25	<0.0236	3.8	3.05	3.64
SB-9	<8	<0.005	<0.005	<1.64	<0.005	<1.64	<1.64	<0.01	<1.64	0.0106	4.53	7.83	7.97
SB-10	<6	2.3	1.54	53.5	<0.25	3.09	<1.66	<0.5	4.18	0.399	7.24	8.5	10.2
SB-11	<8	3.5	1.07	161	<0.249	7.73	13.2	<0.497	38.5	1.99	41.5	33.9	32.1
SB-12	<8	8.66	2.88	569	0.63	93.7	195	<0.5	287	177	223	195	185
SB-13							not collect						
SB-14							not collect						
SB-15 SB-16	4-6	<0.957	<0.957	<1.4	<0.957	<1.4	<1.4	<1.91	<1.4	<0.957	<1.4	<1.4	<1.4
SB-17	4-6	20.6	7.39	559	<1.00	132	118	<2	1330	36.6	296	246	317
SB-17	4-0	20.0	1.55	339	<1.00	132	not collect		1330	30.0	290	240	317
SB-19	4-6	2.08	0.723	66.5	<0.500	<23.6	<23.6	<1.00	34.4	<0.5	69.6	56.3	58.4
SB-20	4-0	2.00	0.725	00.5	\0.500	\25.0	not collect		54.4	\0.5	03.0	30.3	30.4
SB-21							not collect						
SB-22	<2						only metals co						
SB-23	<10	<0.25	<0.25	<3.72	<0.25	<3.72	<3.72	<0.5	<3.72	<0.25	12.2	9.23	19.1
SB-24	<11	<0.25	<0.25	<4.06	<0.25	<4.06	<4.06	<0.5	<4.06	<0.25	<4.06	<4.06	<4.06
SB-25	<7	<0.245	<0.245	<4.14	<0.245	<4.14	<4.14	<0.491	<4.14	<0.245	<4.14	<4.14	<4.14
SB-26	<9	<0.247	<0.247	<3.83	<0.247	<3.83	<3.83	<0.494	<3.83	<0.247	<3.83	<3.83	<3.83
SB-27	<8	<0.24	<0.24	<3.83	<0.24	<3.83	<3.83	<0.479	<3.83	<0.24	<3.83	<3.83	<3.83
SB-28	<9.5	<0.247	<0.247	<3.88	<0.247	<3.88	<3.88	< 0.495	<3.88	<0.247	<3.88	<3.88	<3.88
SB-29	<6	<0.25	<0.25	<3.86	<0.25	<3.83	<3.83	<0.5	<3.83	<0.25	<3.83	<3.83	<3.83
TP-1	<4.5	<0.25	<0.25	<12.2	<0.25	<12.2	<12.2	<0.499	<12.2	<0.25	46.3	66.8	99.6
TP-2	<2	<0.25	<0.25	<4.15	<0.25	<4.15	<4.15	<0.499	<4.15	<0.25	9.58	7.26	10.4
TP-3	<3	<0.25	<0.25	<3.47	<0.25	<3.47	<3.47	<0.5	<3.47	<0.25	3.92	4.34	6.88
TP-4	<2	<0.249	<0.249	<3.08	<0.249	<3.08	<3.08	<0.499	<3.08	<0.249	4.1	3.75	7.26
TP-5	<3	<0.25	<0.25	<3.06	<0.25	<3.06	<3.06	<0.5	<3.06	<0.25	<3.06	<3.06	<3.06
TP-6	<3	12.6	4.36	635	<2.50	641	<81.7	<5	129	26.6	178	158	174
TP-7	<5.5	<0.25	0.25	<3.12	<0.25	<3.12	<3.12	<0.5	<3.12	<0.25	<3.12	<3.12	4.32
TP-8 TP-9	<4 <3	1.85 <0.25	0.69	<11.5 <2.92	<0.25	<11.5 <2.92	<11.5	<0.5	<11.5 5.04	4.84	19.8 40.4	14.5 24.9	18.1 50.6
TP-9 TP-10	<5.5	<0.25	<0.25 <0.25	<3.38	<0.25 <0.25	<3.38	3.68 <3.38	<0.5 <0.499	<3.38	<0.25 <0.25	3.39	<3.38	3.81
TP-10	<5.5 <4	<0.25 83.2	27.1	3060	<0.25 <4.99	<3.38	<3.38 <1000	<0.499 <9.97	<3.38 <1000	47.3	<1000	<3.38	<1000
TP-11	<4	<0.25	<0.25	<3.4	<4.99	<3.4	<3.4	<0.499	<3.4	<0.25	10.2	10.6	16.4
VRP	Tier II SL	0.12	0.91	1.1	N/A	32.08	14.5	3.2	353.75	0.098	1.5	0.15	1.5
Screening	TION IT OF	0.12	0.01		14/71	02.00	. 7.0	0.2	000.70	0.030	1.0	0.10	1.0
Levels	Tier III SL	24	1200	300	N/A	4500	2300	67000	23000	42	29	2.9	29

NOTES: Tier II exceedence only
Tier II and Tier III exceedence

NT = not tested

TABLE 2 - Detected Soils Analytical Results (Concentrations Reported in mg/kg)

Commis	Comple	Danza (a h i)	Donzo (k)			Dibonz (o.b)					Indone (1.2.2 ad)	
Sample Location	Sample Depth (ft)	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Cyanide	Dibenz (a,h) anthracene	Dibenzofuran	Ethylbenzene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Isopropylbenzene
SB-1	2-6	<0.0833	<0.833	<0.0833	NT	<0.0833	<0.0833	<0.005	<0.0833	<0.833	<0.0833	<0.005
SB-2	<8	<0.33	<0.33	<0.33	NT	<0.33	<0.33	<0.005	<0.33	<0.33	<0.33	<0.005
SB-3	<8	13.80	9.70	14.30	NT	<3.31	<3.31	< 0.005	16.00	<3.31	14.70	<0.005
SB-4	<8	<0.0833	<0.0833	<0.0833	NT	<0.0833	<0.0833	< 0.005	<0.0833	<0.0833	<0.0833	<0.005
SB-5						not	installed					
SB-6	<8	<1.67	<1.67	<1.67	NT	<1.67	2.23	0.00827	3.63	2.29	<1.67	<0.005
SB-7						not	installed					
SB-8	<8	1.84	<1.63	3.58	NT	<1.63	<1.63	<0.0236	12	4.3	<1.63	<0.0236
SB-9	<8	4.66	3.02	4.99	NT	<1.64	<1.64	<0.005	3.64	<1.64	3.79	<0.005
SB-10	<6	4.89	3.34	6.48	NT	<1.66	<1.66	4.58	10.5	4.15	4.46	0.561
SB-11	<8	13.1	17.8	36.4	NT	<1.67	<1.67	1.53	111	55.3	11.4	<0.249
SB-12	<8	73.4	67.4	191	NT	<3.19	<3.19	96.3	544	240	63.1	4.27
SB-13							collected					
SB-14							collected					
SB-15							collected					
SB-16	4-6	<1.4	<1.4	<1.4	NT	<1.4	<1.4	<0.957	2.85	<1.4	<1.4	<0.957
SB-17	4-6	95.1	91.4	304	NT	32.9	236	6.33	643	401	74.8	<1
SB-18	4.0	F7.4	00.7	00.5	NT		collected	0.5	470	00.4	47.4	2.5
SB-19	4-6	57.4	26.7	63.5	NT	<23.6	<23.6 collected	<0.5	178	26.4	47.4	<0.5
SB-20 SB-21							collected					
SB-21	<2											
SB-22	<10	3.77	<3.72	12.1	15.8	<3.72	<astraction 3.72<="" <="" a=""></astraction>	<0.25	15.8	<3.72	3.81	<0.25
SB-24	<11	<4.06	<4.06	<4.06	< 0.99	< 4.06	<4.06	<0.25	<4.06	<4.06	<4.06	<0.25
SB-25	<7	<4.14	<4.14	<4.14	<1.00	<4.14	<4.14	<0.245	<4.14	<4.14	<4.14	<0.245
SB-26	<9	<3.83	<3.83	<3.83	5.56	<3.83	<3.83	<0.247	<3.83	<3.83	<3.83	<0.247
SB-27	<8	<3.83	<3.83	<3.83	4.67	<3.83	<3.83	<0.24	<3.83	<3.83	<3.83	<0.24
SB-28	<9.5	<3.88	<3.88	<3.88	<0.99	<3.88	<3.88	<0.247	<3.88	<3.88	<3.88	<0.247
SB-29	<6	<3.83	<3.83	<3.83	<0.98	<3.83	<3.83	<0.25	<3.83	<3.83	<3.83	<0.25
TP-1	<4.5	29.4	18.6	39.2	<2.49	<12.2	<12.2	<0.25	31.8	<12.2	34	<0.25
TP-2	<2	<4.15	<4.15	9.44	<2.46	<4.15	<4.15	< 0.25	6.52	<4.15	<4.15	<0.25
TP-3	<3	<3.47	<3.47	3.77	<2.48	<3.47	<3.47	<0.25	<3.47	<3.47	<3.47	<0.25
TP-4	<2	<3.08	<3.08	4.62	<2.39	<3.08	<3.08	<0.249	4.18	<3.08	<3.08	<0.249
TP-5	<3	<3.06	<3.06	<3.06	<2.5	<3.06	<3.06	<0.25	<3.06	<3.06	<3.06	<0.25
TP-6	<3	<81.7	<81.7	139	78.6	<81.7	<81.7	97.3	372	331	<81.7	<2.5
TP-7	<5.5	<3.12	<3.12	<3.12	15.4	<3.12	<3.12	<0.25	<3.12	<3.12	<3.12	<0.25
TP-8	<4	<11.5	<11.5	19.6	<2.44	<11.5	<11.5	1.9	19.2	<11.5	<11.5	<0.25
TP-9 TP-10	<3 <5.5	<2.92 <3.38	5.36 <3.38	39.3 <3.38	41.8 <1.99	<2.92 <3.38	<2.92 <3.38	<0.25 <0.25	55.4 <3.38	<2.92 <3.38	11.9 <3.38	<0.25 <0.25
TP-10	<5.5 <4	< 1000	<3.36	<3.36 <1000	<1.99	<3.36 <1000	<3.36 <1000	34.4	<3.36 <1000	<3.36 <1000	<3.36 <1000	<0.25
TP-11	<4 <4	3.64	<3.4	9.74	16.5	<3.4	<3.4	<0.25	12.9	<3.4	5.55	<0.25
VRP	Tier II SL	170	15	150	2.1	0.15	0.87	39.7	230	31.94	1.5	3.94
Screening	/ICI II OL	170	10	100	2.1	0.10	0.07	00.7	200	01.04	1.0	0.04
Levels	Tier III SL	2300	290	2900	13	2.9	100	250	3000	3000	29	1100

NOTES: Tier II exceedence only
Tier II and Tier III exceedence

NT = not tested

TABLE 2 - Detected Soils Analytical Results (Concentrations Reported in mg/kg)

Sample	Sample											
Location	Depth (ft)	m+p-Cresols	m+p-Xvlenes	Naphthalene	n-Butvlbenzene	n-Propylbenzene	o-Xylene	Phenanthrene	Pyrene	Styrene	Toluene	Total Xylenes
SB-1	2-6	<0.0833	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0833	<0.0833	<0.005	< 0.005	<0.015
SB-2	<8	<0.33	< 0.005	< 0.005	<0.005	< 0.005	< 0.005	<0.33	< 0.33	< 0.005	< 0.005	<0.015
SB-3	<8	<3.31	< 0.005	<0.005	<0.005	< 0.005	< 0.005	7.66	13.00	< 0.005	< 0.005	<0.015
SB-4	<8	< 0.0833	< 0.005	<0.005	<0.005	<0.005	<0.005	<0.0833	<0.0833	<0.005	<0.005	<0.015
SB-5						not	installed					
SB-6	<8	<1.67	0.0734	8.27	<0.005	< 0.005	0.029	6.65	3.47	0.0116	0.113	0.102
SB-7						not	installed					_
SB-8	<8	<1.63	< 0.0236	0.15	<0.0236	<0.0236	< 0.0236	16.8	8.83	< 0.0236	< 0.0236	<0.0708
SB-9	<8	<1.64	< 0.005	0.0906	<0.005	< 0.005	< 0.005	<1.64	5.22	< 0.005	< 0.005	<0.015
SB-10	<6	<1.66	<0.25	265	<0.25	0.362	<0.25	13.4	10.8	<0.25	<0.25	<0.749
SB-11	<8	<1.67	7.41	1770	<0.249	<0.249	3.07	265	131	1.27	4.02	10.5
SB-12	<8	<3.19	11.5	946	0.319	0.464	10.2	1180	724	<0.25	1.52	21.7
SB-13						not	collected					
SB-14						not	collected					
SB-15							collected					
SB-16	4-6	<1.4	<0.957	<0.957	<0.957	<0.957	<0.957	<1.4	3.78	<0.957	<0.957	<2.87
SB-17	4-6	22.1	43	1880	<1	<1	16.7	1350	609	9.48	59.3	59.7
SB-18						not	collected					
SB-19	4-6	<23.6	0.583	63.8	<0.5	<0.5	<0.5	227	137	<0.5	<0.5	<1.5
SB-20						not	collected					
SB-21						not	collected					
SB-22	<2					only me	etals collecte	ed				
SB-23	<10	<3.72	<0.25	2.51	<0.25	<0.25	<0.25	18.6	30.8	<0.25	<0.25	<0.75
SB-24	<11	<4.06	<0.25	<0.25	<0.25	<0.25	<0.25	<4.06	<4.06	<0.25	<0.25	<0.749
SB-25	<7	<4.14	<0.245	<0.245	<0.245	<0.245	<0.245	<4.14	<4.14	<0.245	<0.245	<0.736
SB-26	<9	<3.83	<0.247	1.12	<0.247	<0.247	<0.247	<3.83	6.61	<0.247	<0.247	<0.74
SB-27	<8	<3.83	<0.24	0.51	<0.24	<0.24	<0.24	<3.83	7.38	<0.24	<0.24	<0.719
SB-28	<9.5	<3.88	<0.247	<0.247	<0.247	<0.247	<0.247	<3.88	<3.88	<0.247	<0.247	<0.742
SB-29	<6	<3.83	<0.25	<0.25	<0.25	<0.25	<0.25	<3.83	<3.83	<0.25	<0.25	<0.749
TP-1	<4.5	<12.2	<0.25	<0.25	<0.25	<0.25	<0.25	<12.2	34.3	<0.25	<0.25	<0.749
TP-2	<2 <3	<4.15	<0.25	0.308 <0.25	<0.25 <0.25	<0.25	<0.25	<4.15	20.9	<0.25	<0.25	<0.749
TP-3	<3 <2	<3.47	<0.25			<0.25	<0.25	<3.47	7.9	<0.25	<0.25	<0.75
TP-4 TP-5	<2 <3	<3.08 <3.06	<0.249 <0.25	0.313 <0.25	<0.249 <0.25	<0.249 <0.25	<0.249 <0.25	<3.08 <3.06	7.2 <3.06	<0.249 <0.25	<0.249 <0.25	<0.748 <0.75
TP-6	<3 <3	<3.06 <81.7	37.5	1750	<0.25	<0.25 <2.5	14.7	975	913	<0.25	7.13	52.2
TP-7	<5.5	<3.12	<0.25	<0.25	<0.25	<0.25	<0.25	<3.12	4.49	<0.25	<0.25	<0.75
TP-8	<5.5 <4	<3.12	3.7	<0.25 111	<0.25	<0.25	1.62	<11.5	61.6	<0.25	9.82	5.32
TP-9	<3	<2.92	<0.25	0.791	<0.25	<0.25	<0.25	40	94.4	<0.25	< 0.25	< 0.75
TP-10	<5.5	<3.38	<0.25	<0.25	<0.25	<0.25	<0.25	<3.38	9.65	<0.25	<0.25	<0.749
TP-10	<5.5	<1000	132	3300	<4.99	<4.99	57.6	1000	1130	55.9	99.4	190
TP-12	<4	<3.4	<0.25	1.08	<0.25	<0.25	<0.25	9.69	18.2	<0.25	< 0.25	<0.749
VRP	Tier II SL	\U. T	NO.20	0.11	18.23	6.68	0.93	34.92	90.32	5.6	31.1	58
Screening	TIOI II OL			0.11	10.20	0.00	0.00	07.02	30.02	0.0	01.1	00
Levels	Tier III SL			59	5800	2200	280	2300	23000	3500	4700	250

Tier II and Tier III exceedence

NT = not tested

TABLE 3 - Detected Surface Soil Analytical Results (Concentrations Reported in mg/kg)

Sampling Location	Sampling Depth (ft)	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Thallium	Zinc
SB-1	2	<1.00	<0.2	<0.2	<0.50	<2.5	<0.50	0.07	<0.5	<2.50	<0.5
SB-2	2	<1.00	<0.2	1.57	12.2	40.4	314	0.755	6.93	<2.50	68
SB-3	2	<1.00	<0.2	2.1	11.3	<2.5	7.86	0.013	2.02	<2.50	9.02
SB-4	2	<1.00	<0.2	1.77	14.9	48.6	7.98	0.019	3.6	<2.50	25
SB-5	_					not ins					
SB-6	2	<1.00	<0.2	0.688	7.57	5.71	8.87	0.024	3.64	<2.50	22
SB-7	-	11.00	٦٥.٢	0.000	7.07	not ins		0.021	0.01	\L.00	
SB-8	2	<1.00	<0.2	1.8	12.8	10.2	10.4	0.062	8.47	3.01	35.7
SB-9	2	<1.00	<0.2	1.85	23.2	107	293	0.397	9.84	3.84	216
SB-10	2	<1.00	<0.2	1.84	8.01	15.9	27.0	0.037	8.2	<2.50	211.0
SB-11	2	<1.00	<0.2	1.03	9.06	12.7	93.4	0.28	3.51	12.1	12.6
SB-11	2	<1.00	<0.2	2.54	17.7	18	49.7	0.394	17.6	7.24	104
SB-13		<1.00	\0.2	2.04	17.7	not col		0.554	17.0	1.24	104
SB-14											
SB-15						not col					
						not col					
SB-16						not te					
SB-17						not te					
SB-18						not col					
SB-19						not te					
SB-20						not col					
SB-21	_					not col					
SB-22	2	5.29	<0.979	3.97	7.79	5	9.49	0.013	5.86	<12.2	18
SB-23	2	8.93	<0.953	1.76	16.5	36.8	126	0.175	10.1	<2.50	70.8
SB-24	2	3.16	<0.926	1.03	12.6	9.72	22.6	0.214	8.49	<2.50	44.1
SB-25	2	6.46	<0.978	1.46	15.1	23.5	94.7	0.387	8.77	<2.50	61.7
SB-26	2	7.68	<0.969	2.11	17.5	25.7	56.6	0.168	8.97	<2.50	282
SB-27	2	5.17	<0.97	1.53	15	21.2	47.6	0.217	8.2	<2.50	63.5
SB-28	2	8.75	<0.946	1.82	13.3	32.3	247	0.501	9.9	<2.50	105
SB-29	2	4.23	<0.969	0.816	9.2	15.8	20.9	0.107	2.76	<2.50	22.2
TP-1	2	8.38	<0.2	1.61	5.24	19.2	7.57	0.014	8.88	<2.50	13.1
TP-2	2	13.6	<0.185	2.26	11.8	58.8	330	0.35	4.63	<23.2	443
TP-3	2	3.08	<0.185	<0.188	7.87	15.8	372	0.155	4.93	<23.5	47.9
TP-4	2	10.1	0.267	<0.197	8.86	13.1	30.2	0.087	4.94	<24.7	31.7
TP-5	2	8.07	0.28	2.02	16.9	4.92	6.49	<0.008	3.58	<23.7	31.6
TP-6	2	5.19	<0.19	<0.185	10.7	23.6	59.0	0.5	8.4	<23.1	70.4
TP-7	2	7.47	0.232	2.24	20.8	17.7	33.4	0.341	8.17	<23.3	37.4
TP-8	2	6.8	<0.187	3.05	30.4	26.7	54.1	0.685	23.6	<23.5	152
TP-9	2	31.4	<0.188	2.45	31.5	46.2	88.4	0.128	27.6	<24.7	20.2
TP-10	2	4.05	<0.197	<0.199	13.6	5.64	11.6	0.04	7.29	<24.9	20.3
TP-11	2	17.1	<0.198	7.26	17.2	71.1	40.2	0.106	15.8	<24.8	196
TP-12	2	32.7	<0.188	3.57	5.85	98.3	139	0.182	4.9	<23.5	38
SS-1	2	<1.99	<0.2	2.45	15.6	24.1	58.6	0.617	13.8	<2.50	78.9
SS-2	2	<1.98	<0.2	2.56	15.2	32.2	77.4	0.189	14.3	<2.50	98.6
SS-3	2	2.35	<0.2	2.51	12.7	47.4	112	0.18	5.57	<2.50	105
SS-4	2	7.52	<0.2	2.68	9.91	40.2	87.7	0.152	6.32	<2.50	28.5
SS-5	2	<1.86	<0.2	2.21	14.1	27	45.2	0.102	4.79	<2.50	36
SS-6	2	<1.92	<0.2	2.74	20.1	34.2	112	0.211	11	<2.50	93.3
SS-7	2	<1.87	<0.2	1.99	13.5	28.4	90.4	0.315	9.04	<2.50	84.9
SS-8	2	<1.93	<0.2	2.11	16.6	40.4	78.9	0.256	9.21	<2.50	92.6
SS-9	2	2.05	<0.2	2.39	11.4	51.3	122	0.72	4.79	<2.50	69.8
SS-10	2	<1.96	<0.2	2.21	14.7	39.1	69.2	0.116	8.85	<2.50	76.7
SS-11	2	<1.99	<0.2	1.85	14.2	17.8	54.5	0.127	6.94	<2.50	68
SS-12	2	<1.83	<0.2	1.55	11.7	16.4	62.5	0.156	5.63	<2.50	52.4
VRP Screening	Tier II SL	3.4	16	7	3	310	270.03	0.130	50.78	0.078	745.2
Levels (mg/kg)	Tier III SL	30	230	98	3	4700	800	4	2200	1.2	35000
Levels (Ilig/kg)	TIOI III OL	30	200	30		7700	000	7	2200	1.2	33300

NOTES: Tier II exceedence only
Tier II and Tier III exceedence

TABLE 4 - Detected Groundwater Analytical Results (Concentrations Reported in $\mu g/L$)

Sampling Location	Sampling Date	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2,4-Dimethylphenol	2-Methylnaphthalene	4-Isopropyltoluene	Acenaphthene	Acenaphtylene	Acetone	Anthracene	Arsenic
MW-1	12/8/2015	<1.0	<1.0	<0.54	<10.9	<1.00	<10.9	<10.9	<10.0	<10.9	21.0
MW-2	12/8/2015	<1.0	<1.0	<0.54	<10.9	<1.00	<10.9	<10.9	<10.0	<10.9	<10
MW-3	12/8/2015	<1.0	<1.0	< 0.52	<10.4	<1.00	<10.4	<10.4	<10.0	<10.4	<10
MW-4	12/8/2015	16.7	<10.0	<10.5	<211	<1.00	<211	<211	<100	<211	373.0
MW-5	12/8/2015	215.0	58.3	<10.6	<213	6.0	<213	<213	<100	<213	<10
MW-6					not te	sted					
MW-7					not ins						
MW-8	1/17/2017	<1.0	<1.0	<2.25	<44.9	<1.00	<44.9	<44.9	<10.0	<44.9	2.6
MW-9					not te						
MW-10					not te						
MW-11	12/7/2016	246.0	73.4	1690.0	1400.0	<50.0	65.9	456.0	<500	<5490	7.2
MW-12					not te						
MW-13	1/17/2017	130.0	44.3	< 5.56	< 111	< 10.0	<111	< 111	< 100	< 111	2.8
MW-14	1/17/2017	162.0	59.8	< 11.1	268.0	< 20.0	<222	< 222	< 200	< 222	25.3
MW-15	1/17/2017	134.0	51.8	< 5.38	< 108	< 10.0	<108	< 108	< 100	< 108	4.2
MW-16	1/17/2017	56.6	<20	< 5.56	< 111	< 20.0	<111	< 111	< 200	< 111	4.8
MW-17	1/17/2017	233.0	73.4	47.1	895.0	< 10.0	<220	< 220	< 100	< 220	7.2
MW-18	1/17/2017	79.5	39.4	< 11.0	349.0	10.1	<220	< 220	< 100	< 220	14.8
MW-19	1/17/2017	420.0	122.0	423.0	976.0	10.8	<222	< 222	103.0	< 222	8.1
MW-20	1/17/2017	< 1.0	<1.0	< 2.22	< 44.4	< 1.00	<44.4	< 44.4	< 10.0	< 44.4	13.1
MW-21	1/17/2017	< 1.0	<1.0	< 2.20	< 44.0	< 1.00	<44	< 44.0	< 10.0	< 44.0	34.2
MW-22	12/1/2016	< 1.0	<1.0	< 1.22	<24.4	<1.00	<24.4	<24.4	10.3	<24.4	22.2
MW-23	12/1/2016	<5.0	<5.0	< 1.23	<24.7	< 5.00	26.1	< 24.7	< 50.0	< 24.7	24.0
MW-24	12/1/2016	<1.0	<1.0	< 1.32	<26.3	< 1.00	<26.3	< 26.3	< 10.0	< 26.3	28.4
MW-25					not ins						
MW-26	12/7/2016	103.0	21.6	< 111	898.0	< 20.0	231.0	< 2220	< 200	26.7	6.0
MW-27	12/7/2016	360.0	120.0	< 253	2800.0	< 50.0	601.0	60.6	< 500	217.0	34.6
MW-28.1	10/25/2016	<1.0	<1.0	<0.54	<10.9	<1.00	<10.9	<10.9	<10.0	<10.9	7.7
MW-29	12/1/2016	<1.0	<1.0	<1.12	<22.5	<1.00	<22.5	<22.5	12.1	<22.5	8.8
VRP Screening	Tier II SL	1.5	12.0	36.0	3.6		53.0	12.0	1400.0	180.0	10.0
Levels (µg/L)	Tier III SL	2.9							2828173.8		

Tier II and Tier III exceedence

Tier III exceedence only

NT=not tested

TABLE 4 - Detected Groundwater Analytical Results (Concentrations Reported in $\mu g/L$)

Sampling Location	Sampling Date	Benzene	Benzo(a) anthracene			•			Ethylbenzene	Fluoranthene		Isopropylbenzene	Lead	m+p-Cresols	m+p-Xylenes	Mercury
MW-1	12/8/2015	<1.0	< 0.05	9.9	68.8	<10.9	81.2	NT	<1.0	<10.9	<10.9	<1.0	236.0	<10.9	<2.00	<0.0002
MW-2	12/8/2015	<1.0	< 0.05	10.5	40.4	<10.9	43.6	NT	<1.0	<10.9	<10.9	<1.0	183.0	<10.9	<2.00	<0.0002
MW-3	12/8/2015	<1.0	< 0.05	<4.0	<10.0	<10.4	<10.0	NT	<1.0	<10.4	<10.4	<1.0	<10.0	<10.4	<2.00	<0.0002
MW-4	12/8/2015	212.0	<1.05	199.0	256.0	<211	67200.0	NT	23.0	<211	<211	<10.0	157.0	<211	56.9	<0.0002
MW-5	12/8/2015	410.0	<1.06	<0.004	<10.0	<213	15.9	NT	596.0	<213	<213	37.7	31.3	<213	463.0	<0.0002
MW-6									not	tested						
MW-7										installed						
MW-8	1/17/2017	23.8	0.5	<4	<10	<44.9	<10	430.0	<1.0	< 44.9	<44.9	5.7	<10	<44.9	<2.00	<0.2
MW-9									not	tested						
MW-10										tested						
MW-11	12/7/2016	45500.0	<27.5	7.9	<10.0	<5490	<10.0	1510.0	1960.0	<5490	209.0	<50.0	15.2	3340.0	1830.0	<0.2
MW-12										tested						
MW-13	1/17/2017	421.0	< 0.56	8.8	<10	< 111	81.5	380.0	844.0	< 111	<111	11.1	<10	< 111	63.6	<0.2
MW-14	1/17/2017	20000.0	< 1.11	12.5	26.4	< 222	<10	1600.0	2040.0	< 222	<222	<20	39.5	< 222	2160.0	0.2
MW-15	1/17/2017	333.0	< 0.54	<4	31.6	< 108	<10	4470.0	172.0	< 108	<108	18.7	13.6	< 108	202.0	<0.2
MW-16	1/17/2017	1030.0	< 0.56	4.4	<10	< 111	<10	1080.0	225.0	< 111	<111	<20	10.1	< 111	245.0	<0.2
MW-17	1/17/2017	1540.0	< 1.10	4.7	<10	< 220	<10	280.0	1070.0	< 220	<220	49.3	<10	< 220	559.0	<0.2
MW-18	1/17/2017	1630.0	< 1.10	<4	<10	< 220	53.7	1150.0	562.0	< 220	<220	163.0	45.9	< 220	129.0	<0.2
MW-19	1/17/2017	11400.0	< 1.11	4.5	<10	< 222	<10	690.0	2320.0	< 222	<222	76.1	<10	< 222	2080.0	<0.2
MW-20	1/17/2017	<1.0	< 0.22	<4	<10	< 44.4	<10	<10	<1.00	< 44.4	<44.4	1.4	<10	< 44.4	<2.00	<0.2
MW-21	1/17/2017	<1.0	< 0.22	12.9	40.4	< 44.0	817.0	<10	<1.00	< 44.0	<44	<1.0	17.0	< 44.0	<2.00	0.6
MW-22	12/1/2016	11.7	< 0.12	18.0	123.0	<24.4	<10.0	940.0	3.4	<24.4	<24.4	<1.0	85.9	<24.4	<2.00	<0.2
MW-23	12/1/2016	<5.00	< 0.12	28.5	147.0	< 24.7	10.3	480.0	<5.0	< 24.7	<24.7	<5.0	186.0	< 24.7	<10.0	0.3
MW-24	12/1/2016	<1.0	< 0.13	7.5	120.0	< 26.3	62.2	30.0	<1.0	< 26.3	<26.3	<1.0	61.8	< 26.3	<2.00	<0.2
MW-25										installed						
MW-26	12/7/2016	1970.0	< 11.1	5.0	<10.0	< 2220	<10.0	540.0	602.0	< 2220	97.8	48.4	11.9	< 2220	126.0	<0.2
MW-27	12/7/2016	469.0	101.0	15.1	142.0	50.5	56.9	720.0	1040.0	182.0	298.0	77.3	212.0	< 5050	469.0	0.8
MW-28.1	10/25/2016	<1.0	<0.05	<4.0	<10.0	<10.9	<10.0	10.0	<1.0	<10.9	<10.9	<1.0	<10.0	<10.9	<2.00	<0.2
MW-29	12/1/2016	<1.0	<0.11	<4.0	16.7	<22.5	23.4	60.0	<1.0	<22.5	<22.5	<1.0	150.0	<22.5	<2.00	0.7
VRP Screening	Tier II SL	5.0	0.3	5.0		34.0	1300.0	200.0	700.0	80.0	29.0	45.0	15.0			2.0
Levels (µg/L)	Tier III SL	940.8	178.0			4084.2		15.3	34.9			88.7				0.067

Tier II and Tier III exceedence

Tier III exceedence only

NT=not tested

TABLE 4 - Detected Groundwater Analytical Results (Concentrations Reported in $\mu g/L$)

Sampling Location	. •	Methyl-tert-butyl ether	Naphthalene	Nickel	n-Propylbenze	ne o-Xylene	Phenanthrene	Pyrene	sec-Butylbenzene		•	Thallium	Toluene	Total Xylenes	Zinc
MW-1	12/8/2015	<1.00	<1.0	53.6	<1.00	<1.0	<10.9	<10.9	<1.00	3.2	<1.00	<2.00	<1.00	<3	251.0
MW-2	12/8/2015	<1.00	<1.0	31.1	<1.00	<1.0	<10.9	<10.9	<1.00	<0.003	<1.00	<2.00	<1.00	<3	388.0
MW-3	12/8/2015	<1.00	<1.0	<10.0	<1.00	<1.0	<10.4	<10.4	<1.00	<0.003	<1.00	<2.00	<1.00	<3	<10.0
MW-4	12/8/2015	<10	1950.0	453.0	2.4	52.9	<211	<211	<10.0	5.8	17.0	2.4	29.8	110.0	12900.0
MW-5	12/8/2015	<10	4800.0	4.0	8.2	249.0	<213	<213	<10.0	<0.003	<10	<2.00	49.2	712.0	11.7
MW-6							not teste	d							
MW-7							not install	ed							
MW-8	1/17/2017	<1.00	4.7	<10	<1.00	<1.0	<44.9	<44.9	2.0	<1.00	<1.00	<1	<1	<3	20.1
MW-9	_						not teste	d							
MW-10							not teste								
MW-11	12/7/2016	<50.0	16800.0	<10.0	<50.0	825.0	225.0	<5490	<50.0	<3.00	753.0	<2.00	14100.0	2650.0	56.3
MW-12							not teste								
MW-13	1/17/2017	< 10.0	1530.0	64.1	10.7	132.0	<111	<111	< 10.0	3.7	12.4	<1	40.3	196.0	1190.0
MW-14	1/17/2017	< 20.0	11300.0	14.7	< 20.0	781.0	<222	<222	< 20.0	3.6	23.4	<1	9120.0	2940.0	104.0
MW-15	1/17/2017	< 10.0	2190.0	<10	10.3	88.6	<108	<108	< 10.0	1.1	15.2	<1	160.0	290.0	496.0
MW-16	1/17/2017	< 20.0	1530.0	<10	< 20.0	122.0	<111	<111	< 20.0	1.1	< 20.0	<1	275.0	367.0	16.0
MW-17	1/17/2017	< 10.0	9330.0	<10	< 10.0	305.0	<220	<220	< 10.0	<1	< 10.0	<1	225.0	864.0	10.3
MW-18	1/17/2017	< 10.0	11300.0	<10	73.8	79.7	<220	<220	< 10.0	1.2	< 10.0	<1	31.4	209.0	180.0
MW-19	1/17/2017	< 10.0	17100.0	<10	14.5	986.0	<222	<222	< 10.0	1.0	< 10.0	<1	2670.0	3060.0	21.8
MW-20	1/17/2017	<1.00	<1.0	<10	< 1.00	<1.0	<44.4	<44.4	<1.00	<1	< 1.00	<1	<1	<3	19.3
MW-21	1/17/2017	<1.00	1.4	26.7	< 1.00	<1.0	<44	<44	<1.00	2.3	< 1.00	<1	<1	<3	490.0
MW-22	12/1/2016	<1.00	81.2	98.1	<1.00	1.6	<24.4	<24.4	<1.00	<3.00	<1.00	<2.00	<1.00		352.0
MW-23	12/1/2016	< 5.00	<5.00	59.3	< 5.00	<5.0	<24.7	<24.7	< 5.00	<3	< 5.00	<2.00	<5.00	<15	759.0
MW-24	12/1/2016	1.4	<1.00	58.8	< 1.00	<1.0	<26.3	<26.3	< 1.00	3.2	< 1.00	<2.00	<1.00	<3	209.0
MW-25		_					not install								
MW-26	12/7/2016	< 20.0	3570.0	<10.0	< 20.0	112.0	118.0	<2220	< 20.0	<3.00	< 20.0	<2.00	<20.0	238.0	12.6
MW-27	12/7/2016	< 50.0	11600.0	40.9	< 50.0	317.0	722.0	369.0	< 50.0	<3.00	< 50.0	<2.00	<50.0	786.0	464.0
MW-28.1	10/25/2016	<1.00	<1.0	<10.0	<1.00	<1.0	<10.9	<10.9	<1.0	<1.00	<1.00	<1.00	<1.00	<3	11.1
MW-29	12/1/2016	<1.00	1.1	<10.0	<1.00	<1.0	<22.5	<22.5	<1.0	<3.00	<1.00	<2.00	<1.00	<3	95.5
VRP Screening	Tier II SL	140.0	0.6	39.0	66.0	19.0	12.0	12.0	200.0	50.0	100.0	2.0	1000.0	10000	600.0
Levels (µg/L)	Tier III SL	4499.81	17.4		242.9	51.9					927.6		1920.8	492.4	

Tier II and Tier III exceedence

Tier III exceedence only

NT=not tested

TABLE 5 - Detected Soil Vapor Analytical Results (Concentrations Reported in μg/m3)

Sampling	Sampling	1,2,4-	1,3,5-				Carbon				
Location	Date	Trimethylbenzene	Trimethylbenzene	1,3-Butadiene	2-Butanone	Benzene	Disulfide	Chloroform	Chloromethane	Cyclohexane	Ethylbenzene
VP-1	6/3/2016	<6.6	<6.6	<2.9	29	330	190	44	10	27	<5.8
VP-2	6/3/2016	<25	<25	<11	<15	46	<39	<24	<10	<17	<22
VP-3	6/3/2016	<25	<25	<11	<15	<16	<39	<24	<10	<17	<22
VP-4	6/3/2016	<1.2	<1.2	<0.55	<0.74	<0.8	<1.9	<1.2	<0.52	<0.86	<1.1
VP-5	6/3/2016	<2.5	<2.5	<1.1	4.1	6.9	4.5	<2.4	<1	9.9	<2.2
VP-6	6/3/2016	<25	<25	<11	<15	<16	<39	<24	<10	<17	<22
VP-7	6/3/2016	<25	<25	<11	<15	78	<39	<24	38	110	<22
VP-8	6/3/2016	<25	<25	<11	<15	<16	<39	<24	<10	<17	<22
VP-9	6/10/2016	<25	<25	<11	<15	<16	<39	<24	<10	<17	<22
VP-10	6/3/2016	<25	<25	<11	<15	340	74	<24	<10	53	<22
VP-11	6/3/2016	<4.9	<4.9	<2.2	<2.9	<3.2	<7.8	<4.9	<2.1	13	<4.3
VP-12	6/3/2016	<25	<25	26	<15	560	<39	<24	<10	<17	<22
VP-13	6/3/2016	590	350	<44	<59	180	<160	<98	<41	<69	<87
VP-14	6/3/2016	4700	1700	<44	<59	440	<160	<98	<41	<69	1800
VP-15	6/3/2016	2300	840	<22	<29	790	<78	<49	<21	<34	330
VP-16	6/3/2016	7300	3600	<11	<15	2500	<39	<24	<10	<17	4900
VP-17	6/3/2016	<25	<25	<11	<15	<16	<39	<24	<10	<17	<22
VP-18	6/3/2016	<25	<25	<11	<15	46	<39	<24	<10	<17	<22
VP-19	6/3/2016	<25	<25	<11	<15	1500	<39	<24	<10	57	190
EPA RSL	Resident Carcinogen			0.094		0.36		0.12			1.1
(μg/m3)	Construction Carcinogen			0.41		1.6		0.53			4.9

NOTES: EPA RSL Residential and Construction exceedences

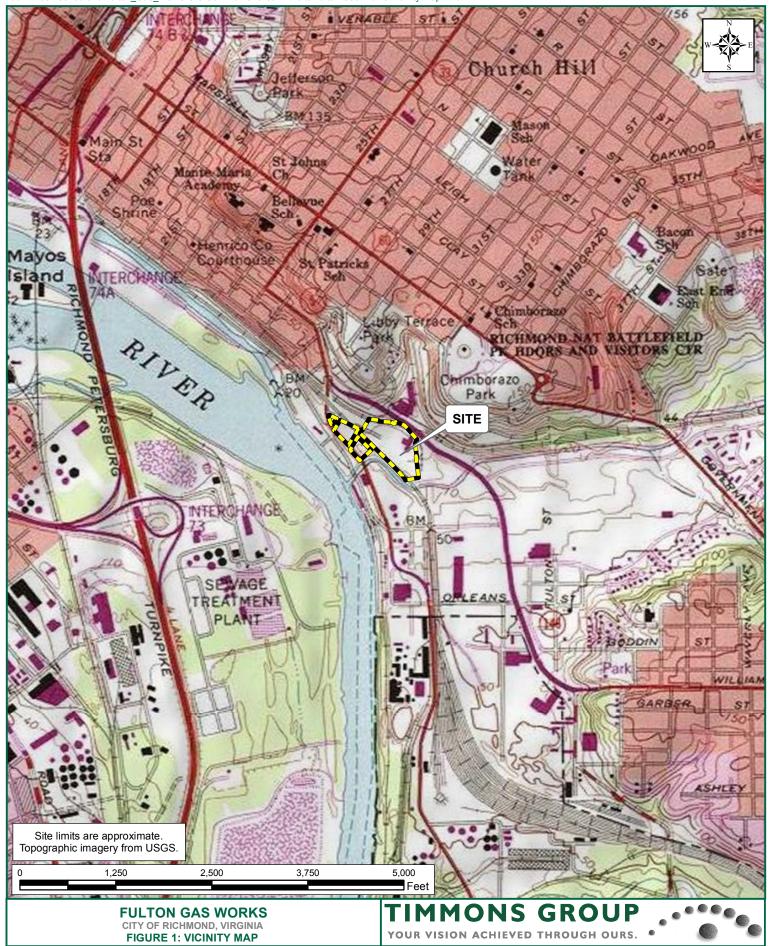
TABLE 5 - Detected Soil Vapor Analytical Results (Concentrations Reported in μg/m3)

Sampling	Sampling										
Location	Date	Heptane	Hexane	Isopropylbenzene	m+p-Xylenes	Naphthalene	o-Xylene	Propylene	Styrene	Toluene	Total Xylenes
VP-1	6/3/2016	22	41	<6.6	27	<7	<5.8	970	<5.7	86	27
VP-2	6/3/2016	<20	<18	<25	<43	<26	<22	30	<21	<19	<65
VP-3	6/3/2016	<20	<18	<25	<43	<26	<22	<8.6	<21	<19	<65
VP-4	6/3/2016	<1	<0.88	<1.2	<2.2	<1.3	<1.1	< 0.43	<1.1	< 0.94	<3.3
VP-5	6/3/2016	<2	<1.8	<2.5	<4.3	<2.6	<2.2	47	<2.1	<1.9	<6.5
VP-6	6/3/2016	<20	<18	<25	<43	<26	<22	<8.6	<21	<19	<65
VP-7	6/3/2016	<20	<18	<25	<43	<26	<22	380	<21	<19	<65
VP-8	6/3/2016	<20	<18	<25	<43	<26	<22	<8.6	<21	<19	<65
VP-9	6/10/2016	<20	<18	<25	<43	<26	<22	<8.6	<21	<19	<65
VP-10	6/3/2016	33	84	<25	<43	<26	<22	350	<21	64	<65
VP-11	6/3/2016	<4.1	<3.5	<4.9	<8.7	<5.2	<4.3	67	<4.3	<3.8	<13
VP-12	6/3/2016	<20	<18	<25	<43	<26	<22	110	<21	66	<65
VP-13	6/3/2016	590	920	<98	430	4400	230	<34	270	300	660
VP-14	6/3/2016	<82	<70	500	820	4500	<87	<34	<85	<75	820
VP-15	6/3/2016	<41	<35	230	270	1800	<43	57	<43	340	270
VP-16	6/3/2016	<20	<18	1100	9300	6300	5200	110	<21	5000	15000
VP-17	6/3/2016	<20	<18	<25	<43	<26	<22	<8.6	<21	<19	<65
VP-18	6/3/2016	<20	<18	<25	<43	<26	<22	43	<21	44	<65
VP-19	6/3/2016	<20	<18	<25	220	<100	67	99	<21	720	290
EPA RSL	Resident Carcinogen					0.083					
(µg/m3)	Construction Carcinogen					0.36					

NOTES: EPA RSL Residential and Construction exceedences



APPENDIX A SITE MAPS



TIMMONS GROUP JOB NUMBER: 36156.006 PROJECT STUDY LIMITS: 10.3 ACRES LATITUDE: 37° 31' 24.9" N

LONGITUDE: 77° 24' 55.8" W

DATE(S): 2013

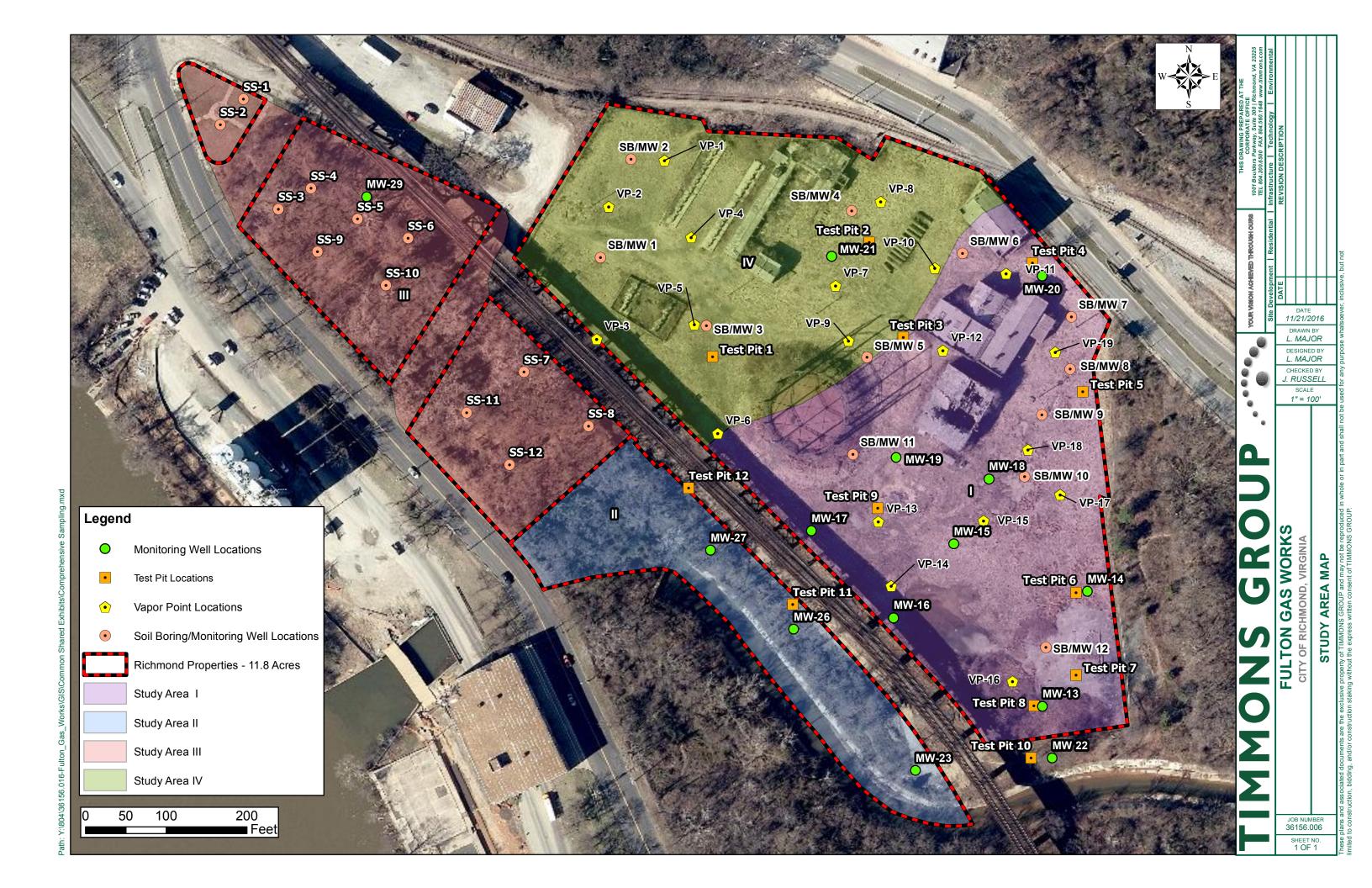
WATERSHED(S): LOWER JAMES HYDROLOGIC UNIT CODE(S): 02080206

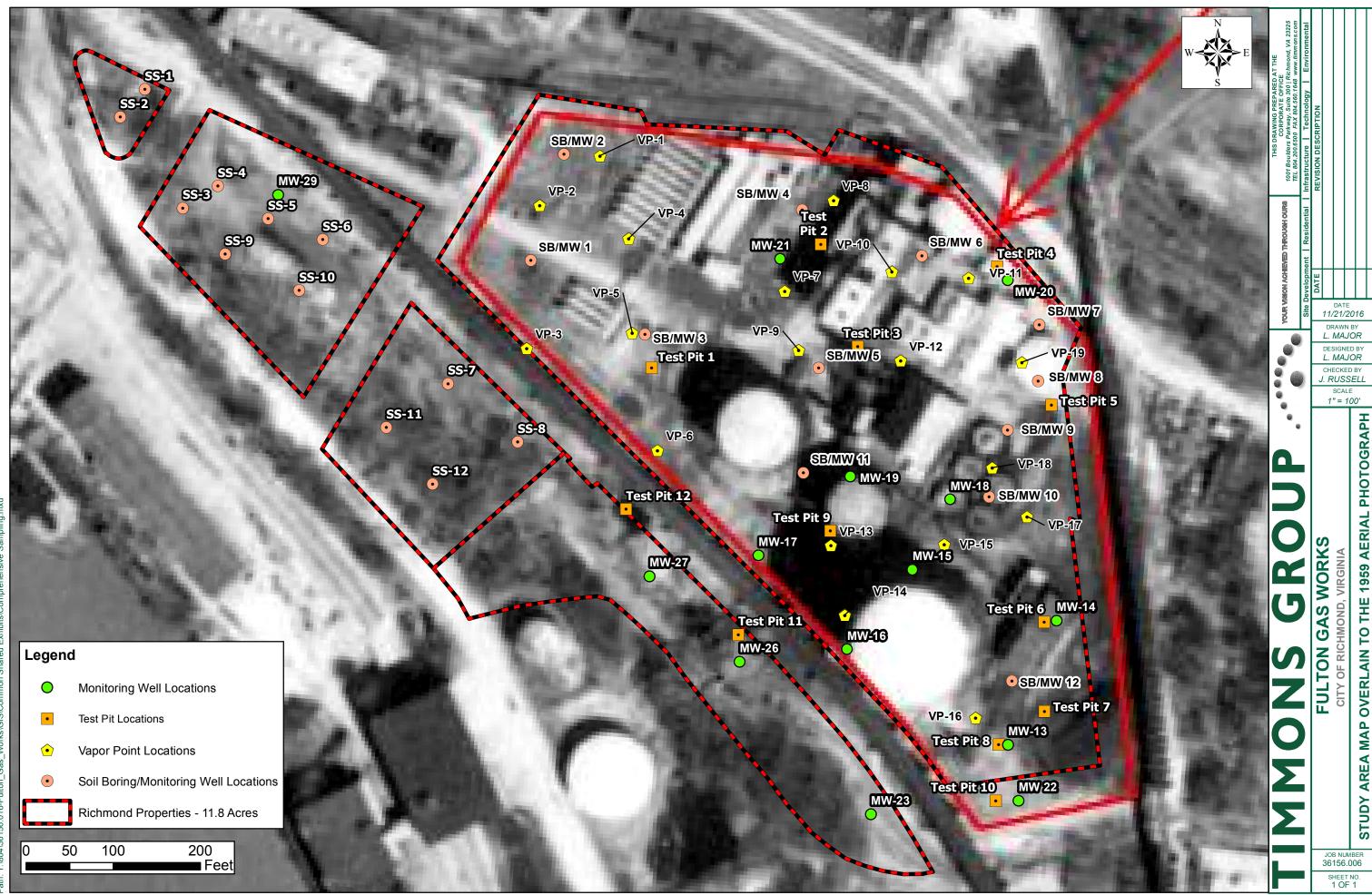
U.S.G.S. QUADRANGLE(S): RICHMOND

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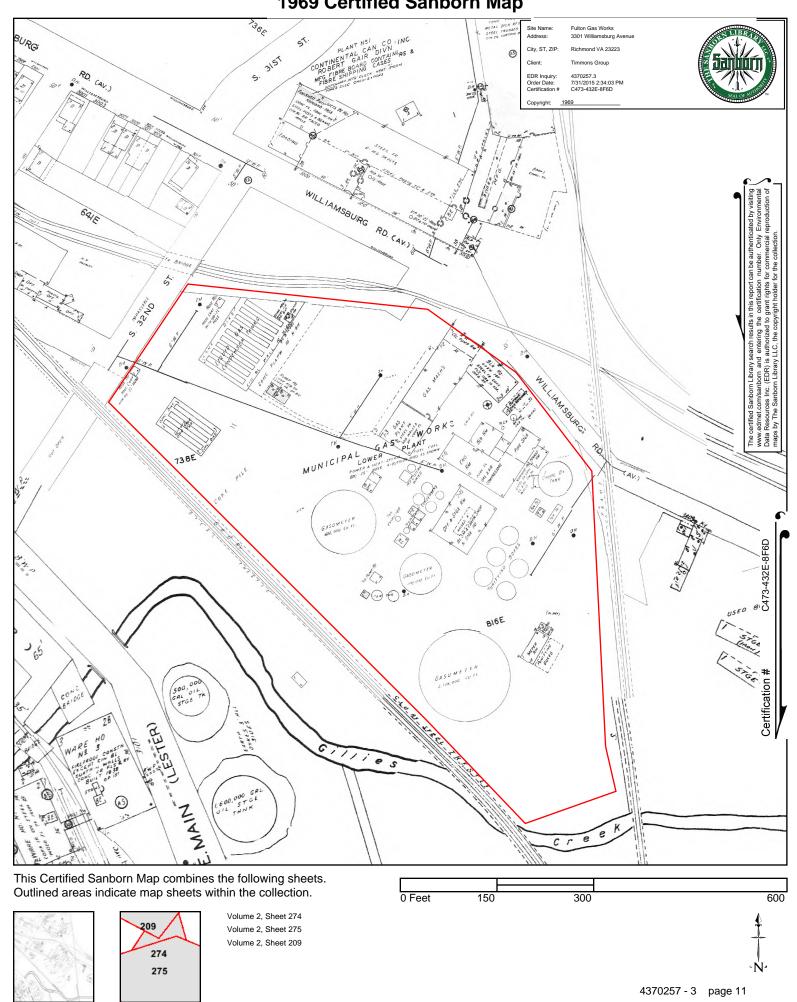
.h: Y:\804\36156.006-Fulton_Gas_Works\GIS\Common Shared Exhibits\Property Map



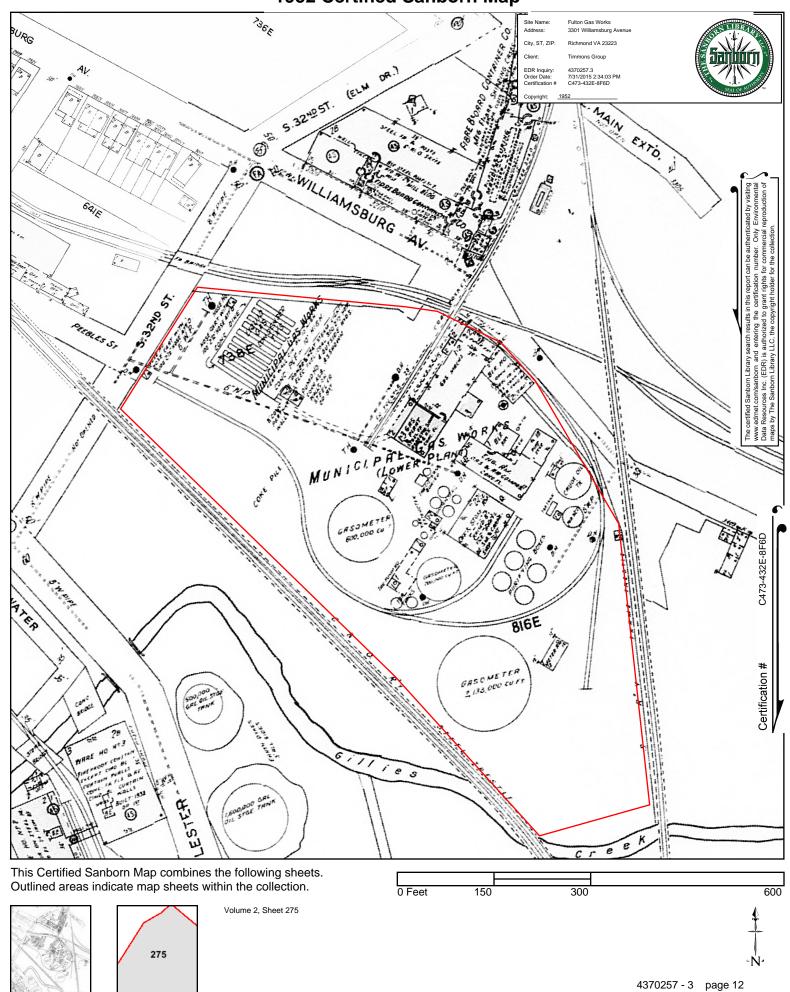


STUDY AREA MAP OVERLAIN TO THE 1959 AERIAL PHOTOGRAPH

1969 Certified Sanborn Map

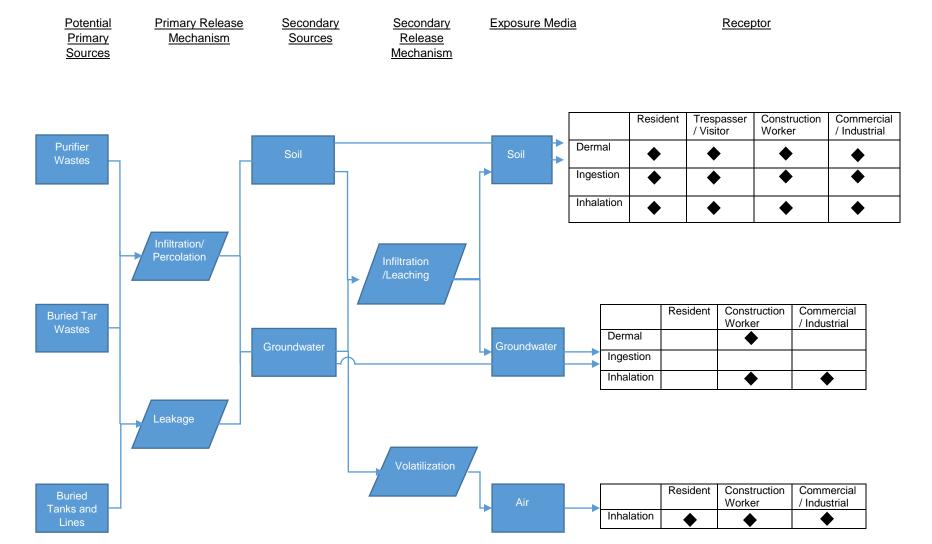


1952 Certified Sanborn Map



APPENDIX B CONCEPTUAL SITE MODEL

Conceptual Site Model



APPENDIX C MONITORING WELL BORING LOGS

Location: Richmond, VA Equipment: Geoprobe

Boring ID: SB-22 Total Depth (ft): 15
Date: 11/30/2016 Boring Diameter (in): 0.75

Water (ft): 7.33 Well Casing Material: Polyvinyl chloride

- Loose organic debris and topsoil - Brown coarse clay loam	CL bles CL		Metals component for soil sample SB-22 collected from first 24"
2- Orange coarse sandy material with coble Orange coarse clay loam Probe loss	bles		
- Orange coarse clay loam - Probe loss -			24"
- Orange coarse clay loam - Probe loss -			
- Orange coarse clay loam - Probe loss -			
- Probe loss	CL		
-			
4-			
4 -			
_			
- Sand clay loam with cobbles	SCL		Former stream bed materials
6- Probe loss			
-			
_		∇	
-			Water table = 7.33' bgs
8-			pH = 5.65
-			
-			
-			
10-			
-			
-			
12-			
-			
_			
_			
14-			
-			
- Gray-tan coarse grained wet silty san	d LCOS		
- some cobbles			
16-			
-			
-			
10			
18-			
]			
_			
20-			

Location: Richmond, VA Equipment: Geoprobe

Boring ID: SB-23 Total Depth (ft): 20
Date: 11/30/2016 Boring Diameter (in): 0.75

Water (ft): 10.72 Well Casing Material: Polyvinyl chloride

Depth (ft)	Soil and Rock Description	NRCS Classification	Water Depth	Remarks
-	Topsoil			Metals for soil sample SB-23
-	Brown coarse clay loam	CL		collected from first 24"
-		1		
2-	Probe loss			
2-				
_				
-				
4-				
-		<u>.</u>		
- -	Brown gravel clay loam Probe loss	CL		
6-	Probe loss			
_				
-				
-				
8-				
-				
-				
10-	Brown gravel clay loam	CL		Some redox observed
	Gray coarse silty sand	1		Slag/staining observed
-	·		∇	
-	Gray fat clay	С		Water table = 10.72' bgs
12-				pH = 5.65
-				Temperature (C) = 17
-				
14-				
-				
-	Brown-orange coarse sandy clay	SC		
-				
16-				
<u>-</u> -	Gray coarse clay sand with some small	1		
-	cobbles			
18-				
-				
-				
-		J		

Location: Richmond, VA Equipment: Geoprobe

Boring ID: SB-24 Total Depth (ft): 22
Date: 11/30/2016 Boring Diameter (in): 0.75

Water (ft): 15.32 Well Casing Material: Polyvinyl chloride

epth (ft)	Soil and Rock Description	NRCS Classification	Water Depth	Remarks
-	Organic and brown loam, sandy loam	SL		Some bricks, white material observed
-	Loam			
-	Brown sandy loam			Metals soil sample SB-24 taken from first 24"
-		SL		
2-				
-	Brown to orange color, clay	С		Unidentified black material
-	Sandy loam, some clay	SL		Some staining, black material
-	Probe loss			
4-				
-	Sandy clay loam	SCL		Some black staining
-	Sandy-gravel material with loam	_		Some black staining
6-	Clay	С		Some redox
-	Orange sandy soil			
-	Black sand]		
8-	Probe loss			
- -	Clay			
10-	,	SC		
-	Orange and white sandy clay			some staining observed
-	Probe loss			
12-				
-				
14-			∇	
_	Sand with some clay chunks and light	1		Water table = 15.32' bgs
_	staining			pH = 6.68
16-	Gray clay, gravel, brick	1		Temperature (C) = 19.3
-[Dark gray clay with broken stone	С		
-				
18-				
-				
- 20-	Gray silty sand	1		
-				
-				

Location: Richmond, VA Equipment: Geoprobe

Boring ID: SB-25 Total Depth (ft): N/A
Date: 11/30/2016 Boring Diameter (in): N/A

Water (ft): N/A Well Casing Material: Polyvinyl chloride

D (6)	Call and David Brand H	NRCS	Water	B I .
Depth (ft)	Soil and Rock Description	Classification	Depth	Remarks
-	Topsoil			
-	Coarse brown loam	L		
-				
-				
2-				
-	Loam mix	L		Isolated staining
-				
-				
4-	Probe loss			
-	But a seed also bear			
-	Brown sandy clay loam	SCL		
-	Sandy gravel clay	C C		
6-	Red clay			
_				
_	Gleyed clay	c		Staining present from 92-106"
8-	Gicycu ciay			Starring present from 32 100
-				
_				
_				
10-	Fat clay; probe refusal	С		No well installed due to refusal
-				
-				
-				
12-				
-				
-				
-				
14-				
-				
-				

Location: Richmond, VA Equipment: Geoprobe
Boring ID: SB-26 Total Depth (ft): 15.02
Date: 11/30/2016 Boring Diameter (in): 0.75

Water (ft) 9.6 Well Casing Material: Polyvinyl chloride

Depth (ft)	Soil and Rock Description	NRCS Classification	Water Depth	l Romarks
-	Brown silty clay loam	SiCL		organic content
-	Brown clay loam	CL		gravel content
-	Orange-brown clay	С		Metals for SB-26 collected from first 24"
2-	Brown sandy loam	SL		Some gravel, isolated staining
-	Gray sand gravel mix			
-	Brown, sandy clay loam	SCL		Some staining
4-	Brown clay soil	С		Some staining
-	Sand-gravel-soil mixture			Staining
-	Brown coarse loam	L		
6- -	Black stained soil			
- 8- -				crushed gravel and sand
-	Black stained soil		∇	
-	Brown coarse loam	L		Stained soil
10-	Black stained soil			
-	Sand mixture with crushed gravel			Stained soil
-	Black stained soil			
-	Sand mixture with crushed gravel			Stained soil
12-	Black/gray stained soils			
-	Probe loss			
- 14-				
-				

Location: Richmond, VA Equipment: Geoprobe
Boring ID: SB-27 Total Depth (ft): 14.75
Date: 11/30/2016 Boring Diameter (in): 0.75

Water (ft): 7.3 Well Casing Material: Polyvinyl chloride

Depth (ft)	Soil and Rock Description	NRCS Classification	Water Depth	l Romarks
-	Loose organic debris, top soil			Metals for soil sample SB-27 collected
-	Brown, coarse clay loam	CL		from first 24"
-				Isolated staining
-				
2-				
- -				Isolated staining
- -	Red-orange clay loam	CL		Some gravel
-	Probe loss	CL		Staining visible
4-				
-}-	Cray candy day	SC		Staining visible
<u>-</u>	Gray, sandy clay Gray brown loam	L		Black chunks
6-	Gray clay loam	CL		organic debris at 72-73"
_	Gray clay loan			organic desiris de 72 73
_			∇	Heavily stained 83-85", 87-91"
-				Brick material 85-87"
8-	Degradation of soil structure	1		Heavy contamination
-	due to product presence			·
-				
-				
10-				
-				
-				
- -				
12-	Clay soil	С		Contamination remains visible
-	Probe loss			
-				
- 14-				
14-				
_				

Location: Richmond, VA Equipment: Geoprobe

Boring ID: SB-28 Total Depth (ft): 15
Date: 11/30/2016 Boring Diameter (in): 0.75

Water (ft): 10 Well Casing Material: Polyvinyl chloride

Depth (ft)	Soil and Rock Description	NRCS Classification	Water Depth	Remarks
-	Brown loam	L		Metals for soil sample SB-28 collected from first 24"
- _		1		Staining visible 8-10"
-	Coarse loam to sandy loam	SL		Some gravel, light staining
-	Coarse loam to clay loam			
2-				
_}	Brown, clay loam	CL		Some staining visible
}	Probe loss			Some staming visible
4-	FIGUE 1033			
-				
_	Coarse sandy loam	SL		Staining visible
-	Probe loss	1		
6-	Brown silty loam	SiL		Orange-brown streaks
-				Some staining visible
-				
-				
8-	Gray-brown clay	С		
-				Staining visible 102-103", 105-107"
- -				
- 10-	Probe loss Water	4	∇	
10-	water Gray brown soil		V	
	Gray brown son			
12-	Grayish clay	С		Light staining
-	Crayion diay			
-	Yellowing gray clay	С		
-				
14-	Brownish clay	С		SB-28 was immediately filled, no groundwater samples
-]		collected

Location:Richmond, VAEquipment:GeoprobeBoring ID:SB-29Total Depth (ft):13.75Date:11/30/2016Boring Diameter (in):0.75

Water (ft): 6.86 Well Casing Material: Polyvinyl chloride

pth (ft)	Soil and Rock Description	NRCS Classification	Water Depth	Remarks
-	Topsoil, organic material, silty loam	SiL	2000	
-	Grayish-brown silty loam	SiL		
-	Grayish-brown silty loam with gravel	SiL		Stained Ioam
_	3 4, 5 5 5 7 7			Heavier staining
2-	Probe loss			
-				
-				
-				
4-				
-				
- [Silty loam	SiL		Staining present
-[Gray sandy mix			Brick materials present
6-				Brick layer 72-75"
-			abla	Heavy staining 75-81"
-	Yellow-gray clay mix			
-	Silty loam	SiL		Staining present
8-	Probe loss			
-				
-				
-				
10-	Clay soils with redox			
-	Clay loam mixed with brick and sand materials			Staining visible
-	Gleyed soils with some red and yellow colors			Staining visible at 141"
12-	Gleyed clayey soils			Redox present
-				
-				
-	Probe loss			
14-				
-				
-	Gleyed clayey soils			
-	Black coarse loam			Staining visible
16-	Gleyed soils with orange coloring			Redox and staining visible
-				
-				
-				
18-				
-				
-				
-[



Field Notes

Ben Henderson and Julia Campus

Project: Fulton Gas Works

Dates: Monday, October 3, 2016 (Pits 1-5) and Tuesday, October 4, 2016 (Pits 6-12)

Participants: Timmons Group (Julia Campus, John Russell, Ben Henderson);

ONE Environmental Group (Kyle Blandford, Site Health and Safety Officer); City of Richmond (Dan Rifenburgh, Engineer IV, and Lewis, equipment

operator);

VA Dept. of Environmental Quality (10/4 only; Brian Campbell, Remediation

Project Manager)

Summary: Clear weather; Safety meeting held at start of each day; Volatile monitoring

conducted by ONE Environmental; Pits dug with backhoe to water contact; Displaced soils placed on 6 mil plastic sheeting; Soil samples taken; Soils characterized (below); Pits fenced with high-visibility fencing; Site secured

upon exit.

Pit 1

- 0"-21": Cobble and overfill (cobble roadbed from approximately 8-12")
- Striated layers forming roadbed and continuing to ~30" below surface; black layers could be hydrocarbon stained
- Staining continuous below roadbed/striated layers
- Groundwater at 54"

Pit 2

- 0-9": loam with staining beginning approximately 4-6"
- Cobble layer present in top two feet
- 9"-water surface: gleyed with gravelly mix
- Groundwater at 28"

Pit 3

- Loam soils
- Staining visible from 18" and below
- Brick and gravel present
- Groundwater at 35"

Pit 4

- Sandy loam
- Saturated at 12" and below
- Carbon staining near waterline
- Mild gleying near waterline
- Groundwater at 26"

Pit 5

- 0-18": A horizon with OM
- 18-24": Redox
- 24-30": Perched
- 30"-below: Gleyed with heavy staining

Pit 6

- 0-4": A horizon
- Staining at 4"
- Heavy staining at 27"
- Groundwater at 34" (seep)



Pit 7

0-12": fill, stained12-18": mottled soil

• 18-24": gleyed

• 24-64": heavily stained to GW

Groundwater at 64"

Pit 8

• 0-8": loam

• 8-22": loam with staining

• 22-31": sandy clay

• 31-48": staining, saturation

Groundwater at 48"

Pit 9

• 0-8" cobblestone, fill

• 8-34": staining

• Brick layer at 20"

Groundwater at 34"

Pit 10

• 0-3": organic matter/humus

• 3-9": A horizon

• 9-31": mottled loamy clay

• 31": bottom: sandy gravel

Groundwater at 64"

Pit 11

• 0-12": A horizon, loam

- Heavy staining at 12" with brick and cobble present
- Saturation visible at 36"
- Groundwater at 47" (initially at 58")

Pit 12

No obvious staining

APPENDIX D MONITORING WELL DIAGRAMS

Well Construction Log

Well Identification: MW-1

Installation Date: 12/07/2015
Development Date: 12/07/2015
Development Method: Overpumping

Drilling Method: <u>Geoprobe</u> Elevation (AMSL): <u>19.42'</u>

Boring Diameter: <u>2"</u> Diameter of Well: <u>1"</u> Depth of Well: <u>9.77'</u>

Depth to Groundwater bgs: <u>1.95'</u>
Well Construction Material: <u>PVC Pipe</u>

Depth to Groundwater bgs (in): 23.3

Stickup (ft): 0.33

Solid interval (ft): 5

=†-

Materials Construction

Seal: bentonite

Filter Pack: sand

Screened interval (ft): 5

Depth of Well (ft): 9.77



Well Construction Log

Well Identification: MW-2

Installation Date: 12/07/2015
Development Date: 12/07/2015
Development Method: Overpumping

Drilling Method: <u>Geoprobe</u> Elevation (AMSL): <u>22.85</u>

Boring Diameter: <u>2"</u>
Diameter of Well: <u>1"</u>
Depth of Well: <u>15'</u>

Depth to Groundwater bgs: <u>5.19</u>'
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 0 (at grade)

Solid interval (ft): 5

Depth to Groundwater bqs (in): 62.28

Screened interval (ft): 10

Materials Construction

Seal: bentonite

Filter Pack: sand

Depth of Well (ft): 15



Well Identification: MW-3

Installation Date: 12/07/2015
Development Date: 12/07/2015
Development Method: Overpumping

Drilling Method: <u>Geoprobe</u> Elevation (AMSL): <u>19.37'</u>

Boring Diameter: <u>2"</u>
Diameter of Well: <u>0.75"</u>
Depth of Well: <u>8.8'</u>

Depth to Groundwater bgs: <u>5.08'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 14.5

Solid interval (ft): 5

Depth to Groundwater bgs (in): 60.9

Screened interval (ft): 5

Materials Construction

Seal: bentonite

Filter Pack: sand



Depth of Well (ft): 8.8

Well Identification: MW-4

Installation Date: 12/07/2015
Development Date: 12/07/2015
Development Method: Overpumping

Drilling Method: <u>Geoprobe</u> Elevation (AMSL): <u>21.00'</u>

Boring Diameter: <u>2"</u> Diameter of Well: <u>1"</u> Depth of Well: <u>19.5'</u>

Depth to Groundwater bgs: <u>1.0'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 5.5

Solid interval (ft): 5

Depth to Groundwater bgs (in): 12.02

Screened interval (ft): 15

Materials Construction

Seal: bentonite

Filter Pack: sand

Depth of Well (ft): 19.5



Well Identification: MW-5

Installation Date: 12/07/2015
Development Date: 12/07/2015
Development Method: Overpumping

Drilling Method: <u>Geoprobe</u> Elevation (AMSL): <u>20.84</u>

Boring Diameter: <u>2"</u>
Diameter of Well: <u>1"</u>
Depth of Well: <u>10'</u>

Depth to Groundwater bgs: 1.14'
Well Construction Material: PVC Pipe

Stickup (in): 0 (at grade)

Solid interval (ft): 5

Depth to Groundwater bgs (in): 13.7

Screened interval (ft): 5

Materials Construction

Seal: bentonite

Filter Pack: sand

Depth of Well (ft): 10



Well Identification: MW-6

Installation Date: 12/07/2015
Development Date: 12/07/2015
Development Method: Overnment

YOUR VISION ACHIEVED THROUGH OURS.

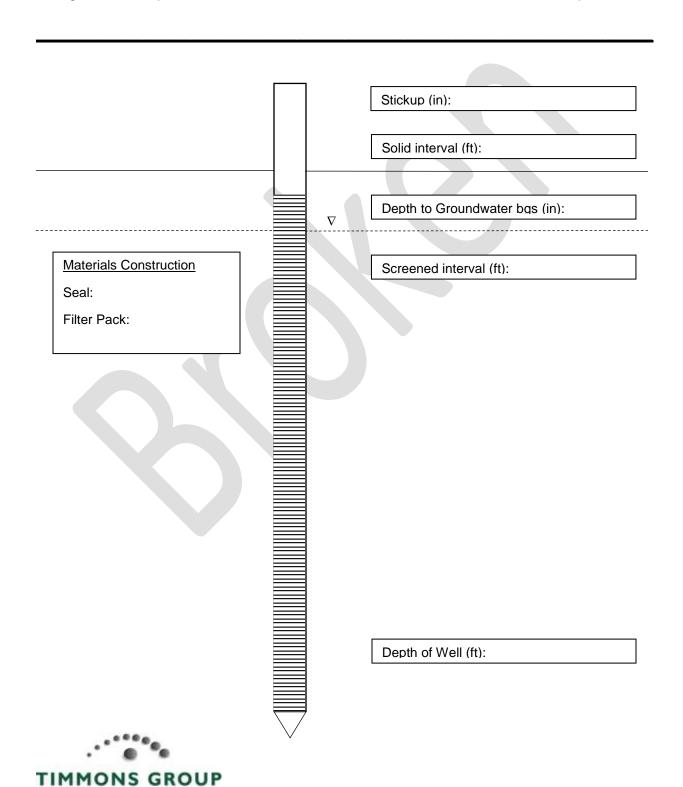
Development Method: Overpumping

Drilling Method: Geoprobe

Boring Diameter: 2"
Diameter of Well: 1"
Depth of Well:

Depth to Groundwater bgs:

Well Construction Material: PVC Pipe



Well Identification: MW-7

Installation Date: Attempted 12/07/2015

Development Date:
Development Method:
Drilling Method: Geoprobe

Boring Diameter: N/A
Diameter of Well: N/A
Depth of Well: N/A

Depth to Groundwater: N/A
Well Construction Material: N/A

Attempted installation 12/07/2015, attempts to install a well were unsuccessful due to concrete in the subsurface.



Well Identification: MW-8

Installation Date: 12/07/2015
Development Date: 12/07/2015
Development Method: Overpumping

Drilling Method: <u>Geoprobe</u> Elevation (AMSL): <u>21.06'</u>

Boring Diameter: <u>2"</u> Diameter of Well: <u>1"</u> Depth of Well: <u>8.3'</u>

Depth to Groundwater bgs: <u>2.88'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 11.5

Solid interval (ft): 4.3

Depth to Groundwater bgs (in): 34.6

Screened interval (ft): 5

Materials Construction

Seal: bentonite

Filter Pack: sand

Depth of Well (ft): 8.3



Well Identification: MW-9

Installation Date: 12/07/2015
Development Date: 12/07/2015
Development Method: Overpumping

Drilling Method: <u>Geoprobe</u> Elevation (AMSL): <u>19.56'</u>

Boring Diameter: <u>2"</u> Diameter of Well: <u>1"</u> Depth of Well: <u>8.7'</u>

Depth to Groundwater bgs: 3.02'
Well Construction Material: PVC Pipe

Stickup (in): 15.5

Solid interval (ft): 5

Depth to Groundwater bgs (in): 36.2

Screened interval (ft): 5

Materials Construction

Seal: bentonite

Filter Pack: sand

Depth of Well (ft): 8.7



Well Identification: MW-10

Installation Date: 12/07/2015
Development Date: 12/07/2015
Development Method: Overpumping

Drilling Method: <u>Geoprobe</u> Elevation (AMSL): <u>18.43</u>

Boring Diameter: <u>2"</u> Diameter of Well: <u>1"</u> Depth of Well: <u>9.1'</u>

Depth to Groundwater bgs: 2.77'
Well Construction Material: PVC Pipe

Depth to Groundwater bgs (in): 33.3

Stickup (in): 11

Solid interval (ft): 5

Screened interval (ft): 5

Materials Construction

Seal: bentonite

Filter Pack: sand

Depth of Well (ft): 9.1



Well Identification: MW-11

Installation Date: 12/07/2015
Development Date: 12/07/2015
Development Method: Overpumping

Drilling Method: <u>Geoprobe</u> Elevation (AMSL): <u>18.86</u>

Boring Diameter: <u>2"</u>
Diameter of Well: <u>1"</u>
Depth of Well: <u>15'</u>

Depth to Groundwater bgs: <u>5.52'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 0 (at grade)

Solid interval (ft): 5

Materials Construction

Seal: bentonite

Filter Pack: sand

Screened interval (ft): 10

Depth to Groundwater bgs (in): 66.2

Depth of Well (ft): 15



Well Identification: MW-12

Installation Date: 12/07/2015
Development Date: 12/07/2015
Development Method: Overpumping

Drilling Method: <u>Geoprobe</u> Elevation (AMSL): <u>17.77</u>

Boring Diameter: <u>2"</u> Diameter of Well: <u>1"</u> Depth of Well: <u>8.5'</u>

Depth to Groundwater bgs: <u>1.6'</u> Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 18.5

Solid interval (ft): 5

Depth to Groundwater bgs (in): 18.7

Screened interval (ft): 5

Materials Construction

Seal: bentonite

Filter Pack: sand

Depth of Well (ft): 8.5



Well Identification: MW-13

Installation Date: <u>01/05/2017</u> Development Date: <u>01/11/2017</u>

Development Method: Overpumping w/surging

Drilling Method: Hollow-stem auger

Elevation (AMSL): 19.15'

Boring Diameter: <u>6.25"</u>
Diameter of Well: <u>2"</u>
Depth of Well: <u>15'</u>

Depth to Groundwater bgs: 3.77'
Well Construction Material: PVC Pipe

Stickup (in): 42

Solid interval (ft): 10

Depth to Groundwater bgs (in): 45.2

Materials Construction

Seal: bentonite, cement

Filter Pack: sand

Screened interval (ft): 10

Depth of Well (ft): 16.5



Well Identification: MW-14

Installation Date: <u>1/6/2017</u> Development Date: <u>1/11/2017</u>

Development Method: Overpumping w/surging

Drilling Method: Hollow-stem auger

Elevation (AMSL): 18.68'

Boring Diameter: 8.25" Diameter of Well: 4" Depth of Well: 13'

Depth to Groundwater bgs: <u>4.6'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 20.75

Solid interval (in): 57

Depth to Groundwater bgs (in): 54.9

Screened interval (ft): 10

Materials Construction

Seal: bentonite, cement

Filter Pack: sand

Depth of Well (ft): 13



Well Identification: MW-15

Installation Date: <u>1/5/2017</u> Development Date: <u>1/11/2017</u>

Development Method: Overpumping w/surging

Drilling Method: Hollow-stem auger

Elevation (AMSL): 19.90'

Boring Diameter: <u>6.25"</u> Diameter of Well: <u>2"</u> Depth of Well: <u>23'</u>

Depth to Groundwater bgs: <u>4.59'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 37

Solid interval (ft): 10

Depth to Groundwater bgs (in): 55.04

Materials Construction

Seal: bentonite, cement

Filter Pack: sand

Screened interval (ft): 15

Depth of Well (ft): 22.2



Well Identification: MW-16

Installation Date: <u>1/4/2017</u> Development Date: <u>1/11/2017</u>

Development Method: Overpumping w/surging

Drilling Method: Hollow-stem auger

Elevation (AMSL): 17.58'

Boring Diameter: <u>6.25"</u> Diameter of Well: <u>4"</u> Depth of Well: <u>11.3'</u>

Depth to Groundwater bgs: 2.3'
Well Construction Material: PVC Pipe

Stickup (in): 44

Solid interval (ft): 5

Depth to Groundwater bgs (in): 28

Materials Construction

Seal: bentonite, cement

Filter Pack: sand

Screened interval (ft): 10

Depth of Well (ft): 11.3



Well Identification: MW-17

Installation Date: <u>1/4/2017</u> Development Date: <u>1/11/2017</u>

Development Method: Overpumping w/surging

Drilling Method: Hollow-stem auger

Elevation (AMSL): 19.96'

Boring Diameter: <u>6.25"</u>
Diameter of Well: <u>2"</u>
Depth of Well: <u>17'</u>

Depth to Groundwater bgs: <u>5.03'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 40

Solid interval (ft): 10

Depth to Groundwater bgs (in): 60.4

Screened interval (ft): 10

Materials Construction

Seal: bentonite, cement

Filter Pack: sand

Depth of Well (ft): 17



Well Identification: MW-18

Installation Date: <u>1/6/2017</u> Development Date: <u>1/11/2017</u>

Development Method: Overpumping w/surging

Drilling Method: <u>Geoprobe</u> Elevation (AMSL): <u>20.85</u>

Boring Diameter: <u>6.25"</u>
Diameter of Well: <u>2"</u>
Depth of Well: <u>15.2'</u>

Depth to Groundwater bgs: 3.06'
Well Construction Material: PVC Pipe

Stickup (in): 40

Solid interval (ft): 8.5

Depth to Groundwater bgs (in): 36.7

Screened interval (ft): 10

Materials Construction

Seal: bentonite, cement

Filter Pack: sand

Depth of Well (ft): 15.2



Well Identification: MW-19

Installation Date: <u>1/12/2017</u> Development Date: <u>1/13/2017</u>

Development Method: Overpumping w/ surging

Drilling Method: Hollow-stem auger

Elevation (AMSL): 21.89'

Boring Diameter: 8.25"
Diameter of Well: 4"
Depth of Well: 17'

Depth to Groundwater bgs: <u>4.93'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 35

Solid interval (ft): 5

Depth to Groundwater bgs (in): 59.2

Screened interval (ft): 15

Materials Construction

Seal: bentonite, cement

Filter Pack: sand

Depth of Well (ft): 17



Well Identification: MW-20

Installation Date: <u>1/6/2017</u> Development Date: <u>1/11/2017</u>

Development Method: Overpumping w/surging

Drilling Method: Hollow-stem auger

Elevation (AMSL): 25.50'

Boring Diameter: <u>6.25"</u> Diameter of Well: <u>2"</u> Depth of Well: <u>13.25'</u>

Depth to Groundwater bgs: <u>3.53'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 45

Solid interval (ft): 5

Depth to Groundwater bgs (in): 42.4

Screened interval (ft): 12

Materials Construction

Seal: bentonite, cement

Filter Pack: sand

Depth of Well (ft): 13.25



Well Identification: MW-21

Installation Date: <u>1/12/2017</u> Development Date: <u>1/13/2017</u>

Development Method: Overpumping w/surging

Drilling Method: Hollow-stem auger

Elevation (AMSL): 23.30'

Boring Diameter: <u>6.25"</u>
Diameter of Well: <u>2"</u>
Depth of Well: <u>10.6'</u>

Depth to Groundwater bgs: 11.8'
Well Construction Material: PVC Pipe

Stickup (in): 42

Solid interval (ft): 2

Depth to Groundwater bgs (in): 11.8

Screened interval (ft): 12

Materials Construction

Seal: bentonite, cement

Filter Pack: sand

Depth of Well (ft): 10.6



Well Identification: MW-22

Installation Date: 11/30/2016
Development Date: 11/30/2016
Development Method: Overpumping

Drilling Method: Geoprobe

Boring Diameter: 2"
Diameter of Well: 0.75"
Depth of Well: 13.9'

Depth to Groundwater bgs: <u>7.33'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 13

Solid interval (ft): 5

Screened interval (ft): 10

Depth to Groundwater bgs (in): 87.3

Materials Construction

Seal: bentonite

Filter Pack: sand

TIMMONS GROUP

Depth of Well (ft): 13.9

Well Identification: MW-23

Installation Date: 11/30/2016
Development Date: 11/30/2016
Development Method: Overpumping

Drilling Method: Geoprobe

Boring Diameter: <u>2"</u>
Diameter of Well: <u>0.75"</u>
Depth of Well: <u>19.1'</u>

Depth to Groundwater bgs: 9.8'
Well Construction Material: PVC Pipe

Stickup (in): 11

Solid interval (ft): 10

Depth to Groundwater bgs (in): 117.4

Screened interval (ft): 10

Materials Construction

Seal: bentonite

Filter Pack: sand

Depth of Well (ft): 19.1



Well Identification: MW-24

Installation Date: 11/30/2016
Development Date: 11/30/2016
Development Method: Overpumping

Drilling Method: Geoprobe

Boring Diameter: <u>2"</u>
Diameter of Well: <u>0.75"</u>
Depth of Well: <u>23.75'</u>

Depth to Groundwater bgs: <u>15.2'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 1.25

Solid interval (ft): 15

Depth to Groundwater bgs (in): 182.4

Screened interval (ft): 10

Materials Construction

Seal: bentonite

Filter Pack: sand

Depth of Well (ft): 23.75



Well Identification: MW-25

Installation Date: Attempted 11/30/2016

Development Date:
Development Method:
Drilling Method: Geoprobe

Boring Diameter: N/A
Diameter of Well: N/A
Depth of Well: N/A

Depth to Groundwater: N/A Well Construction Material: N/A

Attempted installation 11/30/2016, attempts to install a well were unsuccessful due to shrink-swell clay in the subsurface.



Well Identification: MW-26

Installation Date: 11/30/2016
Development Date: 11/30/2016
Development Method: Overpumping

Drilling Method: Geoprobe

Boring Diameter: <u>2"</u>
Diameter of Well: <u>0.75"</u>
Depth of Well: <u>15.02'</u>

Depth to Groundwater bgs: 8.12'
Well Construction Material: PVC Pipe

Stickup (in): 17

Solid interval (ft): 6.5

Depth to Groundwater bgs (in): 97.45

Materials Construction

Seal: bentonite

Filter Pack: sand

Screened interval (ft): 10

Depth of Well (ft): 15.02



Well Identification: MW-27

Installation Date: 11/30/2016
Development Date: 11/30/2016
Development Method: Overpumping

Drilling Method: Geoprobe

Boring Diameter: <u>2"</u>
Diameter of Well: <u>0.75"</u>
Depth of Well: <u>14.75'</u>

Depth to Groundwater bgs: <u>6.9'</u>
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 4.5

Solid interval (ft): 5

Materials Construction

Seal: bentonite

Filter Pack: sand

V

Screened interval (ft): 10

Depth to Groundwater bgs (in): 83.1

Depth of Well (ft): 14.6

TIMMONS GROUP

Well Identification: MW-29

Installation Date: 11/30/2016
Development Date: 11/30/2016
Development Method: Overpumping

Drilling Method: Geoprobe

Boring Diameter: 2"
Diameter of Well: 0.75"
Depth of Well: 13.75'

Depth to Groundwater bgs: <u>5.61</u>'
Well Construction Material: <u>PVC Pipe</u>

Stickup (in): 15

Solid interval (ft): 5

Materials Construction

Seal: bentonite

Filter Pack: sand

Depth to Groundwater bgs (in): 67.3

Screened interval (ft): 10

Depth of Well (ft): 13.75



APPENDIX E WATER TABLE SURFACE MAP

APPENDIX F AQUIFER TEST DATA

AQTESOLV for Windows

Data Set: K:\804 - Environmental New\AQTESOLV Standard\Aqtw1.aqt Date: 02/06/17 Time: 11:19:46

PROJECT INFORMATION

Company: Timmons Group Client: City of Richmond Project: 36156.015

Location: Fulton Gas Works Test Date: 01/13/17 Test Well: MW-16

AQUIFER DATA

Saturated Thickness: 13.97 ft Anisotropy Ratio (Kz/Kr): 287.8

PUMPING WELL DATA

No. of pumping wells: 1

Pumping Well No. 1: MW-16

X Location: 0. ft Y Location: 0. ft

Casing Radius: 0.16 ft Well Radius: 0.2604 ft Fully Penetrating Well

No. of pumping periods: 1

Pumping Period Data

Rate (gal/min) 1.5 Time (min) 20.

OBSERVATION WELL DATA

No. of observation wells: 1

Observation Well No. 1: MW-16

X Location: 0. ft Y Location: 0. ft

Radial distance from MW-16: 0. ft

Fully Penetrating Well

No. of Observations: 34

Observation Data					
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)		
20	5.5	33.	9.73		
20.5	5.98	34.	9.85		
21.	6.28	35.	9.98		
21.5	6.49	36.	10.14		
22.	6.73	37.	10.28		
22.5	6.98	38.	10.4		
22.5 23.	7.17	33. 34. 35. 36. 37. 38. 39. 40. 45.	10.5		
23.5 24.	7.42	40.	10.58		
24.	$7.6\overline{7}$	45.	10.89		
24.5 25.	7.88	50.	11.08		
25.	8.07	55.	11.31		
27.	8.69	60.	11.58		
28.	8.91	50. 55. 60. 65.	11.81		

AQTESOLV for Windows

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	
29.	9.11	70.	12.24	
30. 31	9.46	100. 130.	13.04 13.46	
32.	9.6	160.	13.65	

SOLUTION

Pumping Test Aquifer Model: Unconfined Solution Method: Neuman

VISUAL ESTIMATION RESULTS

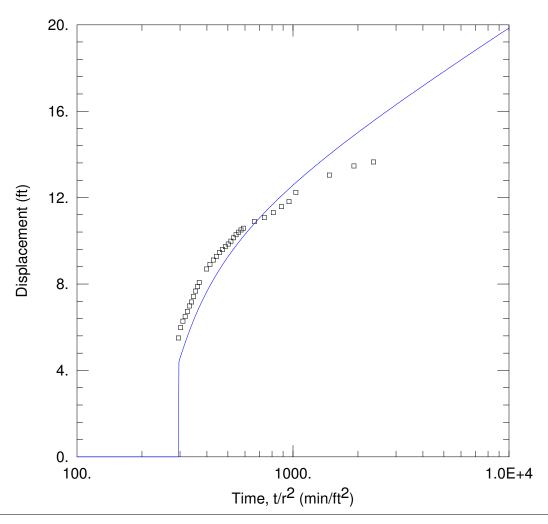
Estimated Parameters

Parameter	Estimate	.9
Ţ	8.254	ft ² /day
S	2.672E-14	_
Sy	0.1	
ß	0.1	

K = T/b = 0.5909 ft/day (0.0002084 cm/sec) Ss = S/b = 1.913E-15 1/ft

Manually Measured Water Table Recovery Data

	-		Time	-	Height of
	Depth to	Time	Interval		Water
Measurement	Groundwater	Interval	Units	Time	Column
1	14.5	sta	rt test	12:20	5.5
2	14.02	30	seconds		5.98
3	13.72	30	seconds	12:21	6.28
4	13.51	30	seconds		6.49
5	13.27	30	seconds	12:22	6.73
6	13.02	30	seconds		6.98
7	12.83	30	seconds	12:23	7.17
8	12.58	30	seconds		7.42
9	12.33	30	seconds	12:24	7.67
10	12.12	30	seconds		7.88
11	11.93	30	seconds	12:25	8.07
12	11.31	1	minute	12:27	8.69
13	11.09	1	minute	12:28	8.91
14	10.89	1	minute	12:29	9.11
15	10.73	1	minute	12:30	9.27
16	10.54	1	minute	12:31	9.46
17	10.4	1	minute	12:32	9.6
18	10.27	1	minute	12:33	9.73
19	10.15	1	minute	12:34	9.85
20	10.02	1	minute	12:35	9.98
21	9.86	1	minute	12:36	10.14
22	9.72	1	minute	12:37	10.28
23	9.6	1	minute	12:38	10.4
24	9.5	1	minute	12:39	10.5
25	9.42	1	minute	12:40	10.58
26	9.11	5	minute	12:45	10.89
27	8.92	5	minute	12:50	11.08
28	8.69	5	minute	12:55	11.31
29	8.42	5	minute	1:00	11.58
30	8.19	5	minute	1:05	11.81
31	7.76	5	minute	1:10	12.24
32	6.96	30	minute	1:40	13.04
33	6.54	30	minute	2:10	13.46
34	6.35	30	minute	2:40	13.65



WELL TEST ANALYSIS

Data Set: K:\804 - Environmental New\AQTESOLV Standard\Aqtw1.aqt
Date: 02/06/17 Time: 11:17:46

PROJECT INFORMATION

Company: <u>Timmons Group</u> Client: <u>City of Richmond</u> Project: 36156.015

Location: Fulton Gas Works

Test Well: MW-16
Test Date: 01/13/17

AQUIFER DATA

Saturated Thickness: 13.97 ft

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
MW-16	0	0	□ MW-16	0	0

SOLUTION

Aquifer Model: Unconfined

 $T = 8.254 \text{ ft}^2/\text{day}$

 $Sy = \frac{8.254}{0.1} \pi^{-1}$

Solution Method: Neuman

S = 2.672E-14

B = 0.1

APPENDIX G LABORATORY CERTIFICATION



COMMONWEALTH of VIRGINIA

Department of General Services

Division of Consolidated Laboratory Services

600 North 5th Street Richmond, Virginia 23219-3691 (804) 648-4480 FAX (804) 692-0416

10/28/2016

Edward Soyars Air Water & Soil Laboratories, Inc. 1941 Reymet Road Richmond VA 23237

VELAP ID: 460021

Dear Edward Soyars:

The Virginia Environmental Laboratory Accreditation Program has completed processing the requested revision to your certificate. Enclosed with this letter is certificate # 8886. Certificate # 8886 and the associated Scope of Accreditation must be posted in a prominent place at the laboratory.

Please contact your lead assessor, John Dec, at john.dec@dgs.virginia.gov or (804) 648-4480 x301 if you have any questions.

Sincerely yours,

Cathy Westerman

Manager, Laboratory Certification Program

Enclosures

cc: Carmela Tombes

Page 1 of 1 VELAP ID: 460021



COMMONWEALTH OF VIRGINIA DEPARTMENT OF GENERAL SERVICES DIVISION OF CONSOLIDATED LABORATORY SERVICES



Certifies that

VA Laboratory ID#: 460021
Air Water & Soil Laboratories, Inc.

1941 Reymet Road Richmond, VA 23237

Owner: CARMELA TOMBES / W GUY BECKER Responsible Official: CARMELA TOMBES

Having met the requirements of 1 VAC 30-46 and having been found compliant with the 2009 TNI Standard approved by The NELAC Institute is hereby approved as an

Accredited Environmental Laboratory

As more fully described in the attached Scope of Accreditation

Effective Date: October 28, 2016
Expiration Date: June 14, 2017
Certificate # 8886

Continued accreditation status depends on successful ongoing participation in the program. Certificate to be conspicuously displayed at the laboratory.

Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP) Scope of Accreditation.

Customers are urged to verify the laboratory's current accreditation status.

Denise M. Toney, Ph.D., HCLD DGS Deputy Director for Laboratories



Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 8886

Air Water & Soil Laboratories, Inc. 1941 Reymet Road Richmond, VA 23237

Virginia Laboratory ID: 460021 Effective Date: October 28, 2016 Expiration Date: June 14, 2017

AIR

AIR					
METHOD EPA 3C	ANALYTE METHANE	PRIMARY VA	METHOD EPA 3C	ANALYTE NITROGEN (N2)	PRIMARY VA
EPA 3C	OXYGEN	VA	EPA TO-14A 2nd Ed.	1,1,1-TRICHLOROETHANE	VA
EPA TO-14A 2nd Ed.	1,1,2,2-TETRACHLOROETHANE	VA	EPA TO-14A 2nd Ed.	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	VA
EPA TO-14A 2nd Ed.	1,1,2-TRICHLOROETHANE	VA	EPA TO-14A 2nd Ed.	1,1-DICHLOROETHANE	VA
EPA TO-14A 2nd Ed.	1,1-DICHLOROETHYLENE	VA	EPA TO-14A 2nd Ed.	1,2,4-TRICHLOROBENZENE	VA
EPA TO-14A 2nd Ed.	1,2,4-TRIMETHYLBENZENE	VA	EPA TO-14A 2nd Ed.	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	VA
EPA TO-14A 2nd Ed.	1,2-DICHLORO-1,1,2,2-TETRAFLUOR OETHANE (FREON-114)	R VA	EPA TO-14A 2nd Ed.	1,2-DICHLOROBENZENE	VA
EPA TO-14A 2nd Ed.	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	VA	EPA TO-14A 2nd Ed.	1,2-DICHLOROPROPANE	VA
EPA TO-14A 2nd Ed.	1,3,5-TRIMETHYLBENZENE	VA	EPA TO-14A 2nd Ed.	1,3-DICHLOROBENZENE	VA
EPA TO-14A 2nd Ed.	1,4-DICHLOROBENZENE	VA	EPA TO-14A 2nd Ed.	2-BUTANONE (METHYL ETHYL KETONE, MEK)	VA
EPA TO-14A 2nd Ed.	BENZENE	VA	EPA TO-14A 2nd Ed.	BENZYL CHLORIDE	VA
EPA TO-14A 2nd Ed.	BROMOFORM	VA	EPA TO-14A 2nd Ed.	CARBON TETRACHLORIDE	VA
EPA TO-14A 2nd Ed.	CHLOROBENZENE	VA	EPA TO-14A 2nd Ed.	CHLOROETHANE (ETHYL CHLORIDE)	VA
EPA TO-14A 2nd Ed.	CHLOROFORM	VA	EPA TO-14A 2nd Ed.	CIS-1,2-DICHLOROETHYLENE	VA
EPA TO-14A 2nd Ed.	CIS-1,3-DICHLOROPROPENE	VA	EPA TO-14A 2nd Ed.	DICHLORODIFLUOROMETHANE (FREON-12)	VA
EPA TO-14A 2nd Ed.	ETHYLBENZENE	VA	EPA TO-14A 2nd Ed.	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	VA
EPA TO-14A 2nd Ed.	M+P-XYLENE	VA	EPA TO-14A 2nd Ed.	METHYL BROMIDE (BROMOMETHANE)	VA
EPA TO-14A 2nd Ed.	METHYL CHLORIDE (CHLOROMETHANE)	VA	EPA TO-14A 2nd Ed.	METHYLENE CHLORIDE (DICHLOROMETHANE)	VA
EPA TO-14A 2nd Ed.	O-XYLENE	VA	EPA TO-14A 2nd Ed.	STYRENE	VA
EPA TO-14A 2nd Ed.	TETRACHLOROETHENE (PERCHLOROETHENE)	VA	EPA TO-14A 2nd Ed.	TOLUENE	VA
EPA TO-14A 2nd Ed.	TRANS-1,2-DICHLOROETHENE	VA	EPA TO-14A 2nd Ed.	TRANS-1,3-DICHLOROPROPENE	VA
EPA TO-14A 2nd Ed.	TRICHLOROETHENE (TRICHLOROETHYLENE)	VA	EPA TO-14A 2nd Ed.	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	VA
EPA TO-14A 2nd Ed.	VINYL CHLORIDE	VA	EPA TO-14A 2nd Ed EXTENDED	1,3-BUTADIENE	VA
EPA TO-14A 2nd Ed EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	VA	EPA TO-14A 2nd Ed EXTENDED	2-CHLOROTOLUENE	VA
EPA TO-14A 2nd Ed EXTENDED	2-HEXANONE	VA	EPA TO-14A 2nd Ed EXTENDED	4-ETHYLTOLUENE	VA
EPA TO-14A 2nd Ed EXTENDED	4-METHYL-2-PENTANONE (METHY) ISOBUTYL KETONE, MIBK)	_ VA	EPA TO-14A 2nd Ed EXTENDED	ACETONE	VA
EPA TO-14A 2nd Ed EXTENDED	ACROLEIN (PROPENAL)	VA	EPA TO-14A 2nd Ed EXTENDED	ALLYL CHLORIDE (3-CHLOROPROPENE)	VA



Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 8886

Air Water & Soil Laboratories, Inc. 1941 Reymet Road Richmond, VA 23237

Virginia Laboratory ID: 460021
Effective Date: October 28, 2016
Expiration Date: June 14, 2017

AIR

METHOD	ANALYTE	PRIMARY
EPA TO-14A 2nd Ed EXTENDED	BROMODICHLOROMETHANE	VA
EPA TO-14A 2nd Ed EXTENDED	CHLORODIBROMOMETHANE	VA
EPA TO-14A 2nd Ed EXTENDED	ETHANOL	VA
EPA TO-14A 2nd Ed EXTENDED	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	VA
EPA TO-14A 2nd Ed EXTENDED	ISOPROPYLBENZENE	VA
EPA TO-14A 2nd Ed EXTENDED	METHYL TERT-BUTYL ETHER (MTBE)	VA
EPA TO-14A 2nd Ed EXTENDED	N-HEPTANE	VA
EPA TO-14A 2nd Ed EXTENDED	N-NONANE	VA
EPA TO-14A 2nd Ed EXTENDED	N-PROPYLBENZENE	VA
EPA TO-14A 2nd Ed EXTENDED	TERT-BUTYL ALCOHOL	VA
EPA TO-14A 2nd Ed EXTENDED	VINYL ACETATE	VA
EPA TO-14A 2nd Ed EXTENDED	XYLENE (TOTAL)	VA
EPA TO-15 2nd Ed.	1,1,2,2-TETRACHLOROETHANE	VA
EPA TO-15 2nd Ed.	1,1,2-TRICHLOROETHANE	VA
EPA TO-15 2nd Ed.	1,1-DICHLOROETHYLENE	VA
EPA TO-15 2nd Ed.	1,2,4-TRIMETHYLBENZENE	VA
EPA TO-15 2nd Ed.	1,2-DICHLORO-1,1,2,2-TETRAFLUOR OETHANE (FREON-114)	R VA
EPA TO-15 2nd Ed.	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	VA
EPA TO-15 2nd Ed.	1,3,5-TRIMETHYLBENZENE	VA
EPA TO-15 2nd Ed.	1,3-DICHLOROBENZENE	VA
EPA TO-15 2nd Ed.	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	VA
EPA TO-15 2nd Ed.	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	. VA
EPA TO-15 2nd Ed.	ALLYL CHLORIDE (3-CHLOROPROPENE)	VA
EPA TO-15 2nd Ed.	BENZYL CHLORIDE	VA
EPA TO-15 2nd Ed.	BROMOFORM	VA
EPA TO-15 2nd Ed.	CARBON TETRACHLORIDE	VA
EPA TO-15 2nd Ed.	CHLOROETHANE (ETHYL CHLORIDE)	VA
EPA TO-15 2nd Ed.	CIS-1,2-DICHLOROETHYLENE	VA

METHOD EPA TO-14A 2nd Ed	ANALYTE CARBON DISULFIDE	PRIMARY VA
EXTENDED EPA TO-14A 2nd Ed EXTENDED	CYCLOHEXANE	VA
EPA TO-14A 2nd Ed EXTENDED	ETHYL ACETATE	VA
EPA TO-14A 2nd Ed EXTENDED	ISOOCTANE (2-METHYLHEPTANE)	VA
EPA TO-14A 2nd Ed EXTENDED	METHYL METHACRYLATE	VA
EPA TO-14A 2nd Ed EXTENDED	N-BUTANE	VA
EPA TO-14A 2nd Ed EXTENDED	N-HEXANE	VA
EPA TO-14A 2nd Ed EXTENDED	N-PENTANE	VA
EPA TO-14A 2nd Ed EXTENDED	PROPYLENE	VA
EPA TO-14A 2nd Ed EXTENDED	TETRAHYDROFURAN (THF)	VA
EPA TO-14A 2nd Ed EXTENDED	VINYL BROMIDE (BROMOETHENE)	VA
EPA TO-15 2nd Ed.	1,1,1-TRICHLOROETHANE	VA
EPA TO-15 2nd Ed.	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	VA
EPA TO-15 2nd Ed.	1,1-DICHLOROETHANE	VA
EPA TO-15 2nd Ed.	1,2,4-TRICHLOROBENZENE	VA
EPA TO-15 2nd Ed.	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	VA
EPA TO-15 2nd Ed.	1,2-DICHLOROBENZENE	VA
EPA TO-15 2nd Ed.	1,2-DICHLOROPROPANE	VA
EPA TO-15 2nd Ed.	1,3-BUTADIENE	VA
EPA TO-15 2nd Ed.	1,4-DICHLOROBENZENE	VA
EPA TO-15 2nd Ed.	2-BUTANONE (METHYL ETHYL KETONE, MEK)	VA
EPA TO-15 2nd Ed.	ACROLEIN (PROPENAL)	VA
EPA TO-15 2nd Ed.	BENZENE	VA
EPA TO-15 2nd Ed.	BROMODICHLOROMETHANE	VA
EPA TO-15 2nd Ed.	CARBON DISULFIDE	VA
EPA TO-15 2nd Ed.	CHLOROBENZENE	VA
EPA TO-15 2nd Ed.	CHLOROFORM	VA



Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 8886

Air Water & Soil Laboratories, Inc. 1941 Reymet Road Richmond, VA 23237

Virginia Laboratory ID: 460021 Effective Date: October 28, 2016 Expiration Date: June 14, 2017

AIR

Aux					
METHOD EPA TO-15 2nd Ed.	ANALYTE CIS-1,3-DICHLOROPROPENE	PRIMARY VA	METHOD EPA TO-15 2nd Ed.	ANALYTE CYCLOHEXANE	PRIMARY VA
EPA TO-15 2nd Ed.	DICHLORODIFLUOROMETHANE (FREON-12)	VA	EPA TO-15 2nd Ed.	ETHYL ACETATE	VA
EPA TO-15 2nd Ed.	ETHYLBENZENE	VA	EPA TO-15 2nd Ed.	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	VA
EPA TO-15 2nd Ed.	ISOPROPYLBENZENE	VA	EPA TO-15 2nd Ed	M+P-XYLENE	VA
EPA TO-15 2nd Ed.	METHYL BROMIDE (BROMOMETHANE)	VA	EPA TO-15 2nd Ed.	METHYL CHLORIDE (CHLOROMETHANE)	VA
EPA TO-15 2nd Ed.	METHYL METHACRYLATE	VA	EPA TO-15 2nd Ed.	METHYL TERT-BUTYL ETHER (MTBE)	VA
EPA TO-15 2nd Ed.	METHYLENE CHLORIDE (DICHLOROMETHANE)	VA	EPA TO-15 2nd Ed.	N-HEPTANE	VA
EPA TO-15 2nd Ed.	N-HEXANE	VA	EPA TO-15 2nd Ed.	O-XYLENE	VA
EPA TO-15 2nd Ed.	PROPYLENE	VA	EPA TO-15 2nd Ed.	STYRENE	VA
EPA TO-15 2nd Ed.	TETRACHLOROETHENE (PERCHLOROETHENE)	VA	EPA TO-15 2nd Ed.	TETRAHYDROFURAN (THF)	VA
EPA TO-15 2nd Ed.	TOLUENE	VA	EPA TO-15 2nd Ed.	TRANS-1,2-DICHLOROETHENE	VA
EPA TO-15 2nd Ed.	TRANS-1,3-DICHLOROPROPENE	VA	EPA TQ-15 2nd Ed.	TRICHLOROETHENE (TRICHLOROETHYLENE)	VA
EPA TO-15 2nd Ed.	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	VA	EPA TO-15 2nd Ed.	VINYL ACETATE	VA
EPA TO-15 2nd Ed.	VINYL BROMIDE (BROMOETHENE)	VA	EPA TO-15 2nd Ed.	VINYL CHLORIDE	VA
EPA TO-15 2nd Ed.	XYLENE (TOTAL)	VA	EPA TO-15 2nd Ed EXTENDED	1,1,1,2-TETRACHLOROETHANE	VA
EPA TO-15 2nd Ed EXTENDED	2-CHLOROTOLUENE	VA	EPA TO-15 2nd Ed EXTENDED	2-HEXANONE	VA
EPA TO-15 2nd Ed EXTENDED	4-ETHYLTOLUENE	VA	EPA TO-15 2nd Ed EXTENDED	ACETONE	VA
EPA TO-15 2nd Ed EXTENDED	CHLORODIBROMOMETHANE	VA	EPA TO-15 2nd Ed EXTENDED	ETHANOL	VA
EPA TO-15 2nd Ed EXTENDED	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	VA	EPA TO-15 2nd Ed EXTENDED	ISOOCTANE (2-METHYLHEPTANE)	VA
EPA TO-15 2nd Ed EXTENDED	N-BUTANE	VA	EPA TO-15 2nd Ed EXTENDED	N-NONANE	VA
EPA TO-15 2nd Ed EXTENDED	N-PENTANE	VA	EPA TO-15 2nd Ed EXTENDED	N-PROPYLBENZENE	VA
EPA TO-15 2nd Ed EXTENDED	NAPHTHALENE	VA	EPA TO-15 2nd Ed EXTENDED	TERT-BUTYL ALCOHOL	VA

DRINKING WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
ENTEROLERT®	ENTEROCOCCI	VA	EPA 180.1 REV 2	TURBIDITY	VA
EPA 200.7 REV 4.4	ALUMINUM	VA	EPA 200.7 REV 4.4	BARIUM	VA
EPA 200.7 REV 4.4	CADMIUM	VA	EPA 200.7 REV 4.4	CALCIUM	VA
EPA 200.7 REV 4.4	CHROMIUM	VA	EPA 200.7 REV 4.4	COPPER	VA



Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 8886

Air Water & Soil Laboratories, Inc. 1941 Reymet Road Richmond, VA 23237

Virginia Laboratory ID: 460021 Effective Date: October 28, 2016 Expiration Date: June 14, 2017

DRINKING WATER

METHOD EPA 200.7 REV 4.4	ANALYTE IRON	PRIMARY VA	METHOD EPA 200.7 REV 4.4	ANALYTE HAGNESIUM	PRIMARY VA
EPA 200.7 REV 4.4	MANGANESE	VA	EPA 200.7 REV 4.4	NICKEL	VA
EPA 200.7 REV 4.4	SILVER	VA	EPA 200.7 REV 4.4	SODIUM	VA
EPA 200.7 REV 4.4	ZINC	VA	EPA 200.8 REV 5.4	ALUMINUM	VA
EPA 200.8 REV 5.4	ANTIMONY	VA	EPA 200.8 REV 5.4	ARSENIC	VA
EPA 200.8 REV 5.4	BARIUM	VA	EPA 200.8 REV 5.4	BERYLLIUM	VA
EPA 200.8 REV 5.4	CADMIUM	VA	EPA 200.8 REV 5.4	CHROMIUM	VA
EPA 200.8 REV 5.4	COPPER	VA	EPA 200 8 REV 5.4	LEAD	VA
EPA 200.8 REV 5.4	MANGANESE	VA	EPA 200 8 REV 5.4	NICKEL	VA
EPA 200.8 REV 5.4	SELENIUM	VA	EPA 200.8 REV 5.4	SILVER	VA
EPA 200.8 REV 5.4	THALLIUM	VA	EPA 200.8 REV 5.4	ZINC	VA
EPA 200.9 REV 2.2	ANTIMONY	VA	EPA 200.9 REV 2.2	ARSENIC	VA
EPA 200.9 REV 2.2	BERYLLIUM	VA	EPA 200.9 REV 2.2	CADMIUM	VA
EPA 200.9 REV 2.2	LEAD	VA	EPA 200.9 REV 2.2	SELENIUM	VA
EPA 200.9 REV 2.2	THALLIUM	VA	EPA 245.1 REV 3	MERCURY	VA
EPA 300.0 REV 2.1	CHLORIDE	VA	EPA 300.0 REV 2.1	FLUORIDE	VA
EPA 300.0 REV 2.1	NITRATE AS N	VA	EPA 300.0 REV 2.1	NITRATE/NITRITE	VA
EPA 300.0 REV 2.1	NITRITE AS N	VA	EPA 300.0 REV 2.1	SULFATE	VA
EPA 504.1 REV 1.1	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	VA	EPA 504.1 REV 1.1	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	VA
EPA 508.1 REV 2	AROCLOR-1016 (PCB-1016)	VA	EPA 508.1 REV 2	AROCLOR-1221 (PCB-1221)	VA
EPA 508.1 REV 2	AROCLOR-1232 (PCB-1232)	VA	EPA 508.1 REV 2	AROCLOR-1242 (PCB-1242)	VA
EPA 508.1 REV 2	AROCLOR-1248 (PCB-1248)	VA	EPA 508.1 REV 2	AROCLOR-1254 (PCB-1254)	VA
EPA 508.1 REV 2	AROCLOR-1260 (PCB-1260)	VA	EPA 508.1 REV 2	CHLORDANE (TECH.)	VA
EPA 508.1 REV 2	ENDRIN	VA	EPA 508.1 REV 2	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXA NE)	VA
EPA 508.1 REV 2	HEPTACHLOR	VA	EPA 508.1 REV 2	HEPTACHLOR EPOXIDE	VA
EPA 508.1 REV 2	METHOXYCHLOR	VA	EPA 508.1 REV 2	TOXAPHENE (CHLORINATED CAMPHENE)	VA
EPA 515.4 REV 1	2,4-D	VA	EPA 515.4 REV 1	DALAPON	VA
EPA 515.4 REV 1	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENO! DNBP)	VA L.	EPA 515.4 REV 1	PENTACHLOROPHENOL	VA
EPA 515.4 REV 1	PICLORAM	VA	EPA 515.4 REV 1	SILVEX (2,4,5-TP)	VA
EPA 524.2 REV 4.1	1,1,1-TRICHLOROETHANE	VA	EPA 524.2 REV 4.1	1,1,2-TRICHLOROETHANE	VA
EPA 524.2 REV 4.1	1,1-DICHLOROETHYLENE	VA	EPA 524.2 REV 4.1	1,2,4-TRICHLOROBENZENE	VA
EPA 524.2 REV 4.1	1,2-DICHLOROBENZENE	VA	EPA 524.2 REV 4.1	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	VA
EPA 524.2 REV 4.1	1,2-DICHLOROPROPANE	VA	EPA 524.2 REV 4.1	1,4-DICHLOROBENZENE	VA
EPA 524.2 REV 4.1	BENZENE	VA	EPA 524.2 REV 4.1	BROMODICHLOROMETHANE	VA



Department of General Services
Division of Consolidated Laboratory Services



PRIMARY

VA

VA

VA

Scope of Accreditation

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Virginia Laboratory ID: 460021 Effective Date: October 28, 2016 Expiration Date: June 14, 2017

DRINKING WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 524.2 REV 4.1	BROMOFORM	VA	EPA 524.2 REV 4.1	CARBON TETRACHLORIDE	VA
EPA 524.2 REV 4.1	CHLOROBENZENE	VA	EPA 524.2 REV 4.1	CHLORODIBROMOMETHANE	VA
EPA 524.2 REV 4.1	CHLOROFORM	VA	EPA 524.2 REV 4.1	CIS-1,2-DICHLOROETHYLENE	VA
EPA 524.2 REV 4.1	ETHYLBENZENE	VA	EPA 524.2 REV 4.1	METHYLENE CHLORIDE (DICHLOROMETHANE)	VA
EPA 524.2 REV 4.1	STYRENE	VA	EPA 524 2 REV 4.1	TETRACHLOROETHENE (PERCHLOROETHENE)	VA
EPA 524.2 REV 4.1	TOLUENE	VA	EPA 524.2 REV 4.1	TOTAL TRIHALOMETHANES	VA
EPA 524.2 REV 4.1	TRANS-1,2-DICHLOROETHENE	VA	EPA 524.2 REV 4.1	TRICHLOROETHENE (TRICHLOROETHYLENE)	VA
EPA 524.2 REV 4.1	VINYL CHLORIDE	VA	EPA 524.2 REV 4.1	XYLENE (TOTAL)	VA
EPA 525 2 REV 2	ALACHLOR	VA	EPA 525.2 REV 2	ATRAZINE	VA
EPA 525.2 REV 2	BENZO(A)PYRENE	VA	EPA 525.2 REV 2	BIS(2-ETHYLHEXYL) PHTHALATE (D(2-ETHYLHEXYL)PHTHALATE), (DEHP)	VA
EPA 525.2 REV 2	BIS(2-ETHYLHEXYL)ADIPATE (DK2-ETHYLHEXYL)ADIPATE)	VA	EPA 525.2 REV 2	HEXACHLOROBENZENE	VA
EPA 525.2 REV 2	HEXACHLOROCYCLOPENTADIENE	E VA	EPA 525.2 REV 2	SIMAZINE	VA
EPA 531.2 REV 1	CARBOFURAN (FURADEN)	VA	EPA 531 2 REV 1	OXAMYL	VA
EPA 552.3 REV 1	BROMOACETIC ACID	VA	EPA 552.3 REV 1	CHLOROACETIC ACID	VA
EPA 552.3 REV 1	DIBROMOACETIC ACID	VA	EPA 552.3 REV 1	DICHLOROACETIC ACID	VA
EPA 552 3 REV 1	HALOACETIC ACIDS - FIVE (HAA5)	VA	EPA 552.3 REV 1	TRICHLOROACETIC ACID	VA
SIMPLATE	HETEROTROPHIC PLATE COUNT	VA	SM 2130 B-2011	TURBIDITY	VA
SM 2320 B-2011	ALKALINITY AS CACO3	VA	SM 2510 B-2011	CONDUCTIVITY	VA
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	VA	SM 4500-CN E-2011	CYANIDE	VA
SM 4500-H+ B-2011	PH	VA	SM 4500-NO3 F-2011	NITRATE/NITRITE	VA
SM 4500-P E-2011	ORTHOPHOSPHATE AS P	VA	SM 5310 C-2011	DISSOLVED ORGANIC CARBON (DOC)	VA
SM 5310 C-2011	TOTAL ORGANIC CARBON	VA	SM 5910 B-2011	UV 254	VA
SM 9223 COLILERT-18 MPN	ESCHERICHIA COLI	VA	SM 9223 COLILERT-18 MPN	TOTAL COLIFORMS	VA
SM 9223 COLILERT-18 P/A	ESCHERICHIA COLI	VA	SM 9223 COLILERT-18 P/A	TOTAL COLIFORMS	VA
SM 9223 COLISURE®	ESCHERICHIA COLI	VA	SM 9223 COLISURE®	TOTAL COLIFORMS	VA
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METHOD ASTM D 7065-06	ANALYTE NONYLPHENOL	PRIMARY VA	METHOD COLILERT-18 MPN	ANALYTE ESCHERICHIA COLI	Ē
ENTEROLERT®	ENTEROCOCCI	VA	EPA 1010	FLASHPOINT	-
EPA 120.1	CONDUCTIVITY	VA	EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	9
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	VA	EPA 160.4	RESIDUE-VOLATILE	



Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 8886

Air Water & Soil Laboratories, Inc. 1941 Reymet Road Richmond, VA 23237

Virginia Laboratory ID: 460021
Effective Date: October 28, 2016
Expiration Date: June 14, 2017

METHOD EPA 1664 A	ANALYTE OIL AND GREASE (AS HEM)	PRIMARY VA	METHOD EPA 1664 A	ANALYTE TOTAL PETROLEUM HYDROCARBONS (TPH) (AS NONPOLAR MATERIAL, SGT-HEM)	PRIMARY VA
EPA 180.1 REV 2	TURBIDITY	VA	EPA 200.2 REV 2.8	PREP: SAMPLE PREPARATION PROCEDURE FOR SPECTROCHEMICAL DETERMINATION OF TOTAL RECOVERABLE ELEMENTS	VA
EPA 200.7 REV 4.4	ALUMINUM	VA	EPA 200 7 REV 4.4	ANTIMONY	VA
EPA 200.7 REV 4.4	ARSENIC	VA	EPA 200.7 REV 4.4	BARIUM	VA
EPA 200.7 REV 4.4	BERYLLIUM	VA	EPA 200.7 REV 4.4	BORON	VA
EPA 200.7 REV 4.4	CADMIUM	VA	EPA 200.7 REV 4.4	CALCIUM	VA
EPA 200.7 REV 4.4	CHROMIUM	VA	EPA 200.7 REV 4.4	COBALT	VA
EPA 200.7 REV 4.4	COPPER	VA	EPA 200.7 REV 4.4	IRON	VA
EPA 200.7 REV 4.4	LEAD	VA	EPA 200.7 REV 4.4	MAGNESIUM	VA
EPA 200.7 REV 4.4	MANGANESE	VA	EPA 200.7 REV 4.4	MOLYBDENUM	VA
EPA 200.7 REV 4.4	NICKEL	VA	EPA 200.7 REV 4.4	POTASSIUM	VA
EPA 200.7 REV 4.4	SELENIUM	VA	EPA 200.7 REV 4.4	SILVER	VA
EPA 200.7 REV 4.4	SODIUM	VA	EPA 200.7 REV 4.4	THALLIUM	VA
EPA 200.7 REV 4.4	TIN	VA	EPA 200.7 REV 4.4	TITANIUM	VA
EPA 200.7 REV 4.4	VANADIUM	VA	EPA 200.7 REV 4.4	ZINC	VA
EPA 200.8 REV 5.4	ANTIMONY	VA	EPA 200.8 REV 5.4	ARSENIC	VA
EPA 200.8 REV 5.4	BARIUM	VA	EPA 200.8 REV 5.4	BERYLLIUM	VA
EPA 200.8 REV 5.4	CADMIUM	VA	EPA 200.8 REV 5.4	CHROMIUM	VA
EPA 200.8 REV 5.4	COBALT	VA	EPA 200.8 REV 5.4	COPPER	VA
EPA 200.8 REV 5.4	LEAD	VA	EPA 200.8 REV 5.4	MANGANESE	VA
EPA 200.8 REV 5.4	MOLYBDENUM	VA	EPA 200 8 REV 5.4	NICKEL	VA
EPA 200.8 REV 5.4	SELENIUM	VA	EPA 200.8 REV 5.4	SILVER	VA
EPA 200.8 REV 5.4	THALLIUM	VA	EPA 200.8 REV 5.4	VANADIUM	VA
EPA 200.8 REV 5.4	ZINC	VA	EPA 200.9 REV 2.2	ANTIMONY	VA
EPA 200.9 REV 2.2	ARSENIC	VA	EPA 200.9 REV 2.2	BERYLLIUM	VA
EPA 200.9 REV 2.2	CADMIUM	VA	EPA 200.9 REV 2.2	CHROMIUM	VA
EPA 200.9 REV 2.2	COPPER	VA	EPA 200.9 REV 2.2	LEAD	VA
EPA 200.9 REV 2.2	NICKEL	VA	EPA 200.9 REV 2.2	SELENIUM	VA
EPA 200.9 REV 2.2	SILVER	VA	EPA 200 9 REV 2 2	THALLIUM	VA
EPA 200.9 REV 2.2	TIN	VA	EPA 245.1 REV 3	MERCURY	VA
EPA 300.0 REV 2.1	BROMIDE	VA	EPA 300.0 REV 2.1	CHLORIDE	VA
EPA 300.0 REV 2.1	FLUORIDE	VA	EPA 300.0 REV 2.1	NITRATE AS N	VA
EPA 300.0 REV 2.1	NITRATE/NITRITE	VA	EPA 300.0 REV 2.1	NITRITE AS N	VA
EPA 300.0 REV 2.1	SULFATE	VA			- mad-1,000



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METHOD EPA 3005 A	ANALYTE PREP: ACID DIGESTION OF WATERS FOR TOTAL RECOVERABLE OR DISSOLVED METALS	PRIMARY VA	METHOD EPA 3010 A	ANALYTE PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	PRIMARY VA
EPA 350.1 REV 2	AMMONIA AS N	VA	EPA 351.2 REV 2	KJELDAHL NITROGEN - TOTAL	VA
EPA 3510 C	PREP: LIQUID-LIQUID EXTRACTION	I VA	EPA 3511	PREP: ORGANIC EXTRACTION AND SAMPLE PREPARATION	VA
EPA 3665 A	SULFURIC ACID/PERMANGANATE CLEAN-UP	VA	EPA 420.1	TOTAL PHENOLICS	VA
EPA 5030	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	VA	EPA 6010 C	ALUMINUM	VA
EPA 6010 C	ANTIMONY	VA	EPA 6010 C	ARSENIC	VA
EPA 6010 C	BARIUM	VA	EPA 6010 C	BERYLLIUM	VA
EPA 6010 C	BORON	VA	EPA 6010 C	CADMIUM	VA
EPA 6010 C	CALCIUM	VA	EPA 6010 C	CHROMIUM	VA
EPA 6010 C	COBALT	VA	EPA 6010 C	COPPER	VA
EPA 6010 C	IRON	VA	EPA 6010 C	LEAD	VA
EPA 6010 C	LITHIUM	VA	EPA 6010 C	MAGNESIUM	VA
EPA 6010 C	MANGANESE	VA	EPA 6010 C	MOLYBDENUM	VA
EPA 6010 C	NICKEL	VA	EPA 6010 C	POTASSIUM	VA
EPA 6010 C	SELENIUM	VA	EPA 6010 C	SILVER	VA
EPA 6010 C	SODIUM	VA	EPA 6010 C	STRONTIUM	VA
EPA 6010 C	THALLIUM	VA	EPA 6010 C	TIN	VA
EPA 6010 C	TITANIUM	VA	EPA 6010 C	VANADIUM	VA
EPA 6010 C	ZINC	VA	EPA 6020 A	ANTIMONY	VA
EPA 6020 A	ARSENIC	VA	EPA 6020 A	BARIUM	VA
EPA 6020 A	BERYLLIUM	VA	EPA 6020 A	CADMIUM	VA
EPA 6020 A	CHROMIUM	VA	EPA 6020 A	COBALT	VA
EPA 6020 A	COPPER	VA	EPA 6020 A	LEAD	VA
EPA 6020 A	MANGANESE	VA	EPA 6020 A	NICKEL	VA
EPA 6020 A	SELENIUM	VA	EPA 6020 A	SILVER	VA
EPA 6020 A	THALLIUM	VA	EPA 6020 A	VANADIUM	VA
EPA 6020 A	ZINC	VA	EPA 6020 A - EXTENDED	MOLYBDENUM	VA
EPA 6020 A - EXTENDED	TIN	VA	EPA 608	4,4'-DDD	VA
EPA 608	4,4'-DDE	VA	EPA 608	4,4'-DDT	VA
EPA 608	ALDRIN	VA	EPA 608	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXA NE)	VA
EPA 608	AROCLOR-1016 (PCB-1016)	VA	EPA 608	AROCLOR-1221 (PCB-1221)	VA
EPA 608	AROCLOR-1232 (PCB-1232)	VA	EPA 608	AROCLOR-1242 (PCB-1242)	VA
EPA 608	AROCLOR-1248 (PCB-1248)	VA	EPA 608	AROCLOR-1254 (PCB-1254)	VA
EPA 608	AROCLOR-1260 (PCB-1260)	VA			Name of the last o



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METHOD EPA 608	ANALYTE BETA-BHC (BETA-HEXACHLOROCYCLOHEXAN	PRIMARY VA	METHOD EPA 608	ANALYTE CHLORDANE (TECH.)	PRIMARY VA
EPA 608	E) DELTA-BHC	VA	EPA 608	DIELDRIN	VA
EPA 608	ENDOSULFAN I	VA	EPA 608	ENDOSULFAN II	VA
EPA 608	ENDOSULFAN SULFATE	VA	EPA 608	ENDRIN	VA
EPA 608	ENDRIN ALDEHYDE	VA	EPA 608	GAMMA-BHC (LINDANE,	VA
EPA 600	ENDRINALDERT DE		EFA 600	GAMMA-HEXACHLOROCYCLOHEXA NE)	
EPA 608	HEPTACHLOR	VA	EPA 608	HEPTACHLOR EPOXIDE	VA
EPA 608	TOXAPHENE (CHLORINATED CAMPHENE)	VA	EPA 608 2	METHOXYCHLOR	VA
EPA 624	1,1,1-TRICHLOROETHANE	VA	EPA 624	1,1,2,2-TETRACHLOROETHANE	VA
EPA 624	1,1,2-TRICHLOROETHANE	VA	EPA 624	1,1-DICHLOROETHANE	VA
EPA 624	1,2-DICHLOROBENZENE	VA	EPA 624	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	VA
EPA 624	1,2-DICHLOROPROPANE	VA	EPA 624	1,3-DICHLOROBENZENE	VA
EPA 624 ·	1,4-DICHLOROBENZENE	VA	EPA 624	2-CHLOROETHYL VINYL ETHER	VA
EPA 624	ACROLEIN (PROPENAL)	VA	EPA 624	ACRYLONITRILE	VA
EPA 624	BENZENE	VA	EPA 624	BROMODICHLOROMETHANE	VA
EPA 624	BROMOFORM	VA	EPA 624	CARBON TETRACHLORIDE	VA
EPA 624	CHLOROBENZENE	VA	EPA 624	CHLORODIBROMOMETHANE	VA
EPA 624	CHLOROETHANE (ETHYL CHLORIDE)	VA	EPA 624	CHLOROFORM	VA
EPA 624	CIS-1,3-DICHLOROPROPENE	VA	EPA 624	ETHYLBENZENE	VA
EPA 624	METHYL BROMIDE (BROMOMETHANE)	VA	EPA 624	METHYL CHLORIDE (CHLOROMETHANE)	VA
EPA 624	METHYLENE CHLORIDE (DICHLOROMETHANE)	VA	EPA 624	TETRACHLOROETHENE (PERCHLOROETHENE)	VA
EPA 624	TOLUENE	VA	EPA 624	TRANS-1,2-DICHLOROETHENE	VA
EPA 624	TRANS-1,3-DICHLOROPROPENE	VA	EPA 624	TRICHLOROETHENE (TRICHLOROETHYLENE)	VA
EPA 624	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	VA	EPA 624	VINYL CHLORIDE	VA
EPA 624 - EXTENDED	1,1-DICHLOROETHYLENE	VA	EPA 624 - EXTENDED	2-BUTANONE (METHYL ETHYL KETONE, MEK)	VA
EPA 624 - EXTENDED	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	. VA	EPA 624 - EXTENDED	ACETONE	VA
EPA 624 - EXTENDED	ETHYL ACETATE	VA	EPA 624 - EXTENDED	ISOPROPYL ACETATE	VA
EPA 624 - EXTENDED	METHYL TERT-BUTYL ETHER (MTBE)	VA	EPA 624 - EXTENDED	N-AMYL ACETATE	VA
EPA 624 - EXTENDED	XYLENE (TOTAL)	VA	EPA 625	1,2,4-TRICHLOROBENZENE	VA
EPA 625	2,2'-OXYBIS(1-CHLOROPROPANE)	VA	EPA 625	2,3,7,8-TCDD (DIOXIN) - QUALITATIVE SCREEN	VA



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METHOD EPA 625	ANALYTE 2,4,6-TRICHLOROPHENOL	PRIMARY VA	METHOD EPA 625	ANALYTE 2,4-DICHLOROPHENOL	PRIMARY VA
EPA 625	2,4-DIMETHYLPHENOL	VA	EPA 625	2,4-DINITROPHENOL	VA
EPA 625	2,4-DINITROTOLUENE (2,4-DNT)	VA	EPA 625	2,6-DINITROTOLUENE (2,6-DNT)	VA
EPA 625	2-CHLORONAPHTHALENE	VA	EPA 625	2-CHLOROPHENOL	VA
EPA 625	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	VA	EPA 625	2-METHYLPHENOL (O-CRESOL)	VA
EPA 625	2-NITROPHENOL	VA	EPA 625	3,3'-DICHLOROBENZIDINE	VA
EPA 625	4-BROMOPHENYL PHENYL ETHER	VA	EPA 625	4-CHLORO-3-METHYLPHENOL	VA
EPA 625	4-CHLOROPHENYL PHENYLETHER	VA	EPA 625	4-NITROPHENOL	VA
EPA 625	ACENAPHTHENE	VA	EPA 625	ACENAPHTHYLENE	VA
EPA 625	ANTHRACENE	VA	EPA 625	BENZIDINE	VA
EPA 625	BENZO(A)ANTHRACENE	VA	EPA 625	BENZO(A)PYRENE	VA
EPA 625	BENZO(B)FLUORANTHENE	VA	EPA 625	BENZO(G,H,I)PERYLENE	VA
EPA 625	BENZO(K)FLUORANTHENE	VA	EPA 625	BIS(2-CHLOROETHOXY)METHANE	VA
EPA 625	BIS(2-CHLOROETHYL) ETHER	VA	EPA 625	BIS(2-ETHYLHEXYL) PHTHALATE (DX2-ETHYLHEXYL) PHTHALATE), (DEHP)	VA
EPA 625	BUTYL BENZYL PHTHALATE	VA	EPA 625	CHRYSENE	VA
EPA 625	DI-N-BUTYL PHTHALATE	VA	EPA 625	DI-N-OCTYL PHTHALATE	VA
EPA 625	DIBENZO(A,H) ANTHRACENE	VA	EPA 625	DIETHYL PHTHALATE	VA
EPA 625	DIMETHYL PHTHALATE	VA	EPA 625	FLUORANTHENE	VA
EPA 625	FLUORENE	VA	EPA 625	HEXACHLOROBENZENE	VA
EPA 625	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	VA	EPA 625	HEXACHLOROCYCLOPENTADIENE	VA
EPA 625	HEXACHLOROETHANE	VA	EPA 625	INDENO(1,2,3-CD) PYRENE	VA
EPA 625	ISOPHORONE	VA	EPA 625	N-NITROSODI-N-PROPYLAMINE	VA
EPA 625	N-NITROSODIMETHYLAMINE	VA	EPA 625	N-NITROSODIPHENYLAMINE	VA
EPA 625	NAPHTHALENE	VA	EPA 625	NITROBENZENE	VA
EPA 625	PENTACHLOROPHENOL	VA	EPA 625	PHENANTHRENE	VA
EPA 625	PHENOL	VA	EPA 625	PYRENE	VA
EPA 625 - EXTENDED	1,2-DIPHENYLHYDRAZINE	VA	EPA 625 - EXTENDED	4-METHYLPHENOL (P-CRESOL)	VA
EPA 625 - EXTENDED	ALPHA-TERPINEOL	VA	EPA 625 - EXTENDED	BENZOIC ACID	VA
EPA 625 - EXTENDED	DINONYL PHTHALATE	VA	EPA 7010	ANTIMONY	VA
EPA 7010	ARSENIC	VA	EPA 7010	BERYLLIUM	VA
EPA 7010	CADMIUM	VA	EPA 7010	CHROMIUM	VA
EPA 7010	COPPER	VA	EPA 7010	LEAD	VA
EPA 7010	NICKEL	VA	EPA 7010	SELENIUM	VA
EPA 7010	SILVER	VA	EPA 7010	THALLIUM	VA
EPA 7196 A	CHROMIUM VI	VA	EPA 7470 A	MERCURY	VA
EPA 8011	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	VA			



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METHOD EPA 8011	ANALYTE 1,2-DIBROMOETHANE (EDB. ETHYLENE DIBROMIDE)	PRIMARY VA	METHOD EPA 8011 - EXTENDED	ANALYTE 1,2,3-TRICHLOROPROPANE	PRIMARY VA
EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	VA	EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	VA
EPA 8015 C - EXTENDED	OIL RANGE ORGANICS	VA	EPA 8021 B	BENZENE	VA
EPA 8021 B	ETHYLBENZENE	VA	EPA 8021 B	M+P-XYLENE	VA
EPA 8021 B	NAPHTHALENE	VA	EPA 8021 B	O-XYLENE	VA
EPA 8021 B	TOLUENE	VA	EPA 8021 B	XYLENE (TOTAL)	VA
EPA 8021 B - EXTENDED	METHYL TERT-BUTYL ETHER (MTBE)	VA	EPA 8081 B	4,4'-DDD	VA
EPA 8081 B	4,4'-DDE	VA	EPA 8081 B	4,4'-DDT	VA
EPA 8081 B	ALDRIN	VA	EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXA NE)	VA
EPA 8081 B	ALPHA-CHLORDANE [CIS-CHLORDANE]	VA	EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXAN E)	VA
EPA 8081 B	CHLORDANE (TECH.)	VA	EPA 8081 B	DELTA-BHC	VA
EPA 8081 B	DIELDRIN	VA	EPA 8081 B	ENDOSULFAN I	VA
EPA 8081 B	ENDOSULFAN II	VA	EPA 8081 B	ENDOSULFAN SULFATE	VA
EPA 8081 B	ENDRIN	VA	EPA 8081 B	ENDRIN ALDEHYDE	VA
EPA 8081 B	ENDRIN KETONE	VA	EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXA NE)	VA
EPA 8081 B	GAMMA-CHLORDANE [BETA-CHLORDANE, TRANS-CHLORDANE]	VA	EPA 8081 B	HEPTACHLOR	VA
EPA 8081 B	HEPTACHLOR EPOXIDE	VA	EPA 8081 B	METHOXYCHLOR	VA
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	VA	EPA 8081 B - EXTENDED	MIREX	VA
EPA 8082 A	AROCLOR-1016 (PCB-1016)	VA	EPA 8082 A	AROCLOR-1221 (PCB-1221)	VA
EPA 8082 A	AROCLOR-1232 (PCB-1232)	VA	EPA 8082 A	AROCLOR-1242 (PCB-1242)	VA
EPA 8082 A	AROCLOR-1248 (PCB-1248)	VA	EPA 8082 A	AROCLOR-1254 (PCB-1254)	VA
EPA 8082 A	AROCLOR-1260 (PCB-1260)	VA	EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	VA
EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	VA	EPA 8151 A	2,4,5-T	VA
EPA 8151 A	2,4-D	VA	EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	VA
EPA 8151 A	PENTACHLOROPHENOL	VA	EPA 8151 A	SILVEX (2,4,5-TP)	VA
EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	VA	EPA 8260 B	1,1,1-TRICHLOROETHANE	VA
EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	VA	EPA 8260 B	1,1,2-TRICHLOROETHANE	VA
EPA 8260 B	1,1-DICHLOROETHANE	VA	EPA 8260 B	1,1-DICHLOROETHYLENE	VA
EPA 8260 B	1,1-DICHLOROPROPENE	VA	EPA 8260 B	1,2,3-TRICHLOROBENZENE	VA
EPA 8260 B	1,2,3-TRICHLOROPROPANE	VA	EPA 8260 B	1,2,4-TRICHLOROBENZENE	VA



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METHOD	ANALYTE	PRIMARY	METHOD		PRIMARY
EPA 8260 B	1,2,4-TRIMETHYLBENZENE	VA	EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	VA
EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	VA	EPA 8260 B	1,2-DICHLOROBENZENE	VA
EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	VA	EPA 8260 B	1,2-DICHLOROPROPANE	VA
EPA 8260 B	1,3,5-TRIMETHYLBENZENE	VA	EPA 8260 B	1,3-DICHLOROBENZENE	VA
EPA 8260 B	1,3-DICHLOROPROPANE	VA	EPA 8260 B	1,4-DICHLOROBENZENE	VA
EPA 8260 B	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	VA	EPA 8260 B	2,2-DICHLOROPROPANE	VA
EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	VA	EPA 8260 B	2-CHLOROETHYL VINYL ETHER	VA
EPA 8260 B	2-CHLOROTOLUENE	VA	EPA 8260 B	2-HEXANONE	VA
EPA 8260 B	2-PICOLINE (2-METHYLPYRIDINE)	VA	EPA 8260 B	4-CHLOROTOLUENE	VA
EPA 8260 B	4-ISOPROPYLTOLUENE (P-CYMENE)	VA	EPA 8260 B	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	VA
EPA 8260 B	ACETONE	VA	EPA 8260 B	ACETONITRILE	VA
EPA 8260 B	ACROLEIN (PROPENAL)	VA	EPA 8260 B	ACRYLONITRILE	VA
EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	VA	EPA 8260 B	BENZENE	VA
EPA 8260 B	BENZYL CHLORIDE	VA	EPA 8260 B	BROMOBENZENE	VA
EPA 8260 B	BROMOCHLOROMETHANE	VA	EPA 8260 B	BROMODICHLOROMETHANE	VA
EPA 8260 B	BROMOFORM	VA	EPA 8260 B	CARBON DISULFIDE	VA
EPA 8260 B	CARBON TETRACHLORIDE	VA	EPA 8260 B	CHLOROBENZENE	VA
EPA 8260 B	CHLORODIBROMOMETHANE	VA	EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	VA
EPA 8260 B	CHLOROFORM	VA	EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	VA
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	VA	EPA 8260 B	CIS-1,3-DICHLOROPROPENE	VA
EPA 8260 B	CIS-1,4-DICHLORO-2-BUTENE	VA	EPA 8260 B	DIBROMOFLUOROMETHANE	VA
EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	VA	EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	VA
EPA 8260 B	DIETHYL ETHER	VA	EPA 8260 B	ETHANOL	VA
EPA 8260 B	ETHYL ACETATE	VA	EPA 8260 B	ETHYL METHACRYLATE	VA
EPA 8260 B	ETHYLBENZENE	VA	EPA 8260 B	ETHYLENE OXIDE	VA
EPA 8260 B	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	VA	EPA 8260 B	IODOMETHANE (METHYL IODIDE)	VA
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	VA	EPA 8260 B	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	VA
EPA 8260 B	ISOPROPYLBENZENE	VA	EPA 8260 B	M+P-XYLENE	VA
EPA 8260 B	METHACRYLONITRILE	VA	EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	VA
EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	VA	EPA 8260 B	METHYL METHACRYLATE	VA



Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 8886

Air Water & Soil Laboratories, Inc. 1941 Reymet Road Richmond, VA 23237

Virginia Laboratory ID: 460021 Effective Date: October 28, 2016 Expiration Date: June 14, 2017

METHOD EPA 8260 B	ANALYTE METHYL TERT-BUTYL ETHER (MTBE)	PRIMARY VA	METHOD EPA 8260 B	ANALYTE METHYLENE CHLORIDE (DICHLOROMETHANE)	PRIMARY VA
EPA 8260 B	N-BUTYLBENZENE	VA	EPA 8260 B	N-PROPYLBENZENE	VA
EPA 8260 B	NAPHTHALENE	VA	EPA 8260 B	O-XYLENE	VA
EPA 8260 B	PENTACHLOROETHANE	VA	EPA 8260 B	PENTAFLUOROBENZENE	VA
EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	VA	EPA 8260 B	SEC-BUTYLBENZENE	VA
EPA 8260 B	STYRENE	VA	EPA 8260 B	TERT-BUTYL ALCOHOL	VA
EPA 8260 B	TERT-BUTYLBENZENE	VA	EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	VA
EPA 8260 B	TOLUENE	VA	EPA 8260 B	TRANS-1,2-DICHLOROETHENE	VA
EPA 8260 B	TRANS-1,3-DICHLOROPROPENE	VA	EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	VA
EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	VA	EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	VA
EPA 8260 B	VINYL ACETATE	VA	EPA 8260 B	VINYL CHLORIDE	VA
EPA 8260 B	XYLENE (TOTAL)	VA	EPA 8260 B - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	VA
EPA 8260 B - EXTENDED	1,3,5-TRICHLOROBENZENE	VA	EPA 8260 B - EXTENDED		VA
EPA 8260 B - EXTENDED	CYCLOHEXANONE	VA	EPA 8260 B - EXTENDED	DHSOPROPYLETHER (DIPE, ISOPROPYLETHER)	VA
EPA 8260 B - EXTENDED	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	VA	EPA 8260 B - EXTENDED	ISOPROPYL ACETATE	VA
EPA 8260 B - EXTENDED	METHYLCYCLOHEXANE	VA	EPA 8260 B - EXTENDED	N-HEXANE	VA
EPA 8260 B - EXTENDED	T-AMYL ALCOHOL (TAA)	VA	EPA 8260 B - EXTENDED	T-AMYL ETHYL ETHER (TAEE) (4,4-DIMETHYL-3-OXAHEXANE)	VA
EPA 8260 B - EXTENDED	T-AMYLMETHYLETHER (TAME)	VA	EPA 8260 B SIM	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	VA
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	VA	EPA 8270 D	1,2,4-TRICHLOROBENZENE	VA
EPA 8270 D	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	VA	EPA 8270 D	1,2-DICHLOROBENZENE	VA
EPA 8270 D	1,2-DINITROBENZENE	VA	EPA 8270 D	1,2-DIPHENYLHYDRAZINE	VA
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	VA	EPA 8270 D	1,3-DICHLOROBENZENE	VA
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	VA	EPA 8270 D	1,4-DICHLOROBENZENE	VA
EPA 8270 D	1,4-DINITROBENZENE	VA	EPA 8270 D	1,4-NAPHTHOQUINONE	VA
EPA 8270 D	1,4-PHENYLENEDIAMINE	VA	EPA 8270 D	1-CHLORONAPHTHALENE	VA
EPA 8270 D	1-NAPHTHYLAMINE	VA	EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	VA
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	VA	EPA 8270 D	2,4,5-TRICHLOROPHENOL	VA
EPA 8270 D	2,4,6-TRICHLOROPHENOL	VA	EPA 8270 D	2,4-DICHLOROPHENOL	VA
EPA 8270 D	2,4-DIMETHYLPHENOL	VA	EPA 8270 D	2,4-DINITROPHENOL	VA
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	VA	EPA 8270 D	2,6-DICHLOROPHENOL	VA
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	VA	EPA 8270 D	2-ACETYLAMINOFLUORENE	VA
EPA 8270 D	2-CHLORONAPHTHALENE	VA			STORES STATES



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Virginia Laboratory ID: 460021 Effective Date: October 28, 2016 Expiration Date: June 14, 2017

METHOD EPA 8270 D	ANALYTE 2-CHLOROPHENOL	PRIMARY VA	METHOD EPA 8270 D	ANALYTE 2-METHYL-4,6-DINITROPHENOL (4.6-DINITRO-2-METHYLPHENOL)	PRIMARY VA
EPA 8270 D	2-METHYLNAPHTHALENE	VA	EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	VA
EPA 8270 D	2-NAPHTHYLAMINE	VA	EPA 8270 D	2-NITROANILINE	VA
EPA 8270 D	2-NITROPHENOL	VA	EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	VA
EPA 8270 D	3,3'-DICHLOROBENZIDINE	VA	EPA 8270 D	3,3'-DIMETHYLBENZIDINE	VA
EPA 8270 D	3-METHYLCHOLANTHRENE	VA	EPA 8270 D	3-METHYLPHENOL (M-CRESOL)	VA
EPA 8270 D	3-NITROANILINE	VA	EPA 8270 D	4,4'-METHYLENEBIS(2-CHLOROANII INE)	L VA
EPA 8270 D	4,4'-METHYLENEBIS(N, N-DIMETHYLANILINE)	VA	EPA 8270 D	4-AMINOBIPHENYL	VA
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER	VA	EPA 8270 D	4-CHLORO-3-METHYLPHENOL	VA
EPA 8270 D	4-CHLOROANILINE	VA	EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	VA
EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	VA	EPA 8270 D	4-METHYLPHENOL (P-CRESOL)	VA
EPA 8270 D	4-NITROANILINE	VA	EPA 8270 D	4-NITROPHENOL	VA
EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	VA	EPA 8270 D	5-NITRO-O-TOLUIDINE	VA
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	VA	EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	VA
EPA 8270 D	ACENAPHTHENE	VA	EPA 8270 D	ACENAPHTHYLENE	VA
EPA 8270 D	ACETOPHENONE	VA	EPA 8270 D	ANILINE	VA
EPA 8270 D	ANTHRACENE	VA	EPA 8270 D	ARAMITE	VA
EPA 8270 D	AZINPHOS-METHYL (GUTHION)	VA	EPA 8270 D	BENZIDINE	VA
EPA 8270 D	BENZO(A)ANTHRACENE	VA	EPA 8270 D	BENZO(A)PYRENE	VA
EPA 8270 D	BENZO(B)FLUORANTHENE	VA	EPA 8270 D	BENZO(G,H,I)PERYLENE	VA
EPA 8270 D	BENZO(K)FLUORANTHENE	VA	EPA 8270 D	BENZOIC ACID	VA
EPA 8270 D	BENZYL ALCOHOL	VA	EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	VA
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	VA	EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	VA
EPA 8270 D	BUTYL BENZYL PHTHALATE	VA	EPA 8270 D	CHLOROBENZILATE	VA
EPA 8270 D	CHRYSENE	VA	EPA 8270 D	DI-N-BUTYL PHTHALATE	VA
EPA 8270 D	DI-N-OCTYL PHTHALATE	VA	EPA 8270 D	DIALLATE	VA
EPA 8270 D	DIBENZ(A, J) ACRIDINE	VA	EPA 8270 D	DIBENZO(A,H) ANTHRACENE	VA
EPA 8270 D	DIBENZOFURAN	VA	EPA 8270 D	DIETHYL PHTHALATE	VA
EPA 8270 D	DIMETHOATE	VA	EPA 8270 D	DIMETHYL PHTHALATE	VA
EPA 8270 D	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENO DNBP)	L, VA	EPA 8270 D	DIPHENYLAMINE	VA
EPA 8270 D	DISULFOTON	VA	EPA 8270 D	ETHYL METHANESULFONATE	VA
EPA 8270 D	FAMPHUR	VA	EPA 8270 D	FLUORANTHENE	VA
EPA 8270 D	FLUORENE	VA	EPA 8270 D	HEXACHLOROBENZENE	VA



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Virginia Laboratory ID: 460021
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Expiration Date: June 14, 2017

METHOD EPA 8270 D	ANALYTE HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PRIMARY VA	METHOD EPA 8270 D	ANALYTE HEXACHLOROCYCLOPENTADIENE	PRIMARY VA
EPA 8270 D	HEXACHLOROETHANE	VA	EPA 8270 D	HEXACHLOROPHENE	VA
EPA 8270 D	HEXACHLOROPROPENE	VA	EPA 8270 D	INDENO(1,2,3-CD) PYRENE	VA
EPA 8270 D	ISODRIN	VA	EPA 8270 D	ISOPHORONE	VA
EPA 8270 D	ISOSAFROLE	VA	EPA 8270 D	KEPONE	VA
EPA 8270 D	MALATHION	VA	EPA 8270 D	METHAPYRILENE	VA
EPA 8270 D	METHYL METHANESULFONATE	VA	EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	VA
EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	VA	EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	VA
EPA 8270 D	N-NITROSODIETHYLAMINE	VA	EPA 8270 D	N-NITROSODIMETHYLAMINE	VA
EPA 8270 D	N-NITROSODIPHENYLAMINE	VA	EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	VA
EPA 8270 D	N-NITROSOMORPHOLINE	VA	EPA 8270 D	N-NITROSOPIPERIDINE	VA
EPA 8270 D	N-NITROSOPYRROLIDINE	VA	EPA 8270 D	NAPHTHALENE	VA
EPA 8270 D	NICOTINE	VA	EPA 8270 D	NITROBENZENE	VA
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	VA	EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	VA
EPA 8270 D	PARATHION (PARATHION - ETHYL)	VA	EPA 8270 D	PENTACHLOROBENZENE	VA
EPA 8270 D	PENTACHLORONITROBENZENE	VA	EPA 8270 D	PENTACHLOROPHENOL	VA
EPA 8270 D	PHENACETIN	VA	EPA 8270 D	PHENANTHRENE	VA
EPA 8270 D	PHENOL	VA	EPA 8270 D	PHORATE	VA
EPA 8270 D	PRONAMIDE (KERB)	VA	EPA 8270 D	PYRENE	VA
EPA 8270 D	SAFROLE	VA	EPA 8270 D	THIONAZIN (ZINOPHOS)	VA
EPA 8270 D - EXTENDED	1,1'-BIPHENYL	VA	EPA 8270 D - EXTENDED	AZOBENZENE	VA
EPA 8270 D - EXTENDED	CARBAZOLE	VA	EPA 8270 D - EXTENDED	DINONYL PHTHALATE	VA
EPA 8270 D - EXTENDED	PYRIDINE	VA	EPA 9012 B	TOTAL CYANIDE	VA
EPA 9020 B	TOTAL ORGANIC HALIDES (TOX)	VA	EPA 9030 B	PREP: SULFIDE	VA
EPA 9034	TOTAL SULFIDES	VA	EPA 9060 A	TOTAL ORGANIC CARBON	VA
EPA 9065	TOTAL PHENOLICS	VA	EPA 9215	SULFIDE	VA
NCASI METHOD COLOR 71.01	COLOR	VA	RSK-175	ETHANE	VA
RSK-175	ETHENE (ETHYLENE)	VA	RSK-175	METHANE	VA
SM 2130 B-2011	TURBIDITY	VA	SM 2310 B-2011	ACIDITY, AS CACO3	VA
SM 2320 B-2011	ALKALINITY AS CACO3	VA	SM 2340 B-2011	TOTAL HARDNESS AS CACO3	VA
SM 2510 B-2011	CONDUCTIVITY	VA	SM 2540 B-2011	RESIDUE-TOTAL	VA
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	VA	SM 2540 D-2011	RESIDUE-NONFILTERABLE (TSS)	VA
SM 2540 F-2011	RESIDUE-SETTLEABLE	VA	SM 3500-CR B-2011	CHROMIUM VI	VA
SM 4500-CN E-2011	CYANIDE	VA	SM 4500-NO2 B-2011	NITRITE AS N	VA
SM 4500-NO3 F-2011	NITRATE/NITRITE	VA	SM 4500-NO3 F-2011 MINUS SM 4500-NO2 B-2011 (CALC)	NITRATE AS N	VA



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NON-POTABLE WATER

METHOD SM 4500-P E-2011	ANALYTE ORTHOPHOSPHATE AS P	PRIMARY VA	METHOD SM 4500-P E-2011	ANALYTE PHOSPHORUS, TOTAL	PRIMARY VA
SM 4500-S2 F-2011	SULFIDE	VA	SM 5210 B-2011	BIOCHEMICAL OXYGEN DEMAND	VA
SM 5210 B-2011	CARBONACEOUS BOD, CBOD	VA	SM 5220 D-2011	CHEMICAL OXYGEN DEMAND	VA
SM 5310 C-2011	TOTAL ORGANIC CARBON	VA	SM 9221 E + C-2006	FECAL COLIFORMS	VA

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 1010 A	FLASHPOINT	VA	EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	VA
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	VA	EPA 3050	PREP: ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS	VA
EPA 350.1 REV 2	AMMONIA AS N	VA	EPA 351 2 REV 2	KJELDAHL NITROGEN - TOTAL	VA
EPA 3550 C	PREP: ULTRASONIC EXTRACTION	VA	EPA 3580 A	PREP: WASTE DILUTION	VA
EPA 3585	PREP: WASTE DILUTION FOR VOLATILE ORGANICS	VA	EPA 3665 A	SULFURIC ACID/PERMANGANATE CLEAN-UP	VA
EPA 5035	PREP: CLOSED-SYSTEM PURGE AND TRAP AND EXTRACTION	VA	EPA 6010 C	ALUMINUM	VA
EPA 6010 C	ANTIMONY	VA	EPA 6010 C	ARSENIC	VA
EPA 6010 C	BARIUM	VA	EPA 6010 C	BERYLLIUM	VA
EPA 6010 C	BORON	VA	EPA 6010 C	CADMIUM	VA
EPA 6010 C	CALCIUM	VA	EPA 6010 C	CHROMIUM	VA
EPA 6010 C	COBALT	VA	EPA 6010 C	COPPER	VA
EPA 6010 C	IRON	VA	EPA 6010 C	LEAD	VA
EPA 6010 C	MAGNESIUM	VA	EPA 6010 C	MANGANESE	VA
EPA 6010 C	MOLYBDENUM	VA	EPA 6010 C	NICKEL	VA
EPA 6010 C	POTASSIUM	VA	EPA 6010 C	SELENIUM	VA
EPA 6010 C	SILICA AS SIO2	VA	EPA 6010 C	SILVER	VA
EPA 6010 C	SODIUM	VA	EPA 6010 C	STRONTIUM	VA
EPA 6010 C	THALLIUM	VA	EPA 6010 C	TIN	VA
EPA 6010 C	TITANIUM	VA	EPA 6010 C	VANADIUM	VA
EPA 6010 C	ZINC	VA	EPA 7010	ANTIMONY	VA
EPA 7010	ARSENIC	VA	EPA 7010	BERYLLIUM	VA
EPA 7010	CADMIUM	VA	EPA 7010	CHROMIUM	VA
EPA 7010	COPPER	VA	EPA 7010	LEAD	VA
EPA 7010	NICKEL	VA	EPA 7010	SELENIUM	VA
EPA 7010	THALLIUM	VA	EPA 7196 A	CHROMIUM VI	VA
EPA 7471 B	MERCURY	VA	EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	VA
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	VA	EPA 8015 C - EXTENDED	OIL RANGE ORGANICS	VA
EPA 8021 B	BENZENE	VA	EPA 8021 B	ETHYLBENZENE	VA
EPA 8021 B	M+P-XYLENE	VA			



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METHOD EPA 8021 B	ANALYTE NAPHTHALENE	PRIMARY VA	METHOD EPA 8021 B	ANALYTE O-XYLENE	PRIMARY VA
EPA 8021 B	TOLUENE	VA	EPA 8021 B	XYLENE (TOTAL)	VA
EPA 8021 B - EXTENDED	METHYL TERT-BUTYL ETHER (MTBE)	VA	EPA 8081 B	4,4'-DDD	VA
EPA 8081 B	4,4'-DDE	VA	EPA 8081 B	4,4'-DDT	VA
EPA 8081 B	ALDRIN	VA	EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXA NE)	VA
EPA 8081 B	ALPHA-CHLORDANE [CIS-CHLORDANE]	VA	EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXAN E)	VA
EPA 8081 B	CHLORDANE (TECH.)	VA	EPA 8081 B	DELTA-BHC	VA
EPA 8081 B	DIELDRIN	VA	EPA 8081 B	ENDOSULFAN I	VA
EPA 8081 B	ENDOSULFAN II	VA	EPA 8081 B	ENDOSULFAN SULFATE	VA
EPA 8081 B	ENDRIN	VA	EPA 8081 B	ENDRIN ALDEHYDE	VA
EPA 8081 B	ENDRIN KETONE	VA	EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXA NE)	VA
EPA 8081 B	GAMMA-CHLORDANE [BETA-CHLORDANE, TRANS-CHLORDANE]	VA	EPA 8081 B	HEPTACHLOR	VA
EPA 8081 B	HEPTACHLOR EPOXIDE	VA	EPA 8081 B	METHOXYCHLOR	VA
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	VA	EPA 8081 B - EXTENDED	MIREX	VA
EPA 8082 A	AROCLOR-1016 (PCB-1016)	VA	EPA 8082 A	AROCLOR-1221 (PCB-1221)	VA
EPA 8082 A	AROCLOR-1232 (PCB-1232)	VA	EPA 8082 A	AROCLOR-1242 (PCB-1242)	VA
EPA 8082 A	AROCLOR-1248 (PCB-1248)	VA	EPA 8082 A	AROCLOR-1254 (PCB-1254)	VA
EPA 8082 A	AROCLOR-1260 (PCB-1260)	VA	EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	VA
EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	VA	EPA 8151 A	2,4,5-T	VA
EPA 8151 A	2,4-D	VA	EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL DNBP)	VA
EPA 8151 A	PENTACHLOROPHENOL	VA	EPA 8151 A	SILVEX (2,4,5-TP)	VA
EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	VA	EPA 8260 B	1,1,1-TRICHLOROETHANE	VA
EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	VA	EPA 8260 B	1,1,2-TRICHLOROETHANE	VA
EPA 8260 B	1,1-DICHLOROETHANE	VA	EPA 8260 B	1,1-DICHLOROETHYLENE	VA
EPA 8260 B	1,1-DICHLOROPROPENE	VA	EPA 8260 B	1,2,3-TRICHLOROBENZENE	VA
EPA 8260 B	1,2,3-TRICHLOROPROPANE	VA	EPA 8260 B	1,2,4-TRICHLOROBENZENE	VA
EPA 8260 B	1,2,4-TRIMETHYLBENZENE	VA	EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	VA
EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	VA	EPA 8260 B	1,2-DICHLOROBENZENE	VA
EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENI DICHLORIDE)	E VA	EPA 8260 B	1,2-DICHLOROPROPANE	VA
EPA 8260 B	1,3,5-TRIMETHYLBENZENE	VA	1 - 25		



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METHOD EPA 8260 B	ANALYTE 1,3-DICHLOROBENZENE	PRIMARY	METHOD EPA 8260 B	ANALYTE 1,3-DICHLOROPROPANE	PRIMARY VA
A STATE OF THE PARTY OF T	1.4-DICHLOROBENZENE		EPA 8260 B		VA
EPA 8260 B	1,4-DICHLOROBENZENE	VA	EPA 0200 B	1,4-DIOXANE (P-DIOXANE /1,4- DIETHYLENEOXIDE)	VA
EPA 8260 B	2,2-DICHLOROPROPANE	VA	EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	VA
EPA 8260 B	2-CHLOROTOLUENE	VA	EPA 8260 B	2-HEXANONE	VA
EPA 8260 B	4-CHLOROTOLUENE	VA	EPA 8260 B	4-ISOPROPYLTOLUENE (P-CYMENE)	VA
EPA 8260 B	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	. VA	EPA 8260 B	ACETONE	VA
EPA 8260 B	ACETONITRILE	VA	EPA 8260 B	ACROLEIN (PROPENAL)	VA
EPA 8260 B	ACRYLONITRILE	VA	EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	VA
EPA 8260 B	BENZENE	VA	EPA 8260 B	BROMOBENZENE	VA
EPA 8260 B	BROMOCHLOROMETHANE	VA	EPA 8260 B	BROMODICHLOROMETHANE	VA
EPA 8260 B	BROMOFORM	VA	EPA 8260 B	CARBON DISULFIDE	VA
EPA 8260 B	CARBON TETRACHLORIDE	VA	EPA 8260 B	CHLOROBENZENE	VA
EPA 8260 B	CHLORODIBROMOMETHANE	VA	EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	VA
EPA 8260 B	CHLOROFORM	VA	EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	VA
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	VA	EPA 8260 B	CIS-1,3-DICHLOROPROPENE	VA
EPA 8260 B	DIBROMOFLUOROMETHANE	VA	EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	VA
EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	VA	EPA 8260 B	ETHANOL	VA
EPA 8260 B	ETHYL METHACRYLATE	VA	EPA 8260 B	ETHYLBENZENE	VA
EPA 8260 B	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	VA	EPA 8260 B	IODOMETHANE (METHYL IODIDE)	VA
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	VA	EPA 8260 B	ISOPROPYLBENZENE	VA
EPA 8260 B	M+P-XYLENE	VA	EPA 8260 B	METHACRYLONITRILE	VA
EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	VA	EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	VA
EPA 8260 B	METHYL METHACRYLATE	VA	EPA 8260 B	METHYL TERT-BUTYL ETHER (MTBE)	VA
EPA 8260 B	METHYLENE CHLORIDE (DICHLOROMETHANE)	VA	EPA 8260 B	N-BUTYLBENZENE	VA
EPA 8260 B	N-PROPYLBENZENE	VA	EPA 8260 B	NAPHTHALENE	VA
EPA 8260 B	O-XYLENE	VA	EPA 8260 B	PENTACHLOROETHANE	VA
EPA 8260 B	PENTAFLUOROBENZENE	VA	EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	VA
EPA 8260 B	SEC-BUTYLBENZENE	VA	EPA 8260 B	STYRENE	VA
EPA 8260 B	TERT-BUTYL ALCOHOL	VA	EPA 8260 B	TERT-BUTYLBENZENE	VA
EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	VA	EPA 8260 B	TOLUENE	VA



Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 8886

Air Water & Soil Laboratories, Inc. 1941 Reymet Road Richmond, VA 23237

Virginia Laboratory ID: 460021 Effective Date: October 28, 2016 Expiration Date: June 14, 2017

METHOD EPA 8260 B	ANALYTE TRANS-1,2-DICHLOROETHENE	PRIMARY VA	METHOD EPA 8260 B	ANALYTE TRANS-1,3-DICHLOROPROPENE	PRIMARY VA
EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	VA	EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	VA
EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	VA	EPA 8260 B	VINYL ACETATE	VA
EPA 8260 B	VINYL CHLORIDE	VA	EPA 8260 B	XYLENE (TOTAL)	VA
EPA 8260 B - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	VA	EPA 8260 B - EXTENDED	1,3,5-TRICHLOROBENZENE	VA
EPA 8260 B - EXTENDED	CYCLOHEXANE	VA	EPA 8260 B - EXTENDED	CYCLOHEXANONE	VA
EPA 8260 B - EXTENDED	DHSOPROPYLETHER (DIPE, ISOPROPYLETHER)	VA	EPA 8260 B - EXTENDED	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	VA
EPA 8260 B - EXTENDED	ISOPROPYL ACETATE	VA	EPA 8260 B - EXTENDED	METHYLCYCLOHEXANE	VA
EPA 8260 B - EXTENDED	N-HEXANE	VA	EPA 8260 B - EXTENDED	T-AMYL ALCOHOL (TAA)	VA
EPA 8260 B - EXTENDED	T-AMYL ETHYL ETHER (TAEE) (4,4-DIMETHYL-3-OXAHEXANE)	VA	EPA 8260 B - EXTENDED	T-AMYLMETHYLETHER (TAME)	VA
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	VA	EPA 8270 D	1,2,4-TRICHLOROBENZENE	VA
EPA 8270 D	1,2-DICHLOROBENZENE	VA	EPA 8270 D	1,2-DINITROBENZENE	VA
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	VA	EPA 8270 D	1,3-DICHLOROBENZENE	VA
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	VA	EPA 8270 D	1,4-DICHLOROBENZENE	VA
EPA 8270 D	1,4-DINITROBENZENE	VA	EPA 8270 D	1,4-NAPHTHOQUINONE	VA
EPA 8270 D	1,4-PHENYLENEDIAMINE	VA	EPA 8270 D	1-CHLORONAPHTHALENE	VA
EPA 8270 D	1-NAPHTHYLAMINE	VA	EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	VA
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	VA	EPA 8270 D	2,4,5-TRICHLOROPHENOL	VA
EPA 8270 D	2,4,5-TRIMETHYLANILINE	VA	EPA 8270 D	2,4,6-TRICHLOROPHENOL	VA
EPA 8270 D	2,4-DICHLOROPHENOL	VA	EPA 8270 D	2,4-DIMETHYLPHENOL	VA
EPA 8270 D	2,4-DINITROPHENOL	VA	EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	VA
EPA 8270 D	2,6-DICHLOROPHENOL	VA	EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	VA
EPA 8270 D	2-ACETYLAMINOFLUORENE	VA	EPA 8270 D	2-CHLORONAPHTHALENE	VA
EPA 8270 D	2-CHLOROPHENOL	VA	EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	VA
EPA 8270 D	2-METHYLNAPHTHALENE	VA	EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	VA
EPA 8270 D	2-NAPHTHYLAMINE	VA	EPA 8270 D	2-NITROANILINE	VA
EPA 8270 D	2-NITROPHENOL	VA	EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	VA
EPA 8270 D	3,3'-DICHLOROBENZIDINE	VA	EPA 8270 D	3,3'-DIMETHYLBENZIDINE	VA
EPA 8270 D	3-METHYLCHOLANTHRENE	VA	EPA 8270 D	3-METHYLPHENOL (M-CRESOL)	VA
EPA 8270 D	3-NITROANILINE	VA	EPA 8270 D	4,4'-METHYLENEBIS(2-CHLOROANII INE)	L VA
EPA 8270 D	4-AMINOBIPHENYL	VA	EPA 8270 D	4-BROMOPHENYL PHENYL ETHER	VA
EPA 8270 D	4-CHLORO-3-METHYLPHENOL	VA	EPA 8270 D	4-CHLOROANILINE	VA
EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	R VA	EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	VA



Department of General Services
Division of Consolidated Laboratory Services



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VELAP Certificate No.: 8886

Air Water & Soil Laboratories, Inc. 1941 Reymet Road Richmond, VA 23237

Virginia Laboratory ID: 460021 Effective Date: October 28, 2016 Expiration Date: June 14, 2017

METHOD EPA 8270 D	ANALYTE 4-METHYLPHENOL (P-CRESOL)	PRIMARY VA	METHOD EPA 8270 D	ANALYTE 4-NITROANILINE	PRIMARY VA
EPA 8270 D	4-NITROPHENOL	VA	EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	VA
EPA 8270 D	5-NITRO-O-TOLUIDINE	VA	EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	VA
EPA 8270 D	ACENAPHTHENE	VA	EPA 8270 D	ACENAPHTHYLENE	VA
EPA 8270 D	ACETOPHENONE	VA	EPA 8270 D	AMINOAZOBENZENE	VA
EPA 8270 D	ANILINE	VA	EPA 8270 D	ANTHRACENE	VA
EPA 8270 D	ARAMITE	VA	EPA 8270 D	AZINPHOS-METHYL (GUTHION)	VA
EPA 8270 D	BENZIDINE	VA	EPA 8270 D	BENZO(A)ANTHRACENE	VA
EPA 8270 D	BENZO(A)PYRENE	VA	EPA 8270 D	BENZO(B)FLUORANTHENE	VA
EPA 8270 D	BENZO(G,H,I)PERYLENE	VA	EPA 8270 D	BENZO(K)FLUORANTHENE	VA
EPA 8270 D	BENZOIC ACID	VA	EPA 8270 D	BENZYL ALCOHOL	VA
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	VA	EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	VA
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (D)(2-ETHYLHEXYL)PHTHALATE), (DEHP)	VA	EPA 8270 D	BUTYL BENZYL PHTHALATE	VA
EPA 8270 D	CARBOFURAN (FURADEN)	VA	EPA 8270 D	CHLOROBENZILATE	VA
EPA 8270 D	CHRYSENE	VA	EPA 8270 D	DI-N-BUTYL PHTHALATE	VA
EPA 8270 D	DI-N-OCTYL PHTHALATE	VA	EPA 8270 D	DIALLATE	VA
EPA 8270 D	DIBENZ(A, J) ACRIDINE	VA	EPA 8270 D	DIBENZO(A,H) ANTHRACENE	VA
EPA 8270 D	DIBENZOFURAN	VA	EPA 8270 D	DIETHYL PHTHALATE	VA
EPA 8270 D	DIMETHOATE	VA	EPA 8270 D	DIMETHYL PHTHALATE	VA
EPA 8270 D	DIPHENYLAMINE	VA	EPA 8270 D	DISULFOTON	VA
EPA 8270 D	ETHYL METHANESULFONATE	VA	EPA 8270 D	FAMPHUR	VA
EPA 8270 D	FLUORANTHENE	VA	EPA 8270 D	FLUORENE	VA
EPA 8270 D	HEXACHLOROBENZENE	VA	EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	VA
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	VA	EPA 8270 D	HEXACHLOROETHANE	VA
EPA 8270 D	HEXACHLOROPHENE	VA	EPA 8270 D	HEXACHLOROPROPENE	VA
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	, VA	EPA 8270 D	ISODRIN	VA
EPA 8270 D	ISOPHORONE	VA	EPA 8270 D	ISOSAFROLE	VA
EPA 8270 D	KEPONE	VA	EPA 8270 D	MALATHION	VA
EPA 8270 D	METHAPYRILENE	VA	EPA 8270 D	METHYL METHANESULFONATE	VA
EPA 8270 D	METHYL PARATHION (PARATHION METHYL)	, VA	EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	VA
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	VA	EPA 8270 D	N-NITROSODIETHYLAMINE	VA
EPA 8270 D	N-NITROSODIMETHYLAMINE	VA	EPA 8270 D	N-NITROSODIPHENYLAMINE	VA
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	VA	EPA 8270 D	N-NITROSOMORPHOLINE	VA
EPA 8270 D	N-NITROSOPIPERIDINE	VA	EPA 8270 D	N-NITROSOPYRROLIDINE	VA
EPA 8270 D	NAPHTHALENE	VA	EPA 8270 D	NICOTINE	VA
EPA 8270 D	NITROBENZENE	VA			



Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 8886

Air Water & Soil Laboratories, Inc. 1941 Reymet Road Richmond, VA 23237

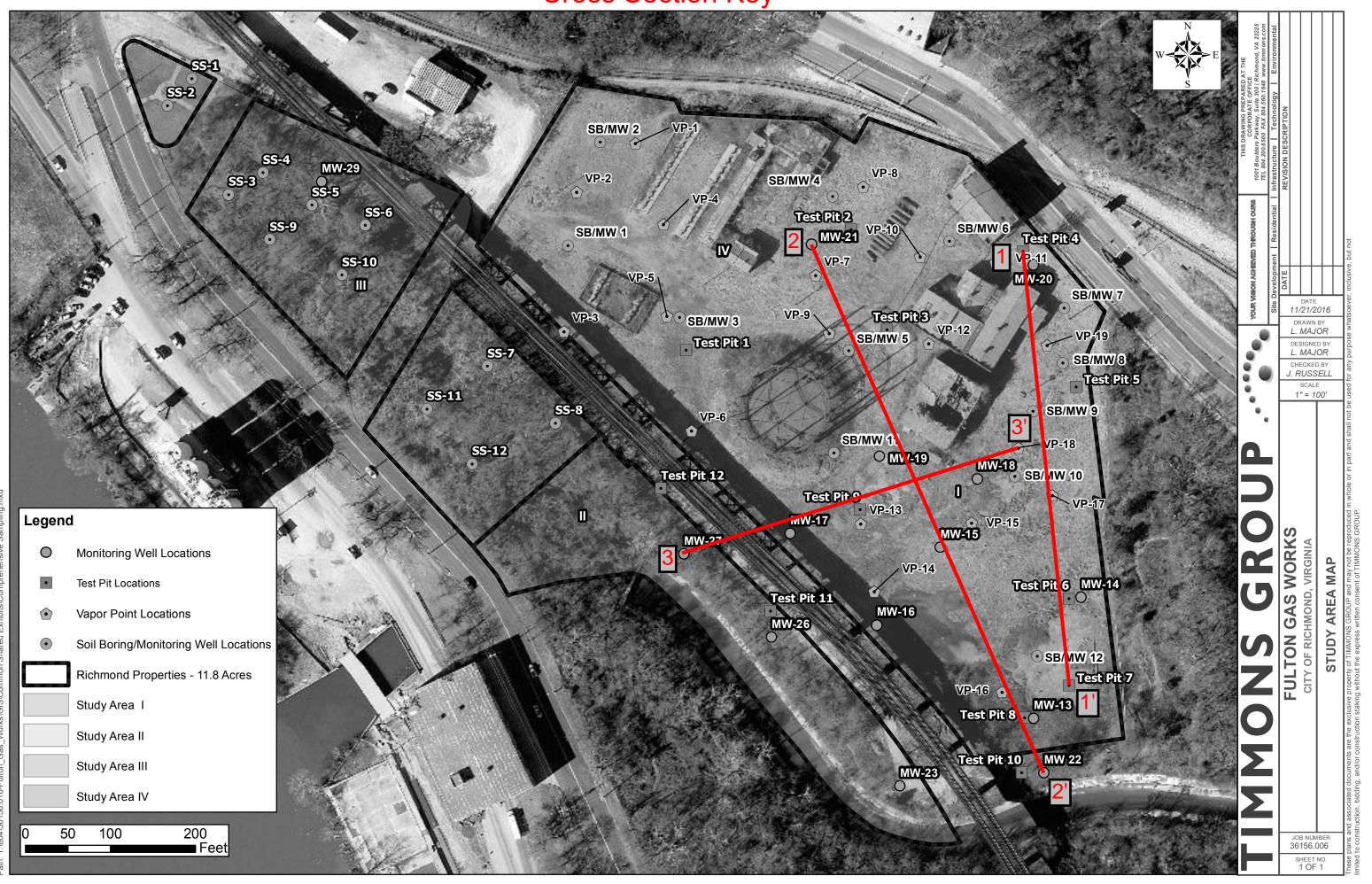
Virginia Laboratory ID: 460021 Effective Date: October 28, 2016 Expiration Date: June 14, 2017

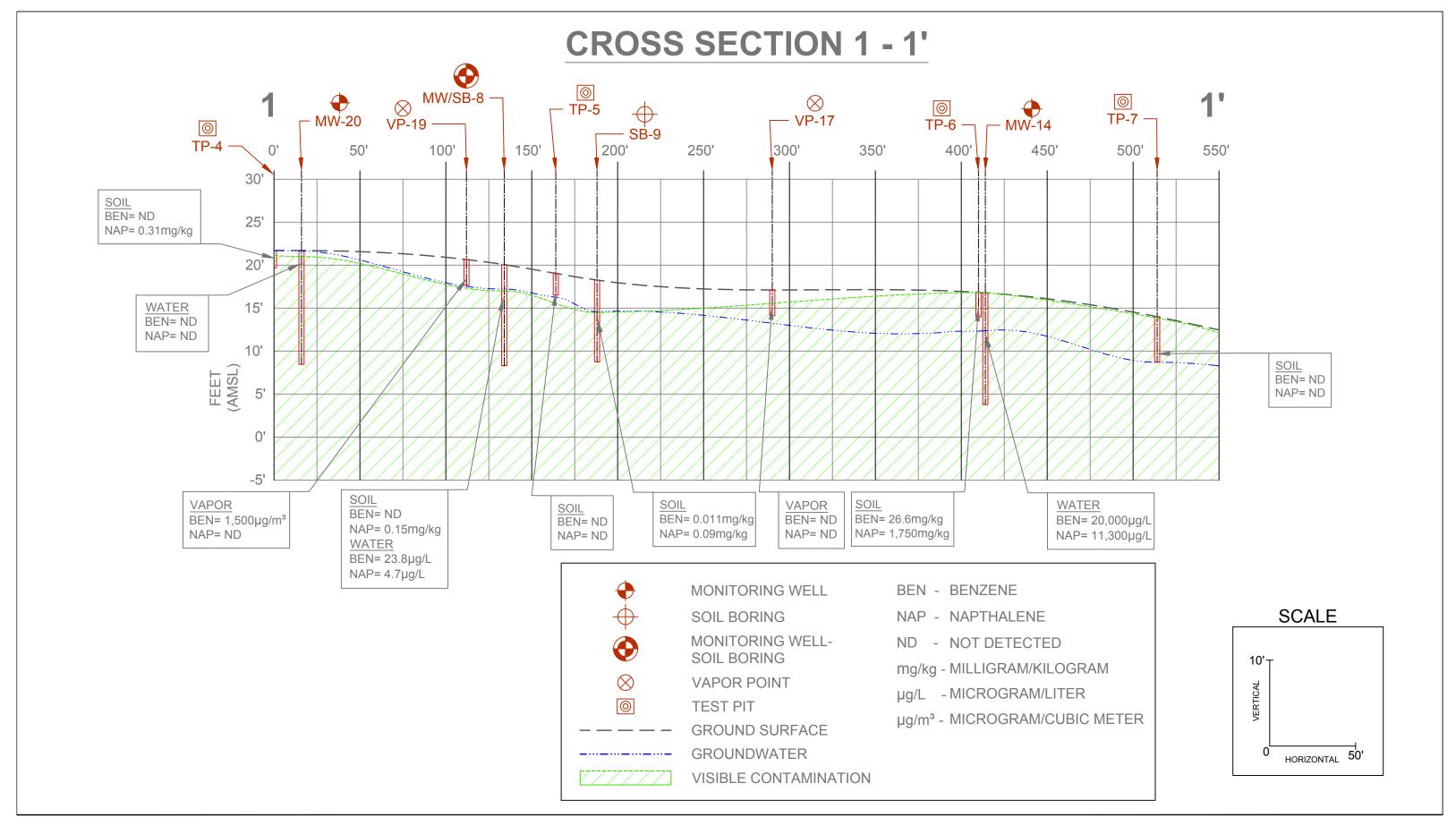
METHOD	ANALYTE	PRIMARY
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	VA
EPA 8270 D	PARATHION (PARATHION - ETHYL)	VA
EPA 8270 D	PENTACHLOROPHENOL	VA
EPA 8270 D	PHENANTHRENE	VA
EPA 8270 D	PHORATE	VA
EPA 8270 D	PYRENE	VA
EPA 8270 D	THIONAZIN (ZINOPHOS)	VA
EPA 8270 D - EXTENDED	CARBAZOLE	VA
EPA 9012 B	TOTAL CYANIDE	VA
EPA 9023	EXTRACTABLE ORGANIC HALIDES (EOX)	VA
EPA 9034	TOTAL SULFIDES	VA
EPA 9056 A	BROMIDE	VA
EPA 9056 A	FLUORIDE	VA
EPA 9056 A	NITRITE	VA
EPA 9056 A	SULFATE	VA
EPA 9065	TOTAL PHENOLICS	VA
SM 2320 B-2011	ALKALINITY AS CACO3	VA
SM 2540 G-2011	RESIDUE-VOLATILE	VA
SM 4500-NO3 F-2011	NITRATE/NITRITE	VA

METHOD EPA 8270 D	ANALYTE O-TOLUIDINE (2-METHYLANILINE)	PRIMARY VA
EPA 8270 D	PENTACHLOROBENZENE	VA
EPA 8270 D	PHENACETIN	VA
EPA 8270 D	PHENOL	VA
EPA 8270 D	PRONAMIDE (KERB)	VA
EPA 8270 D	SAFROLE	VA
EPA 8270 D - EXTENDED	AZOBENZENE	VA
EPA 8270 D - EXTENDED	PYRIDINE	VA
EPA 9020 B	TOTAL ORGANIC HALIDES (TOX)	VA
EPA 9030 B	PREP: SULFIDE	VA
EPA 9045 C	PH	VA
EPA 9056 A	CHLORIDE	VA
EPA 9056 A	NITRATE AS N	VA
EPA 9056 A	ORTHOPHOSPHATE AS P	VA
EPA 9060 A	TOTAL ORGANIC CARBON	VA
EPA 9095 B	FREE LIQUID	VA
SM 2540 G-2011	RESIDUE-TOTAL	VA
SM 4500-CN E-2011	CYANIDE	VA
SM 4500-P E-2011	PHOSPHORUS, TOTAL	VA

APPENDIX H GEOLOGIC CROSS SECTION

Cross Section Key

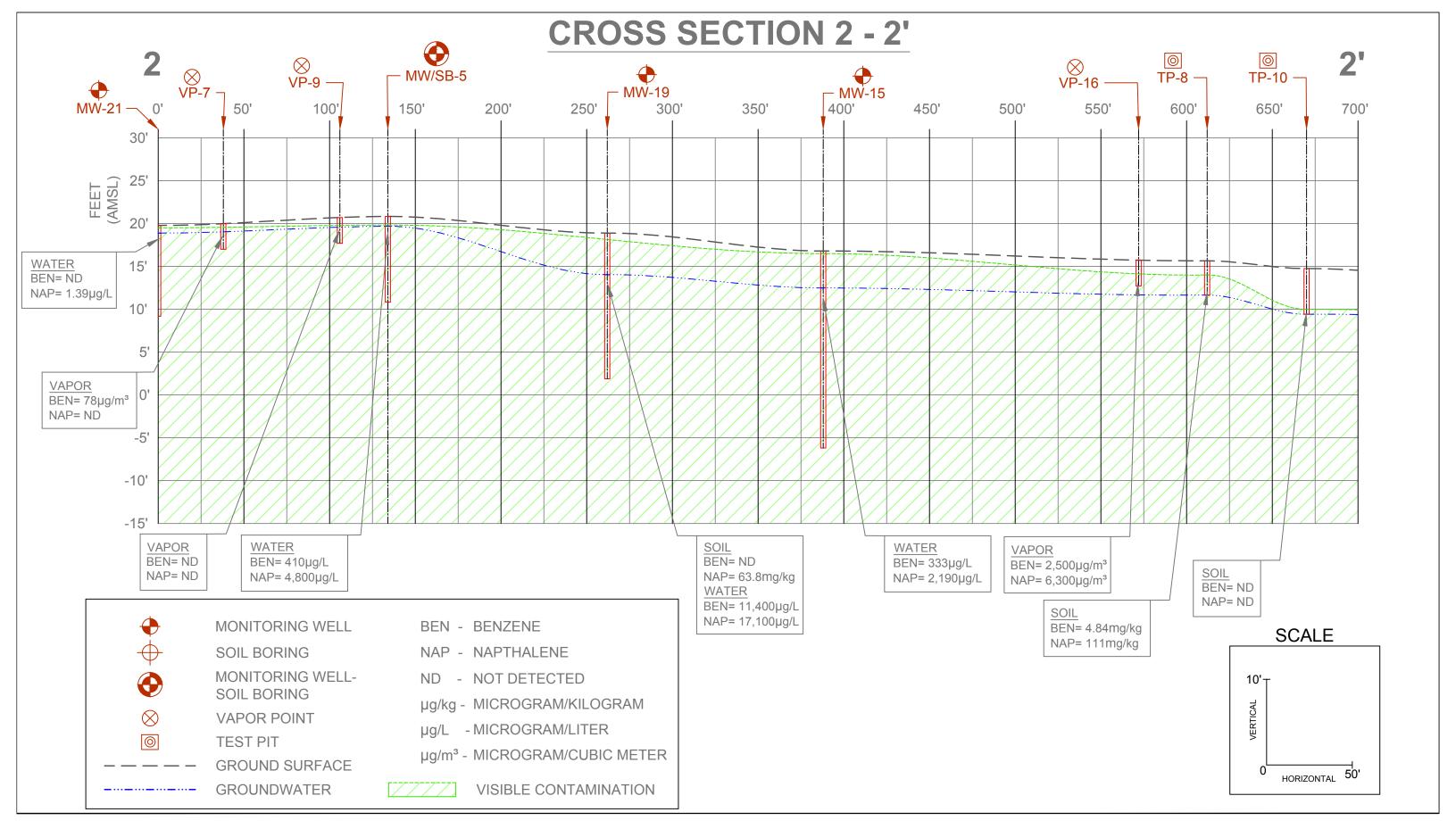






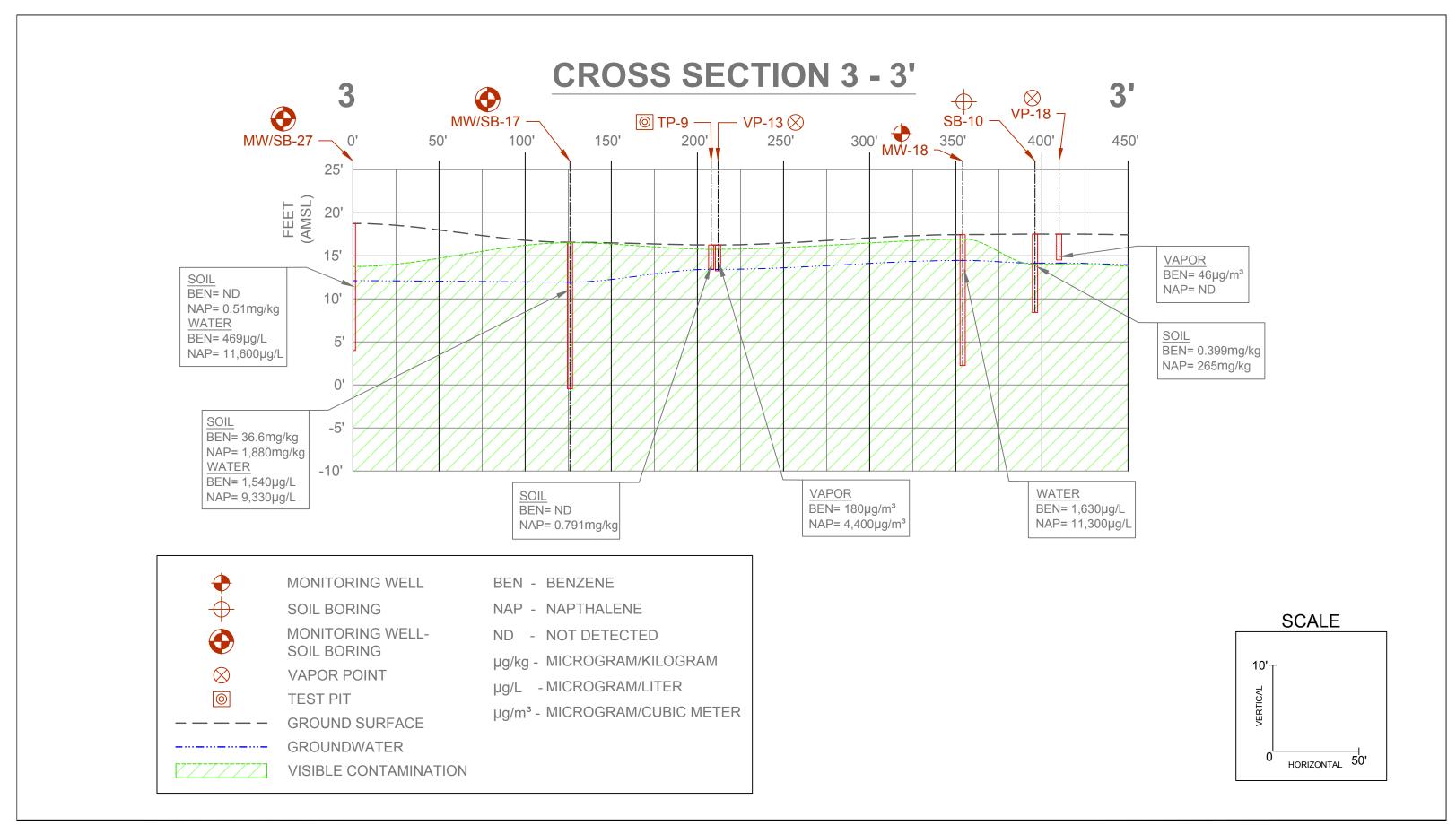
PROFILE OF SOIL CONTAMINANTS
CROSS SECTION 1 - 1'





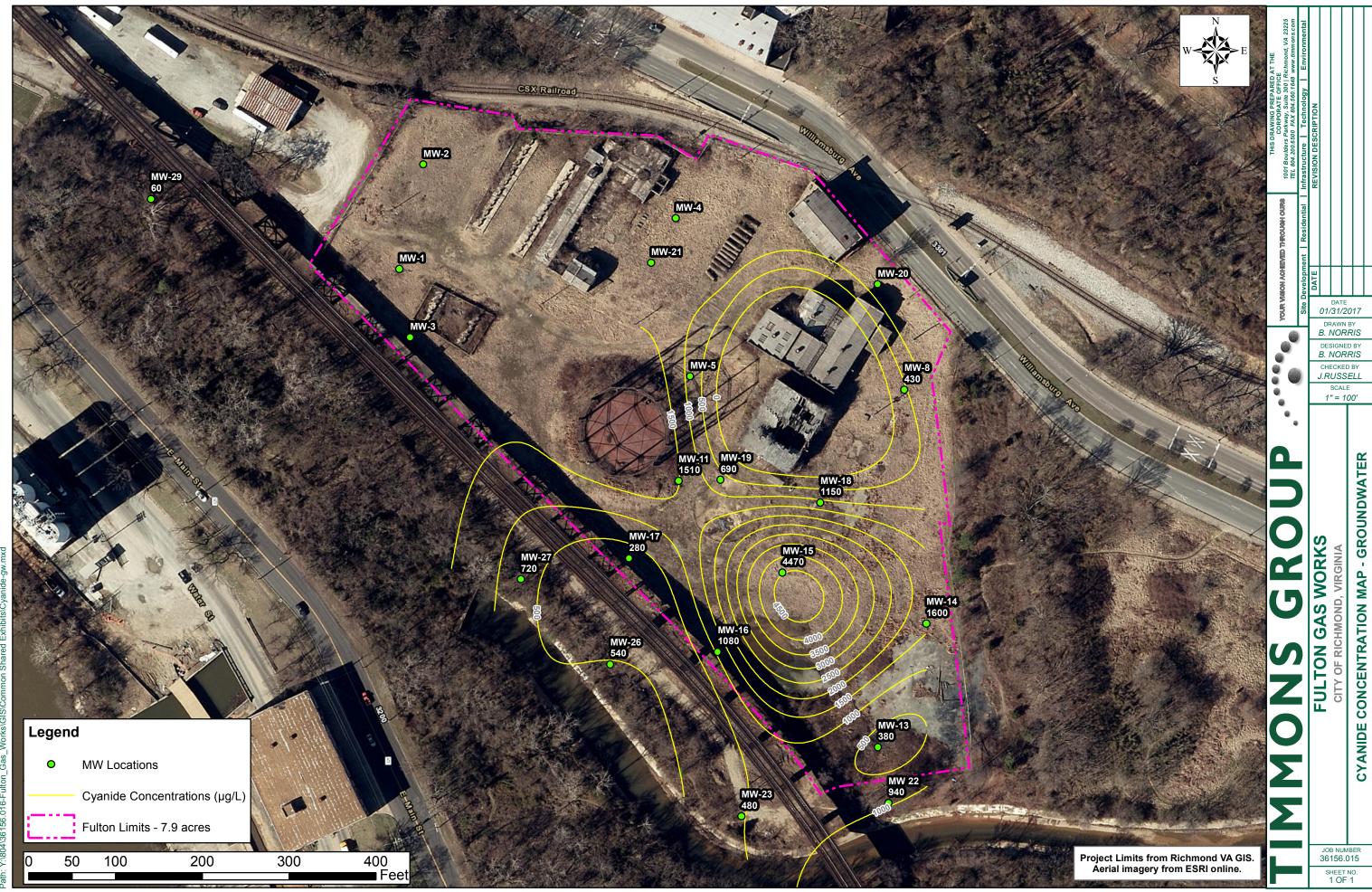
FULTON GAS WORKS

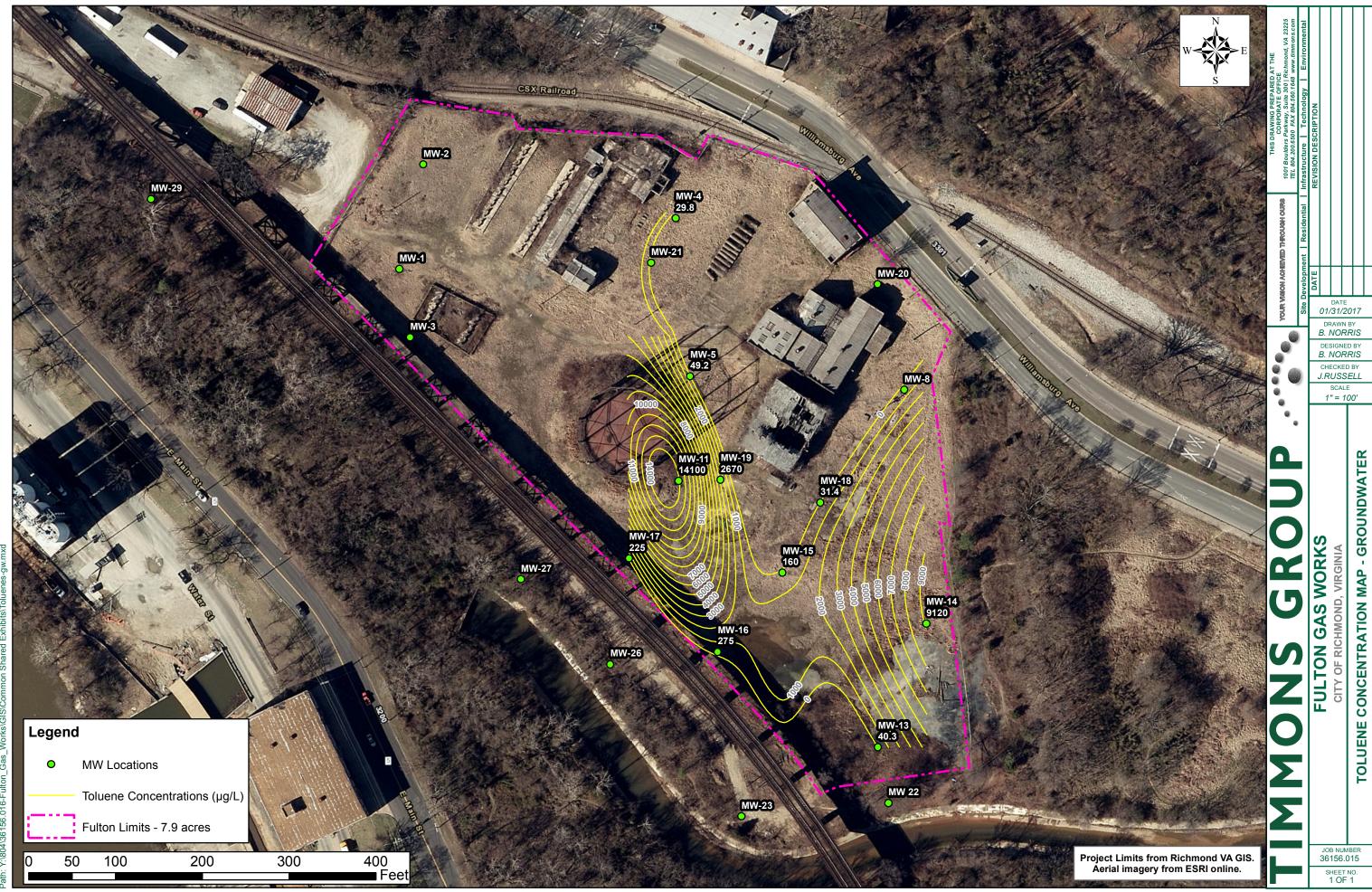


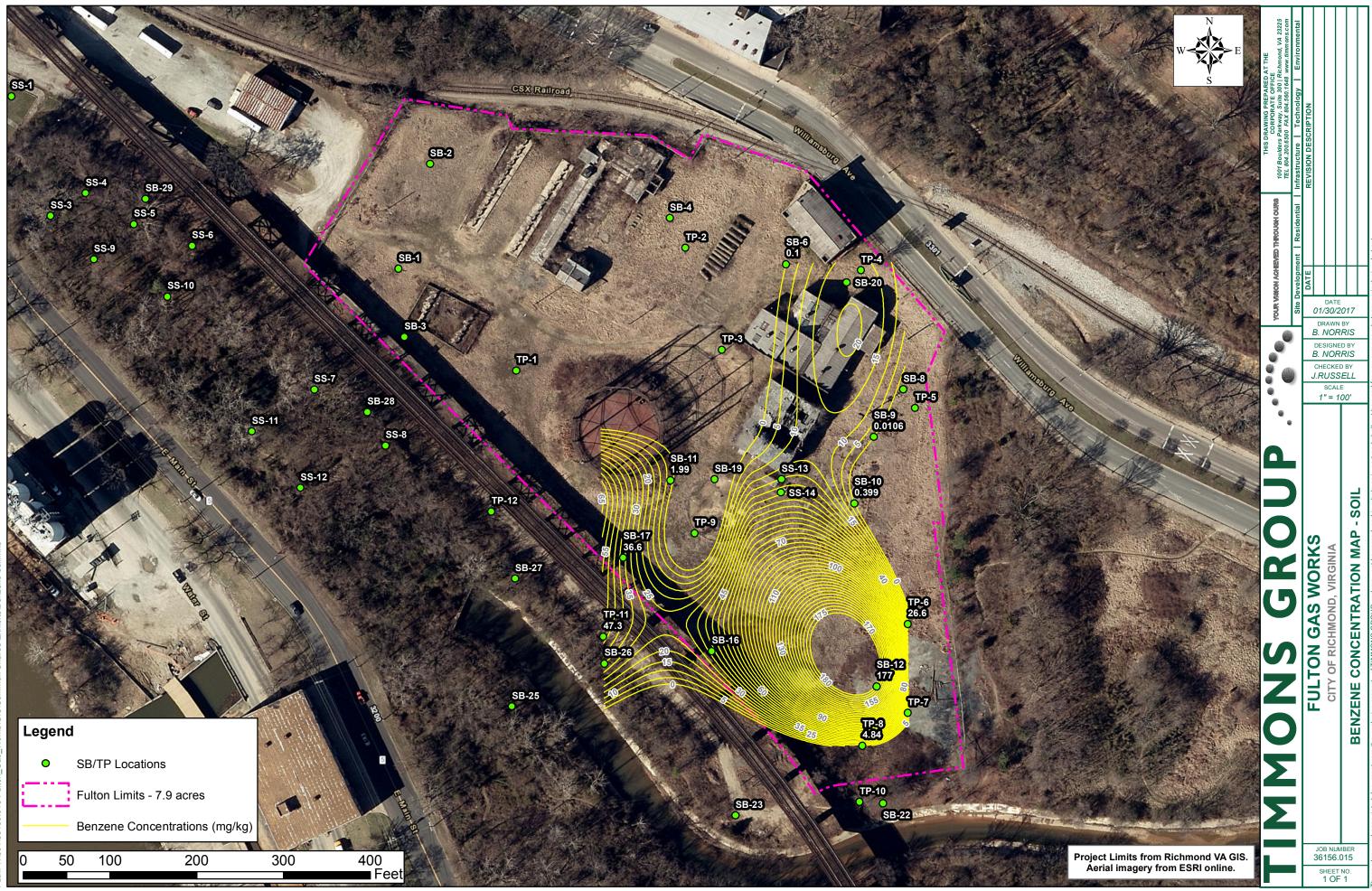


FULTON GAS WORKS

APPENDIX I CONTAMINANT ISOCONTOUR MAPS





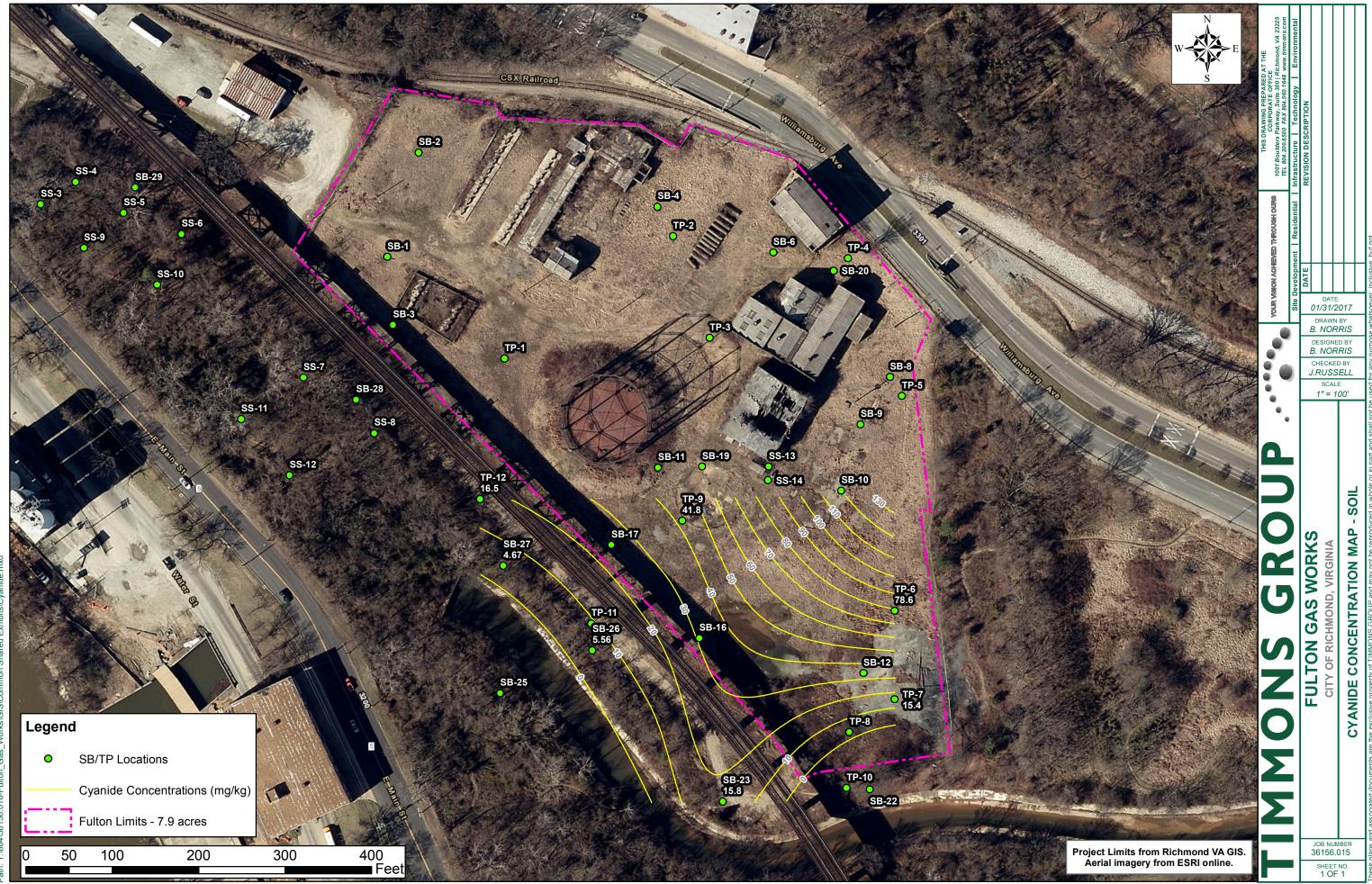




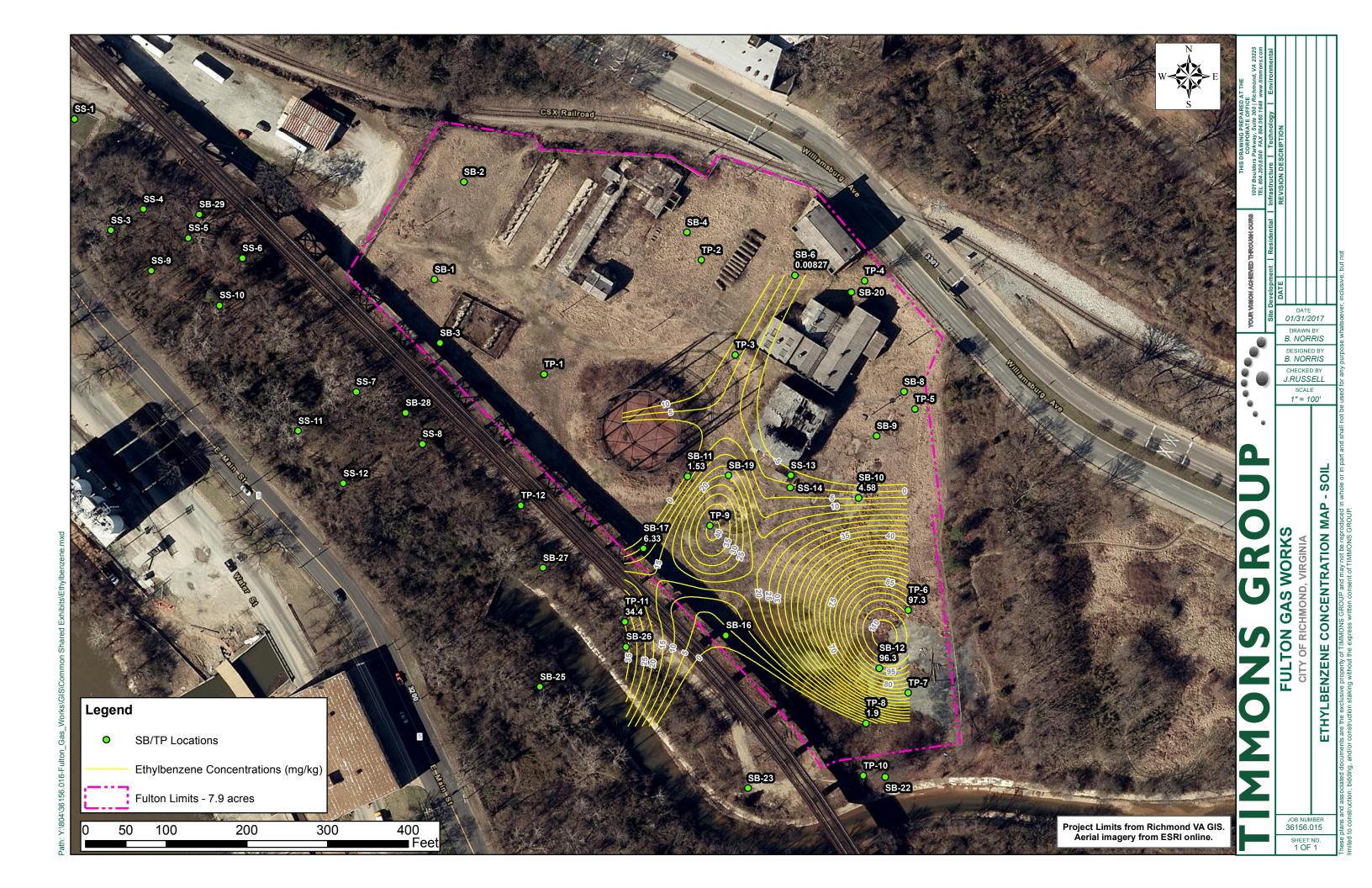
BENZO(A) PYRENE CONCENTRATION MAP - SOIL

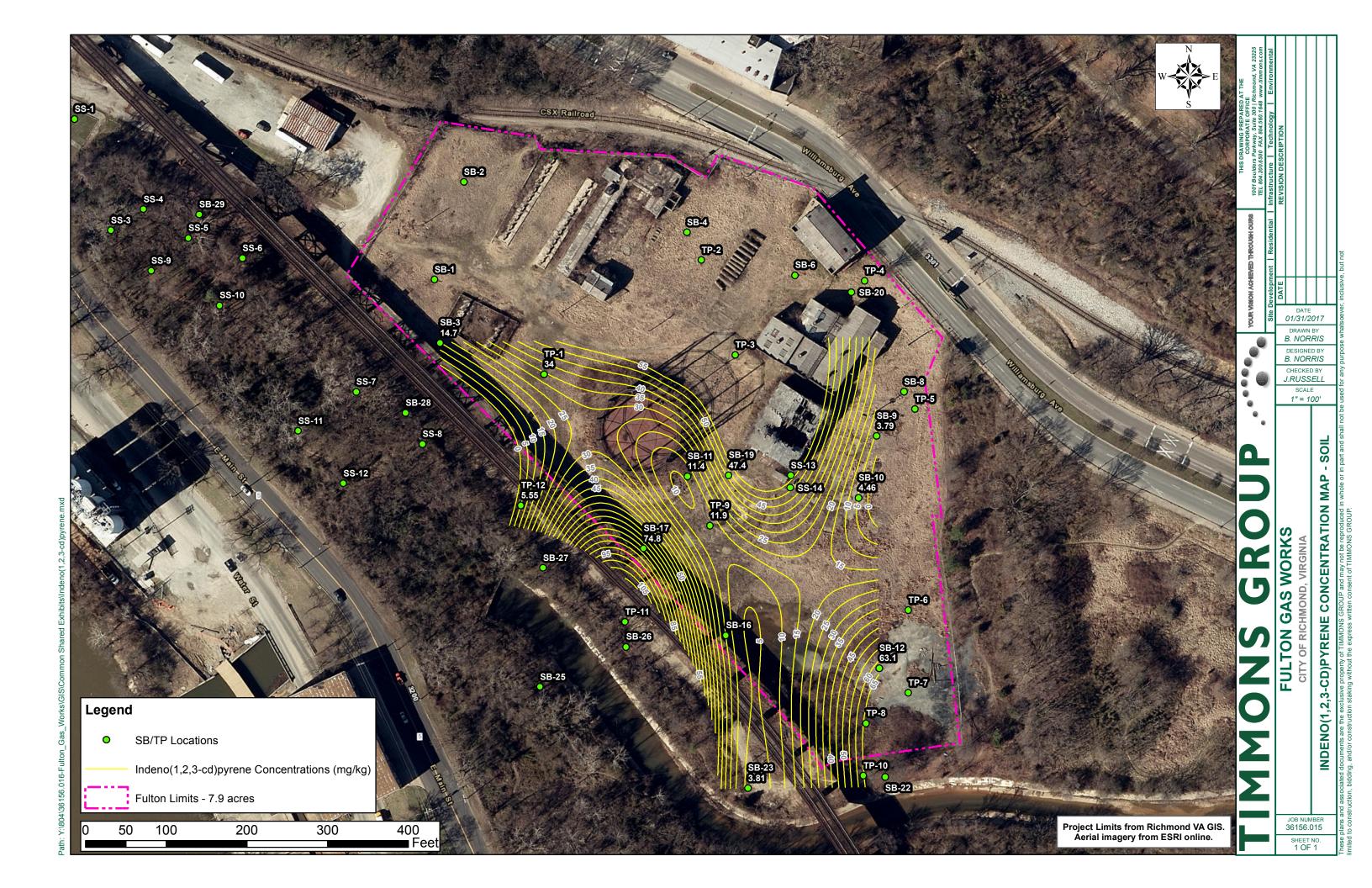
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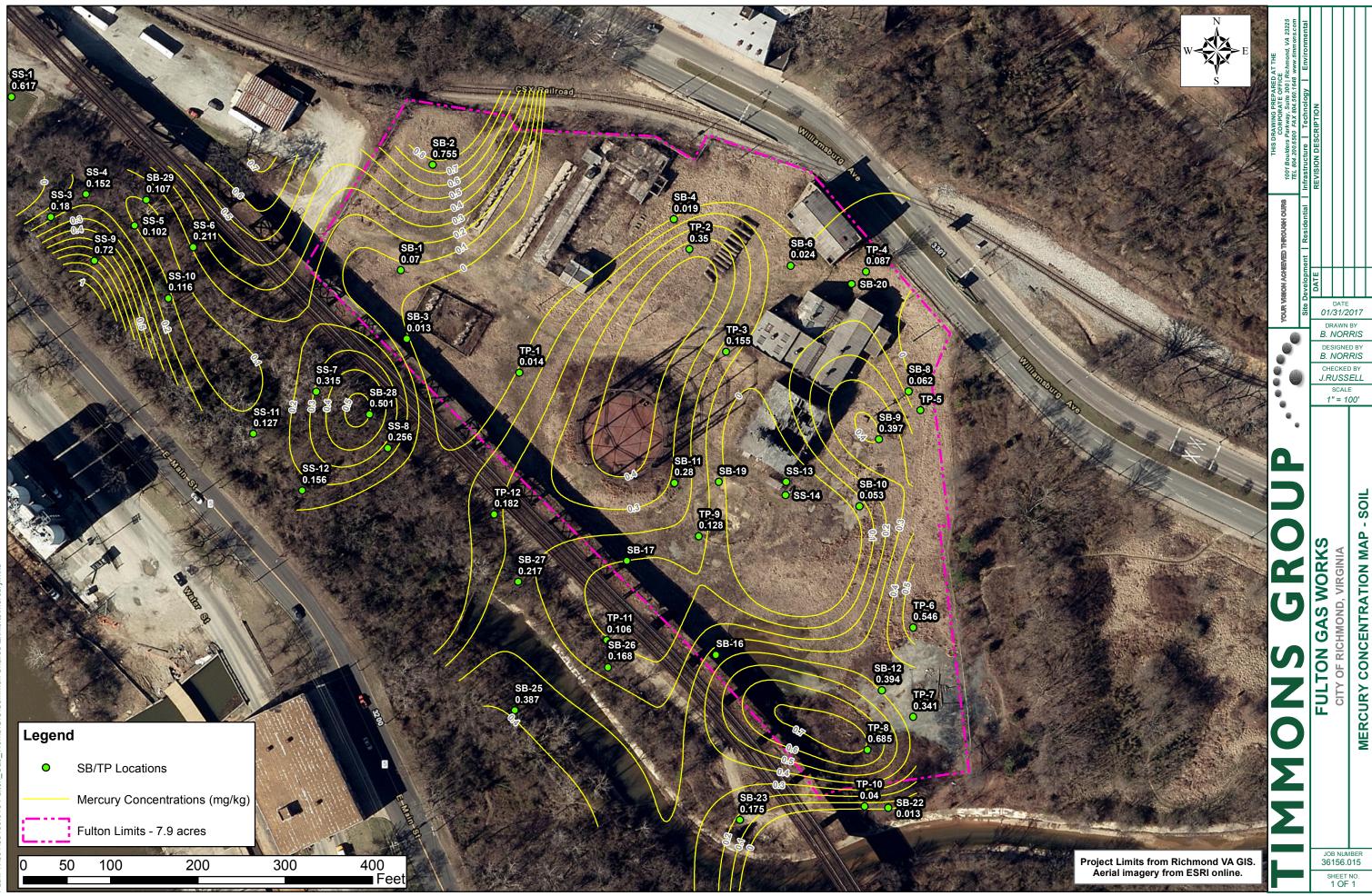




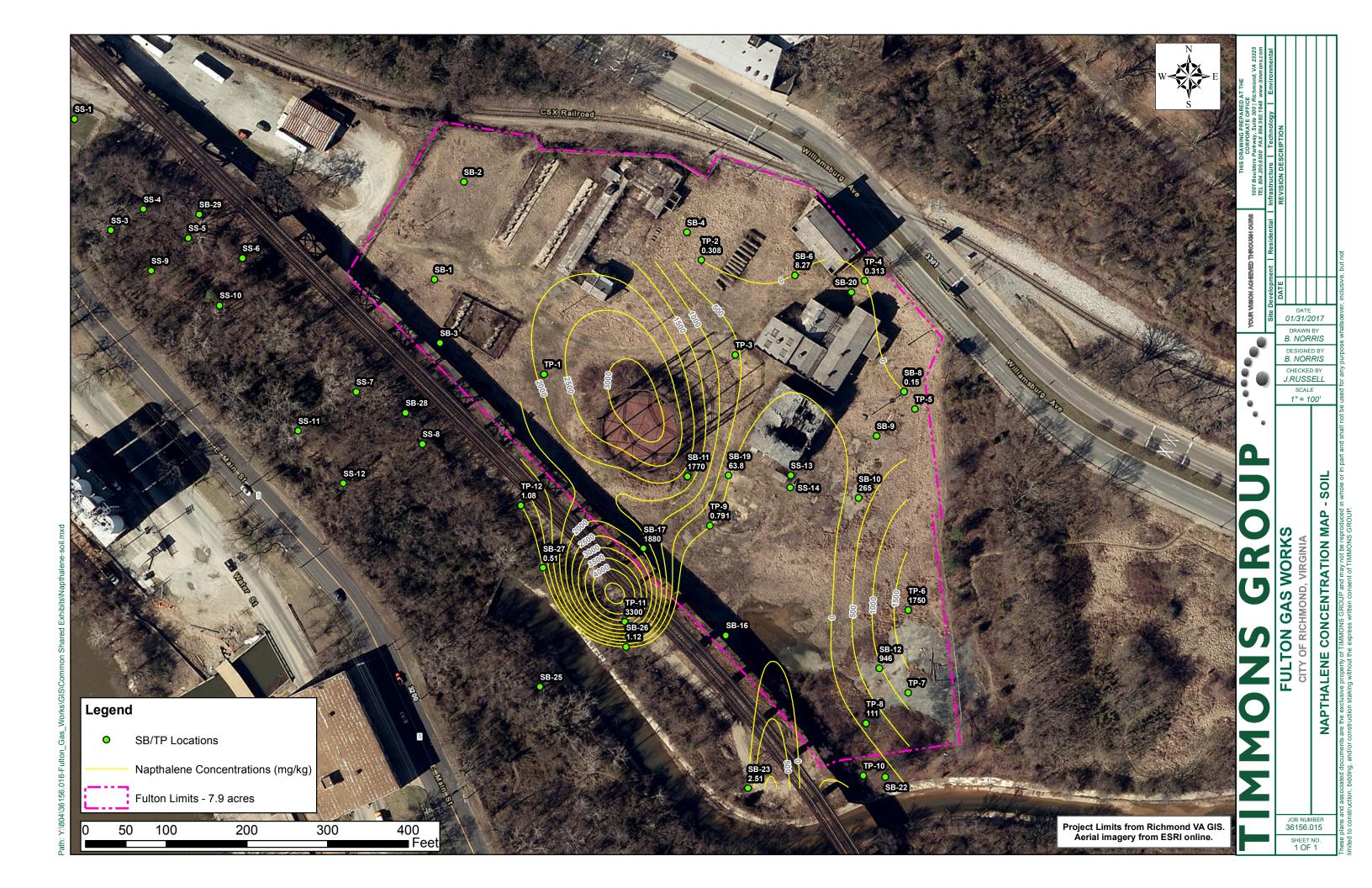
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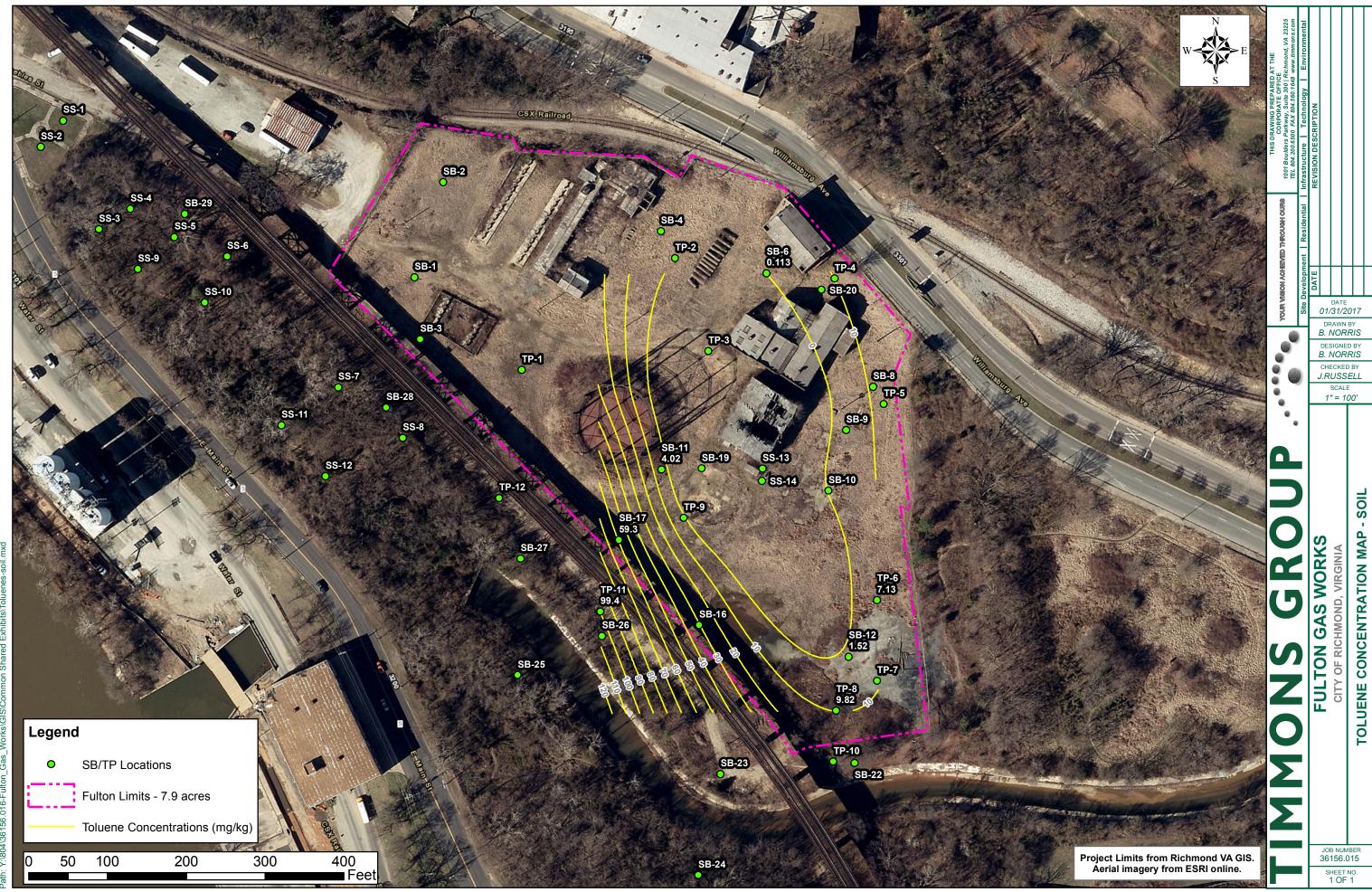


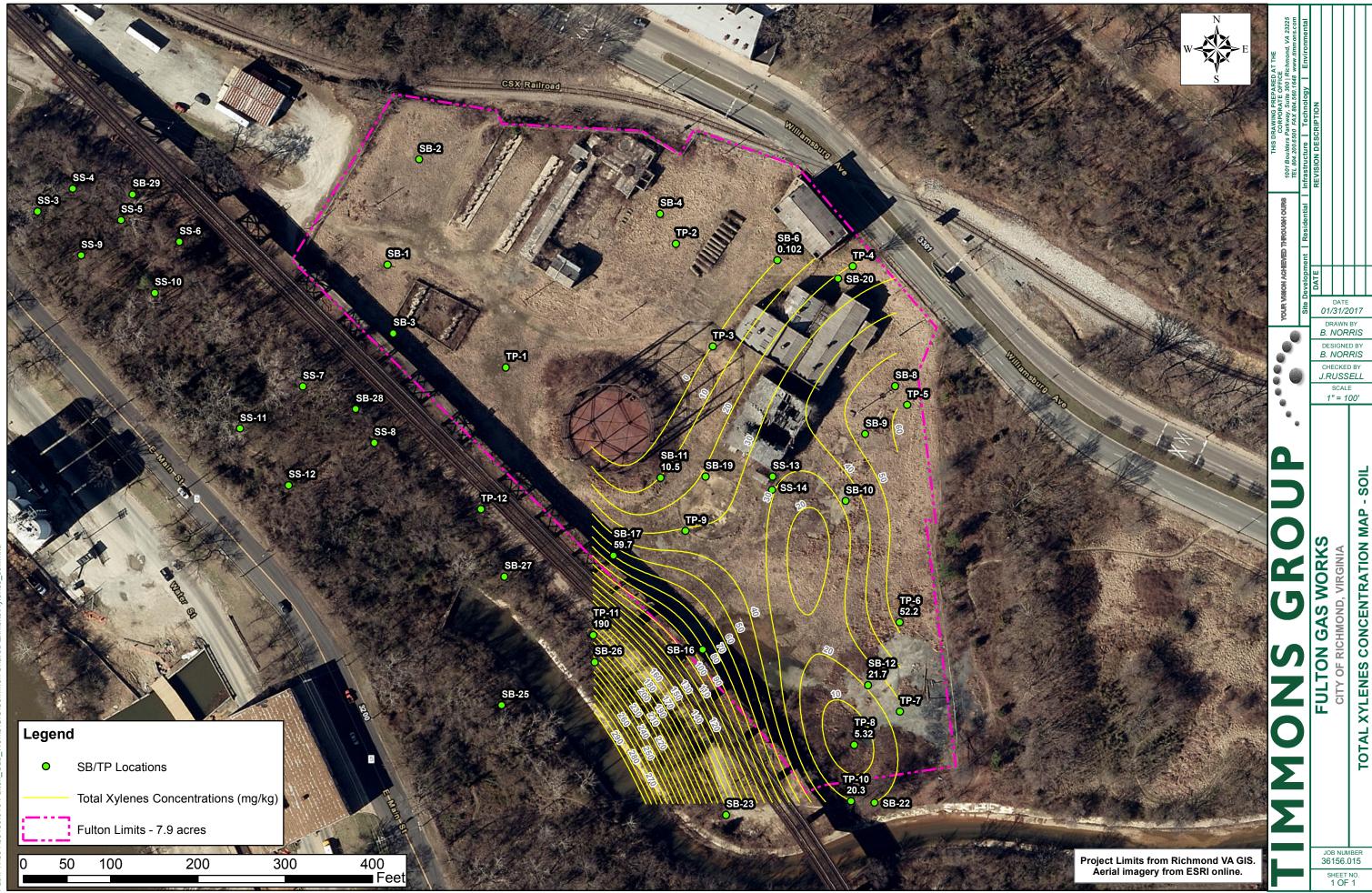




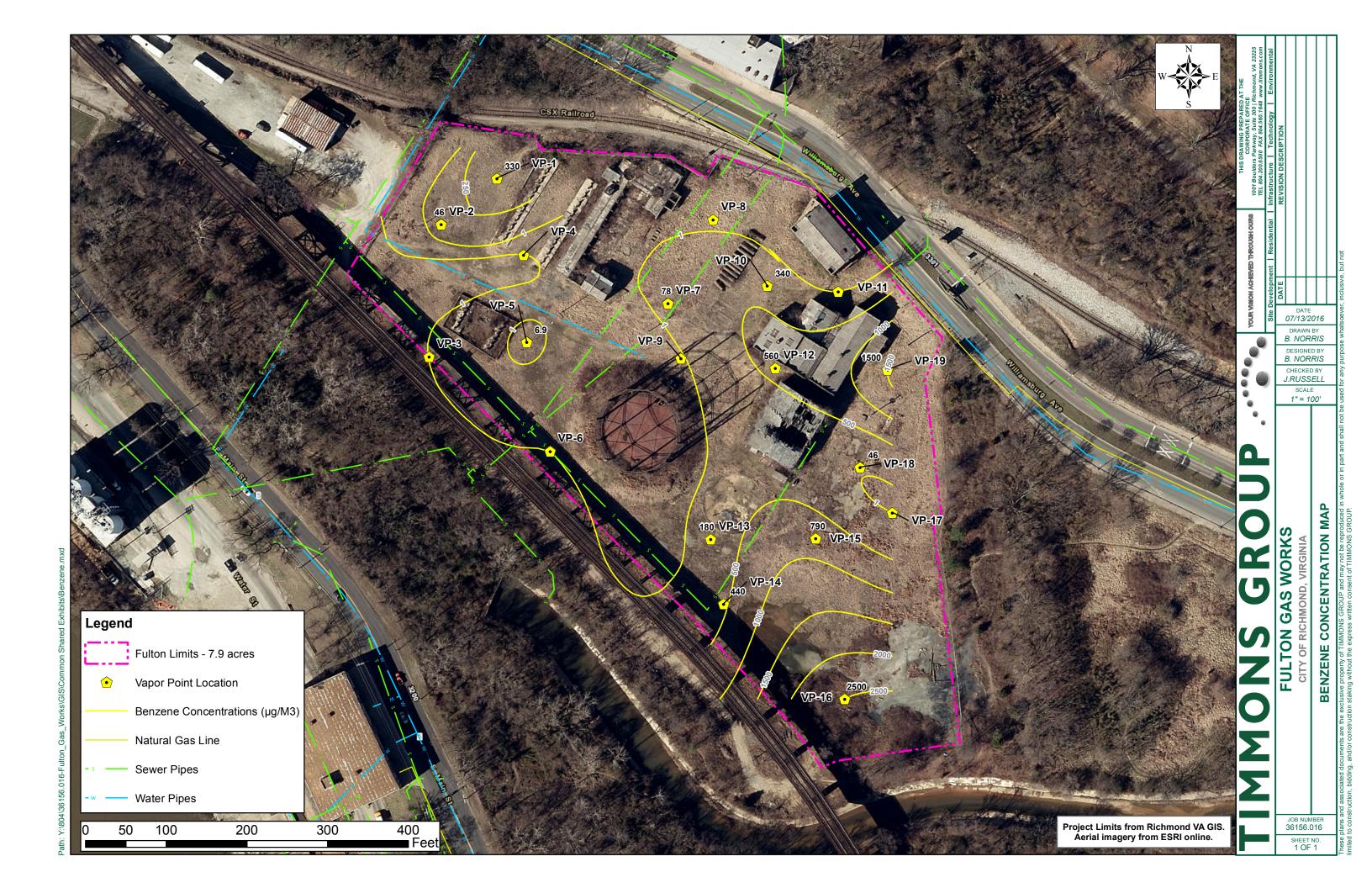
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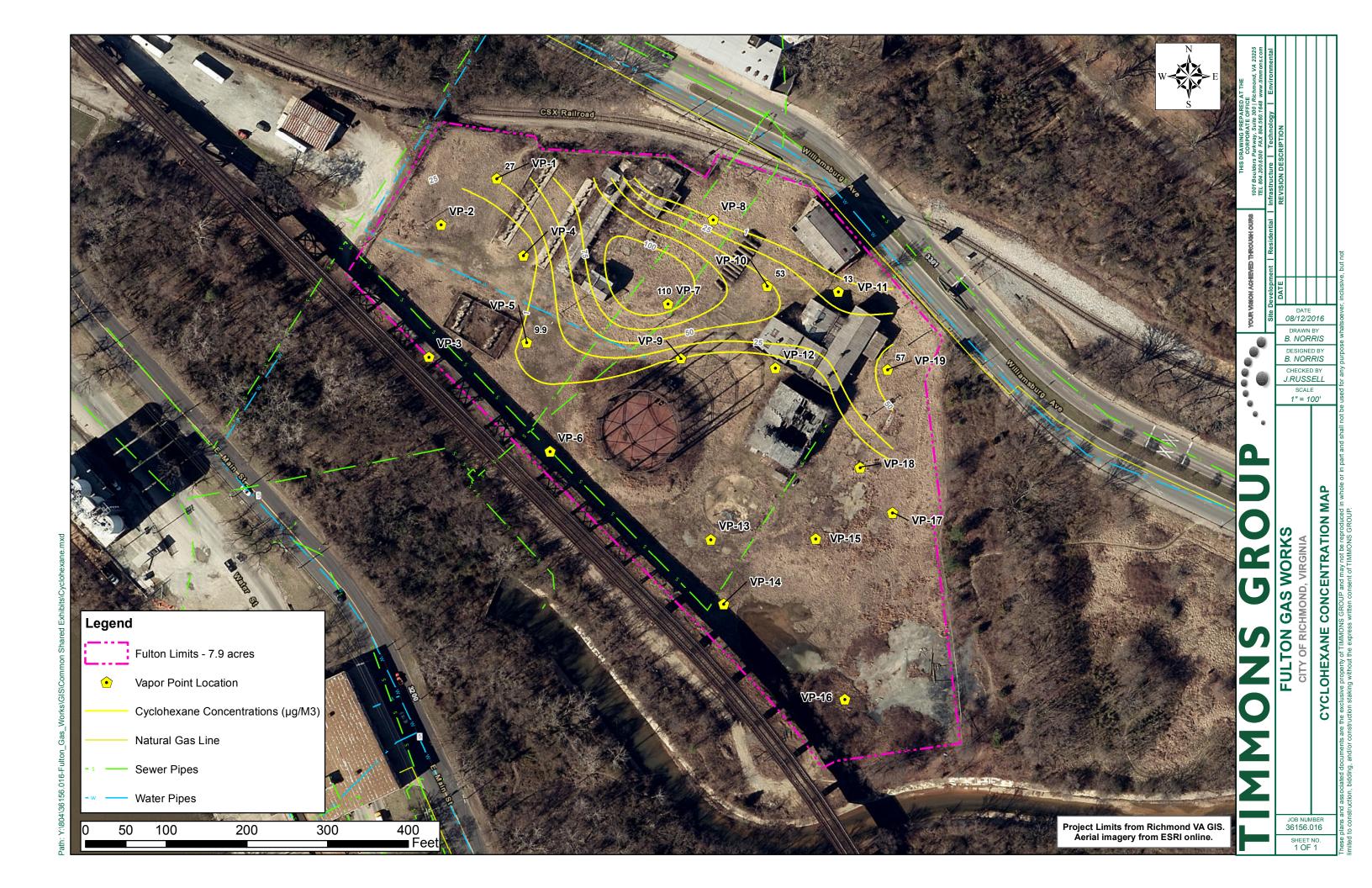


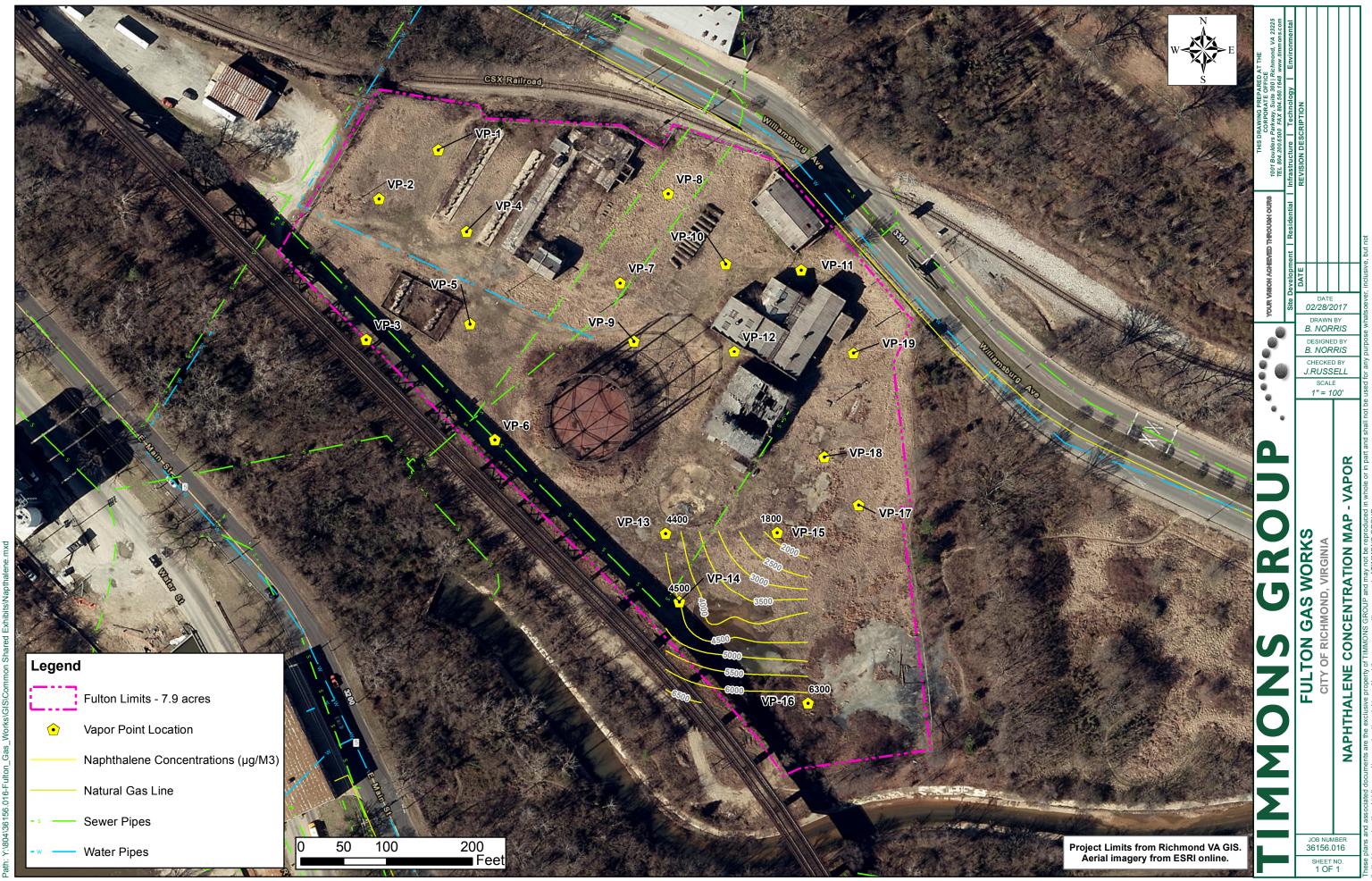


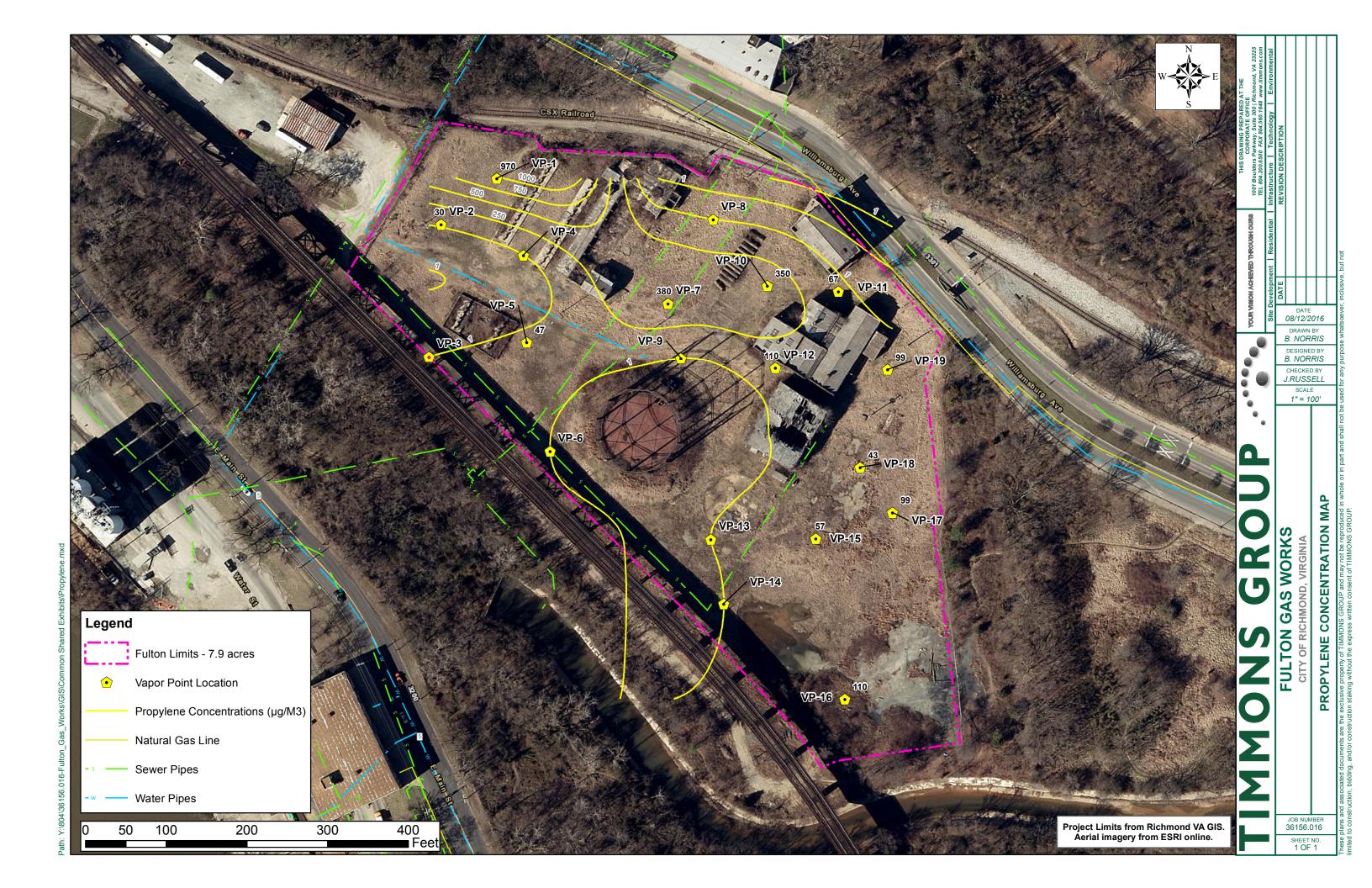


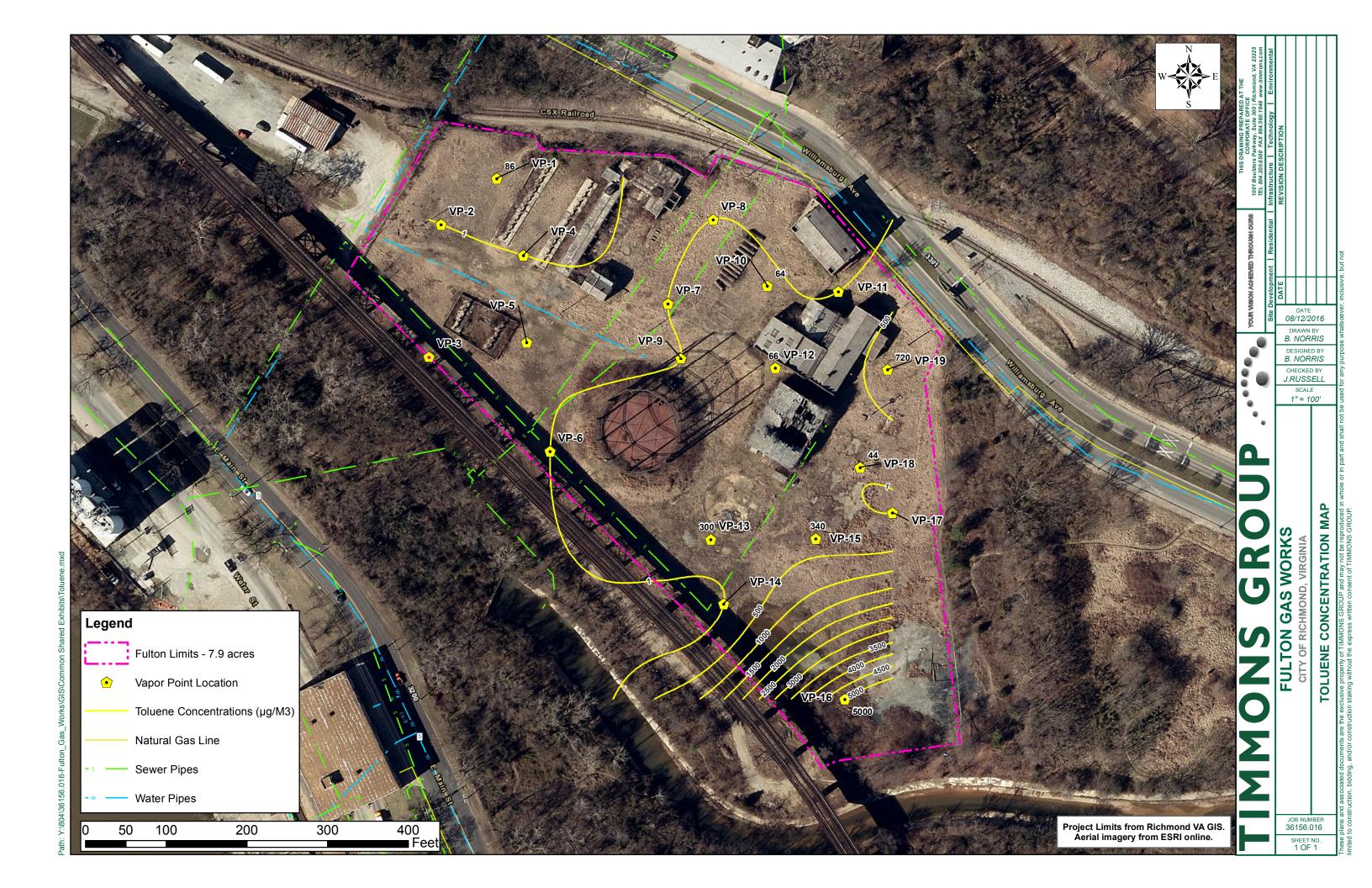
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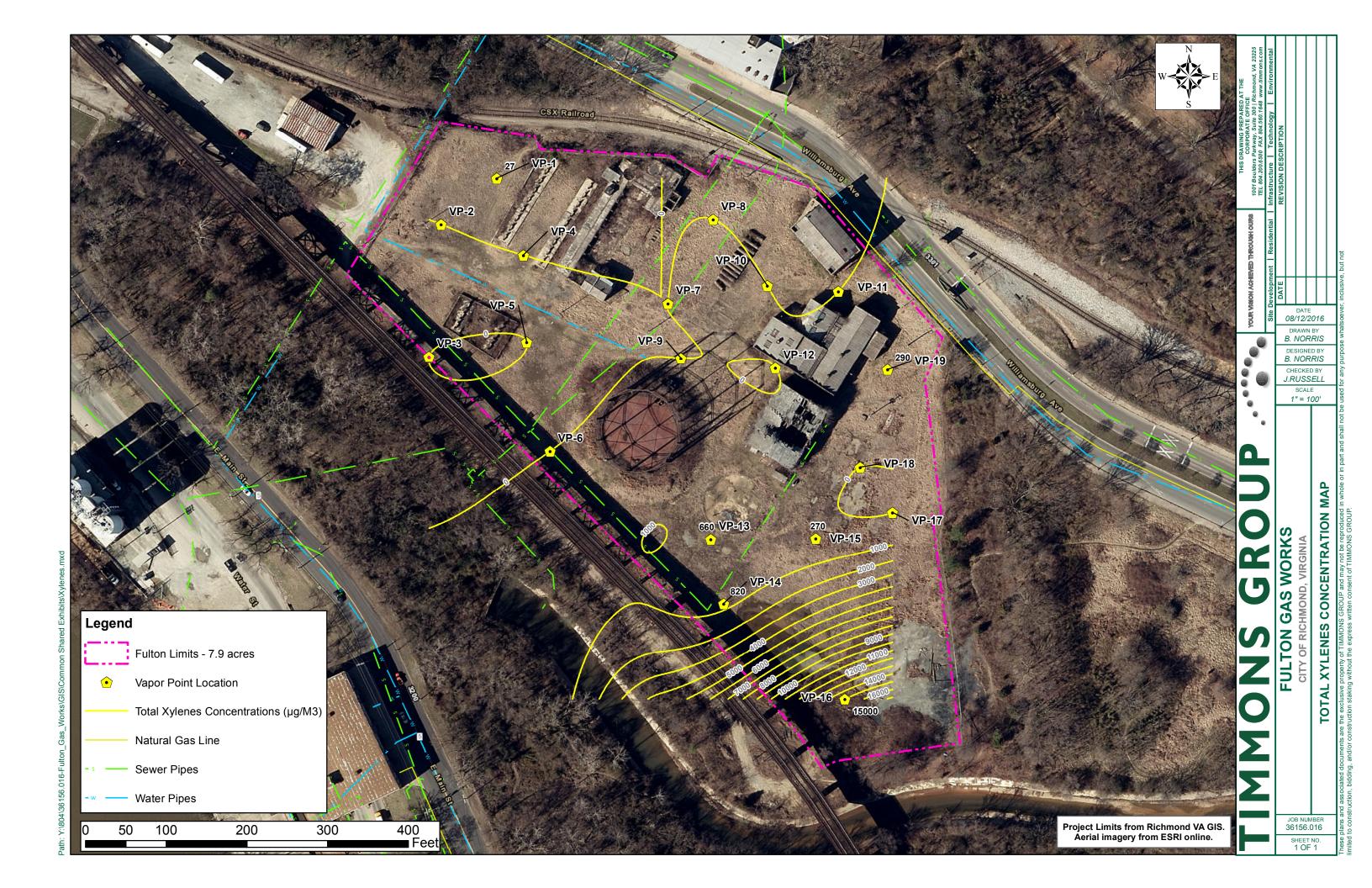




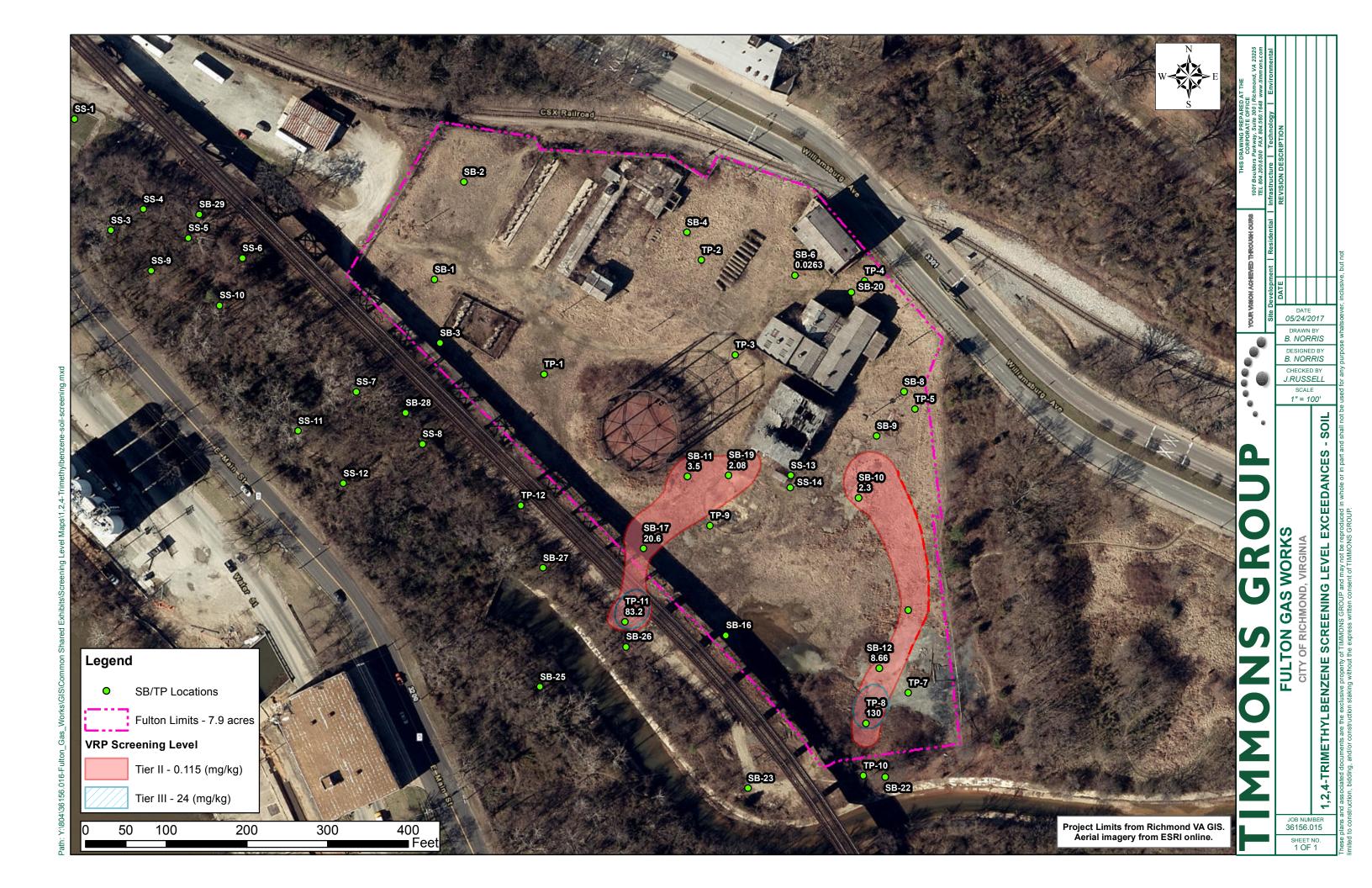


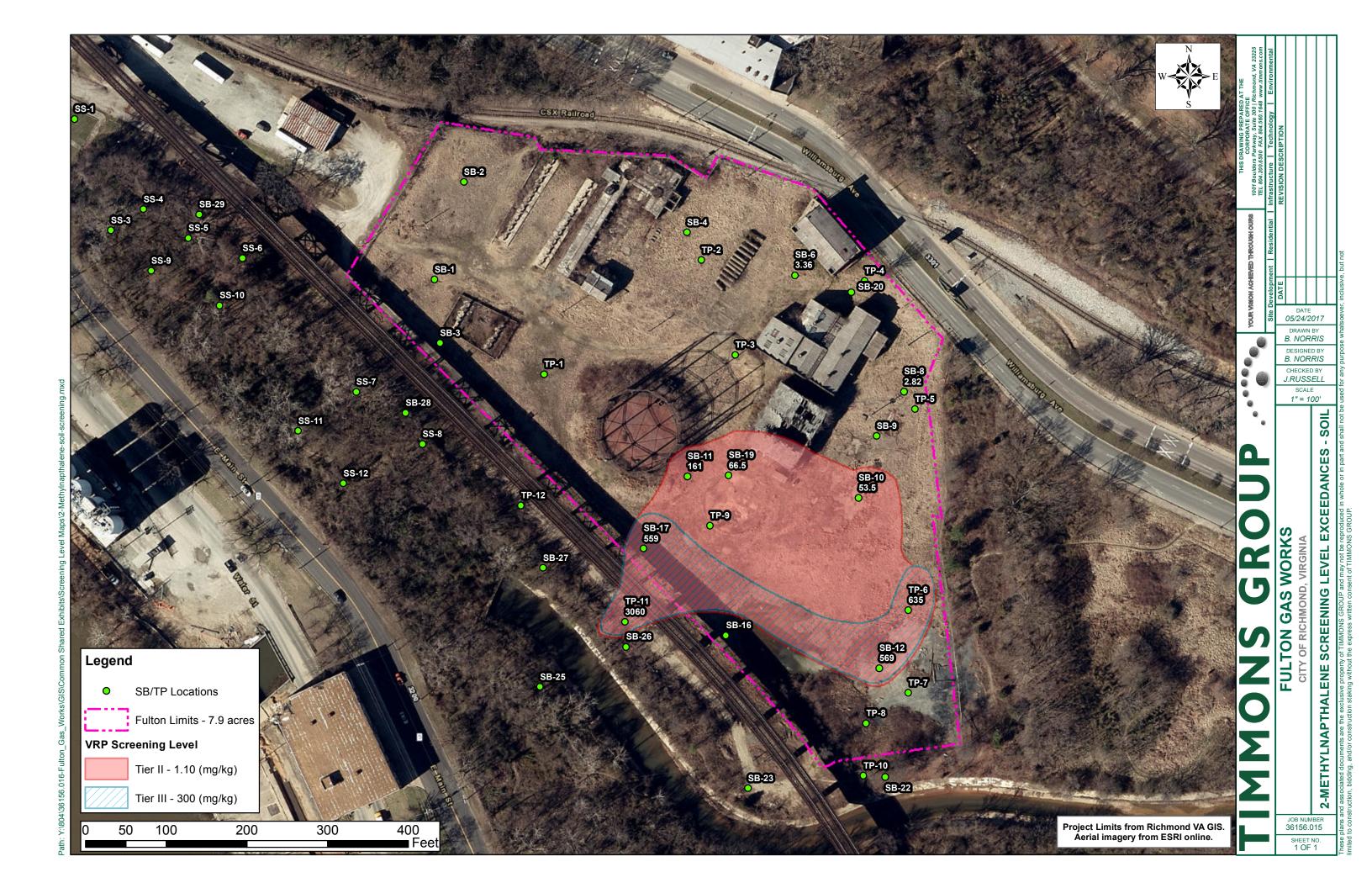


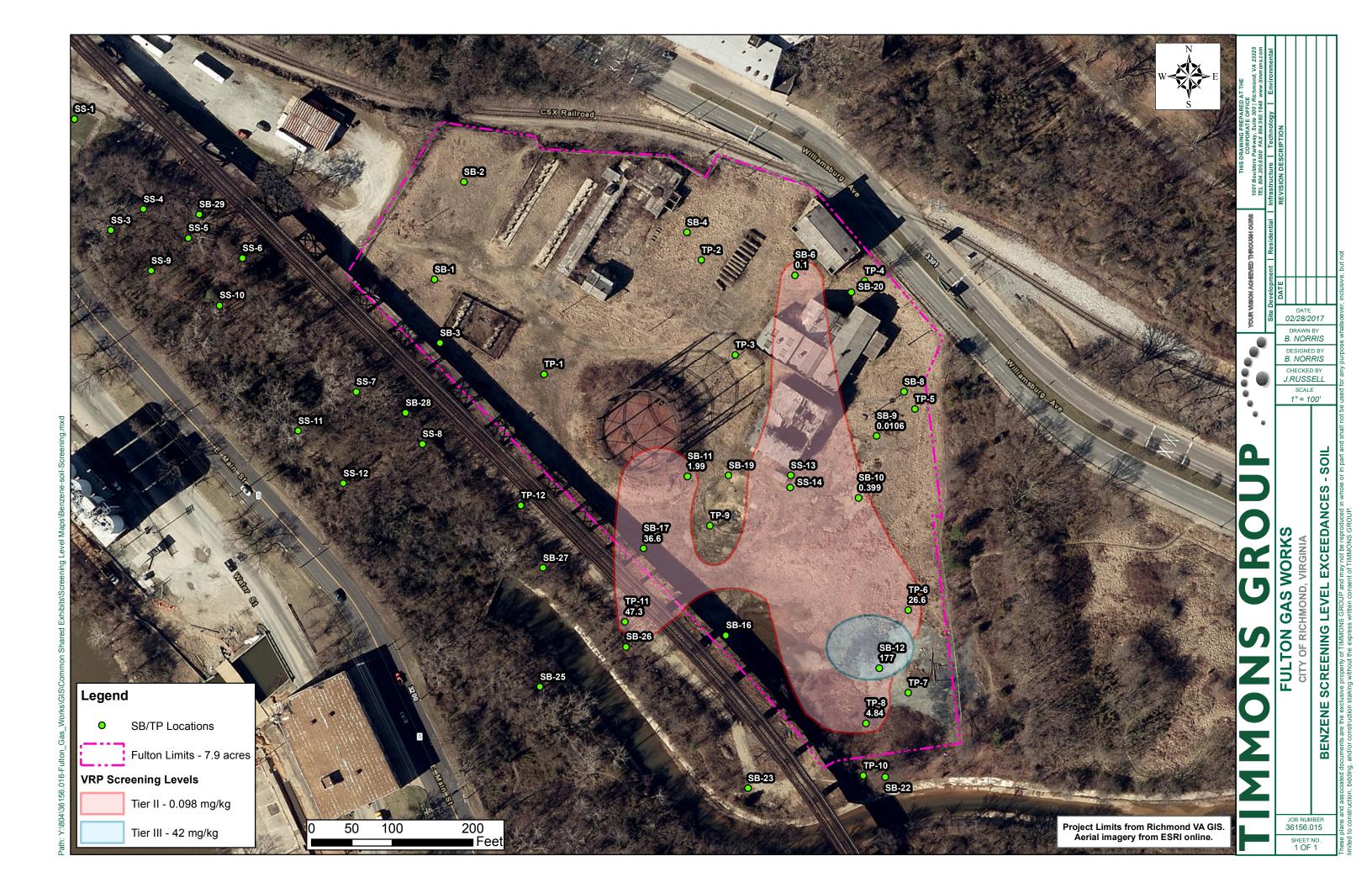


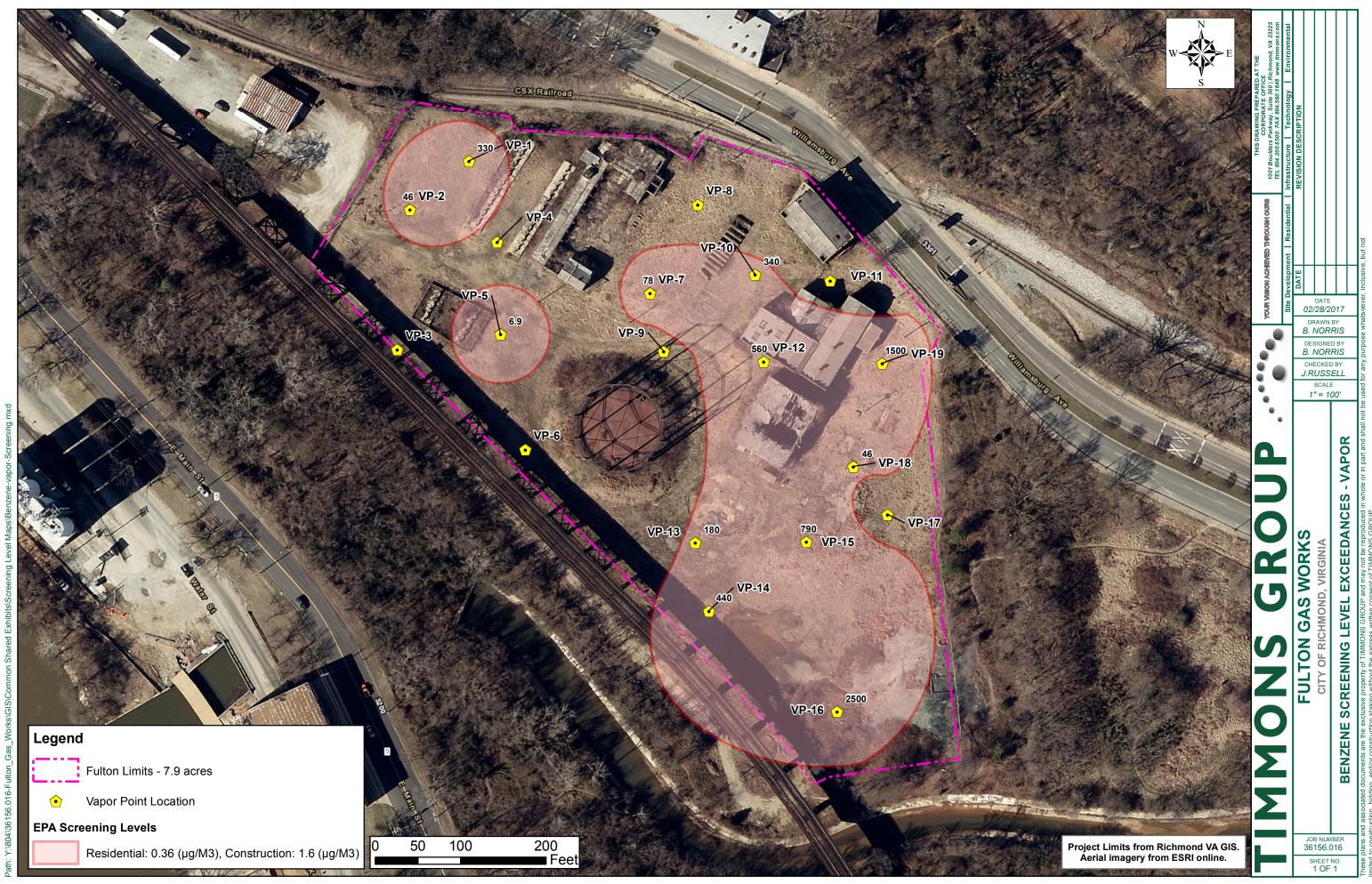


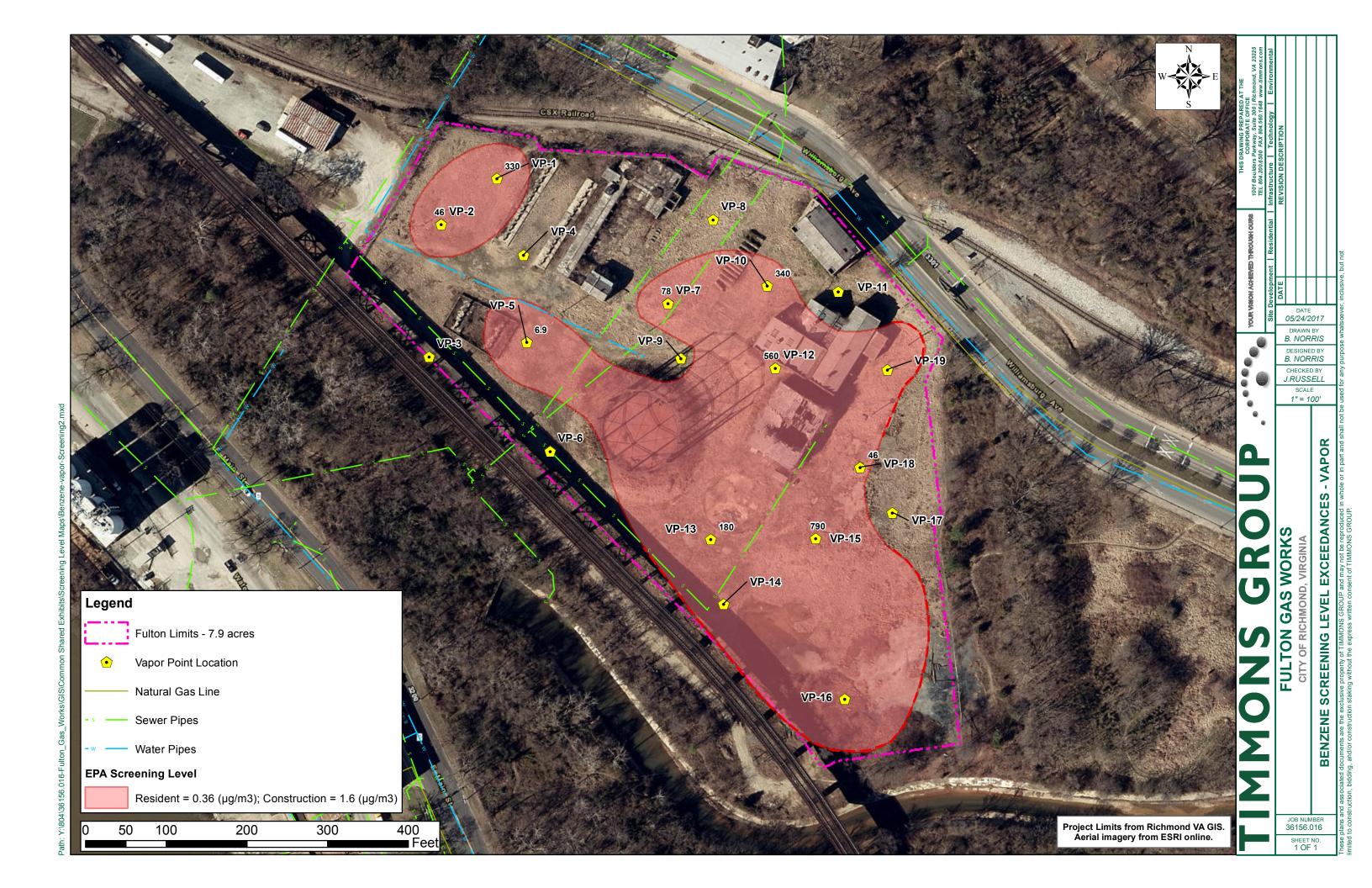
APPENDIX J CONTAMINANT SCREENING LEVEL MAPS

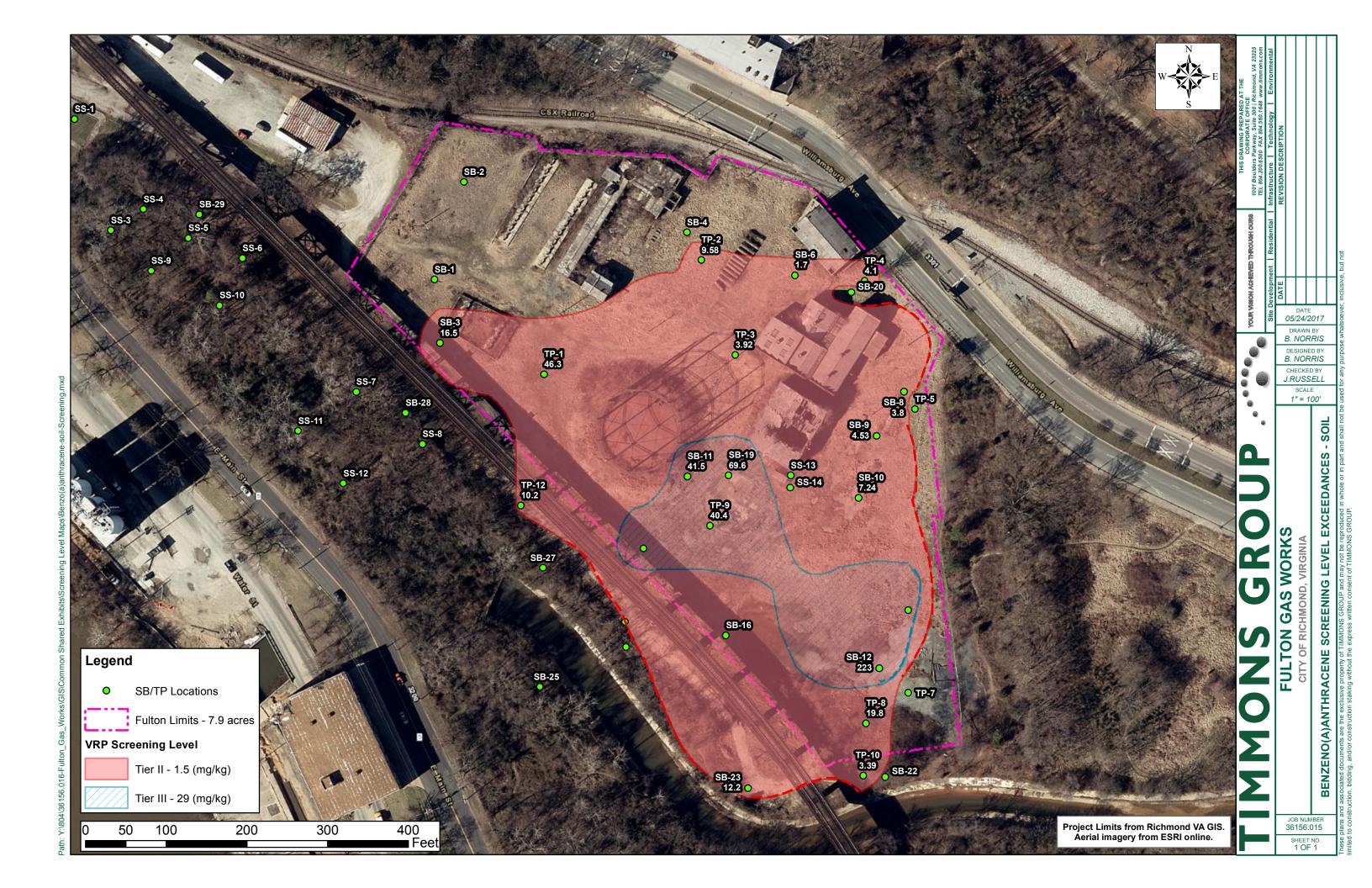


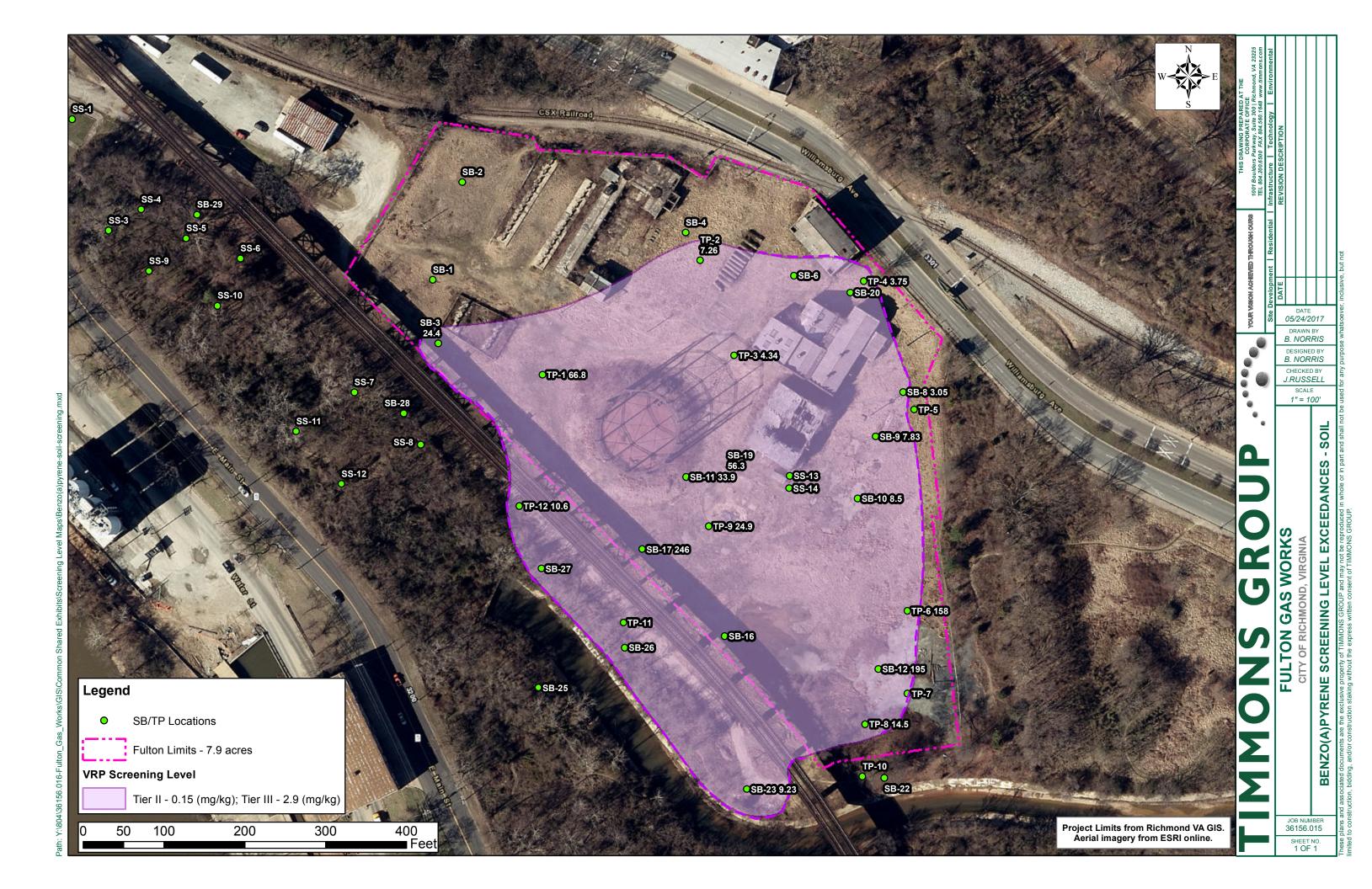


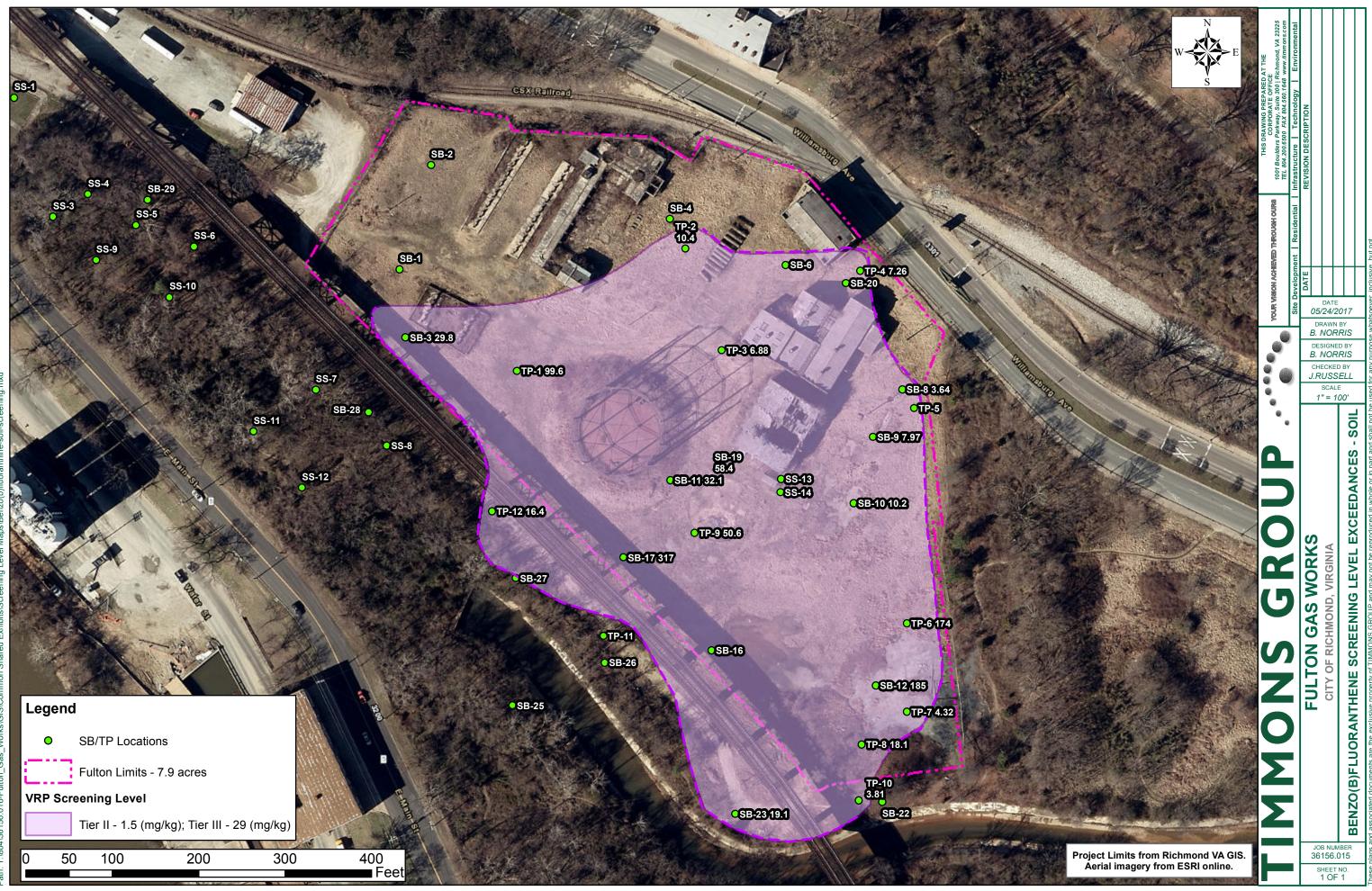




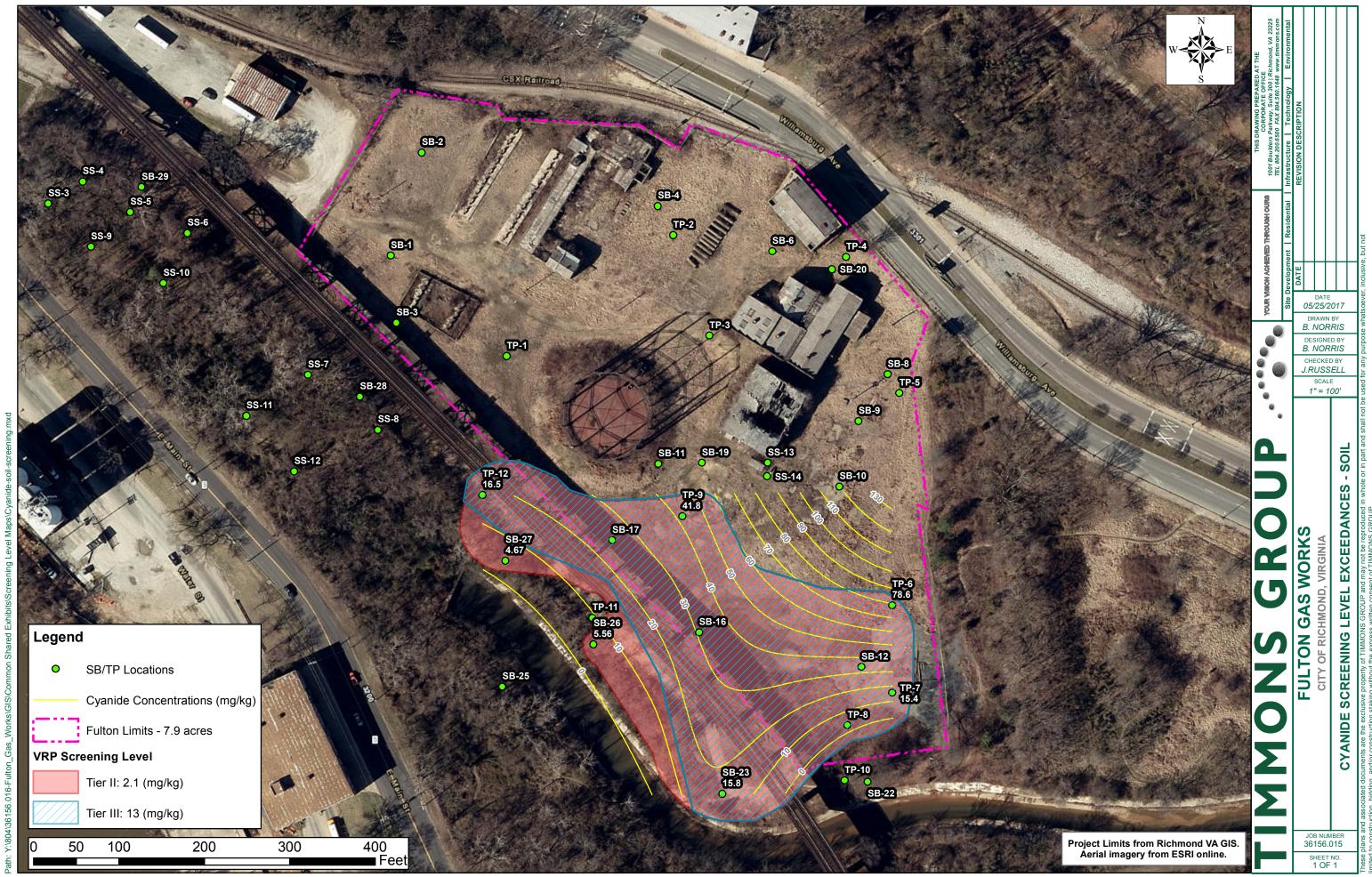


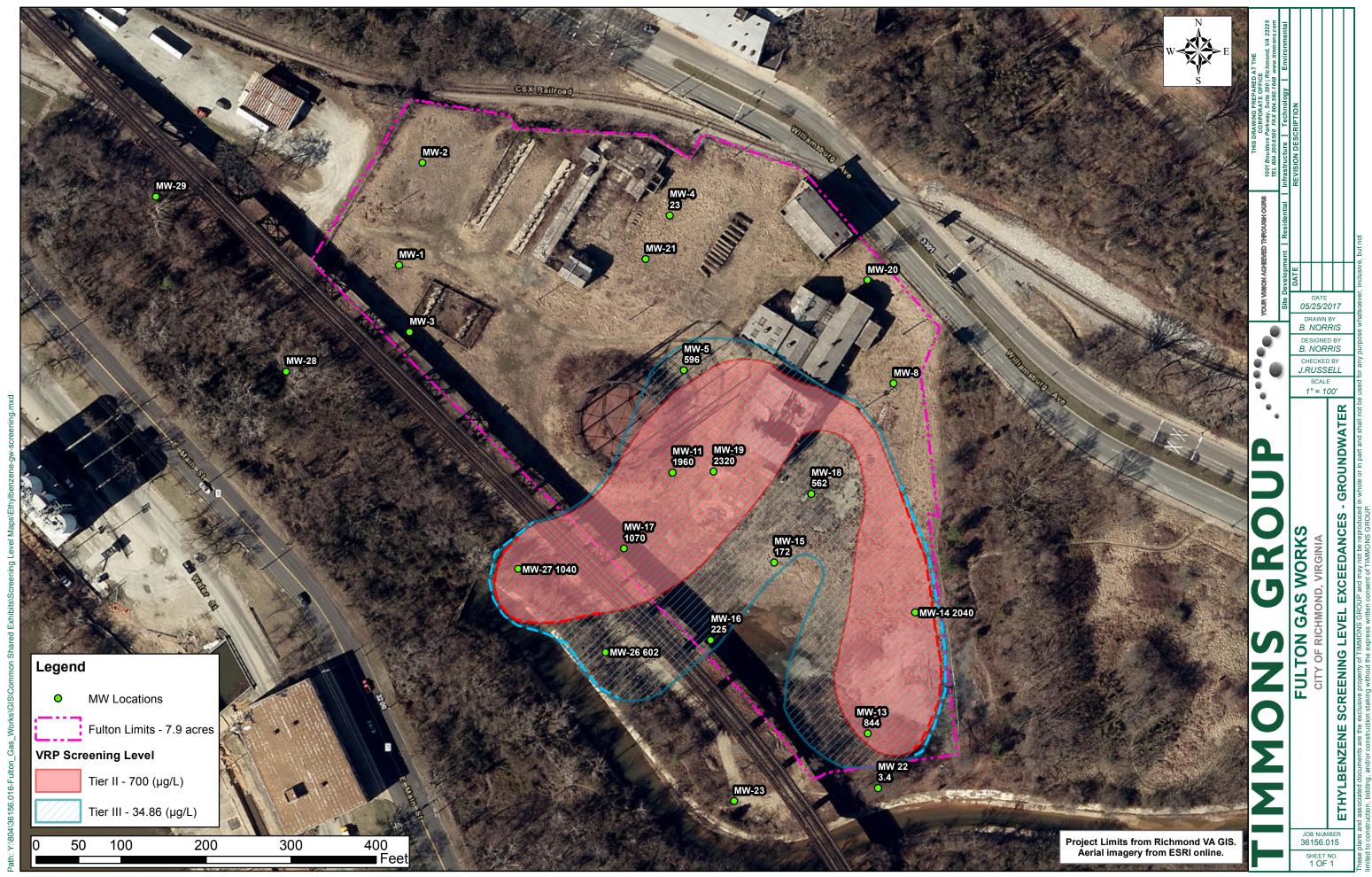


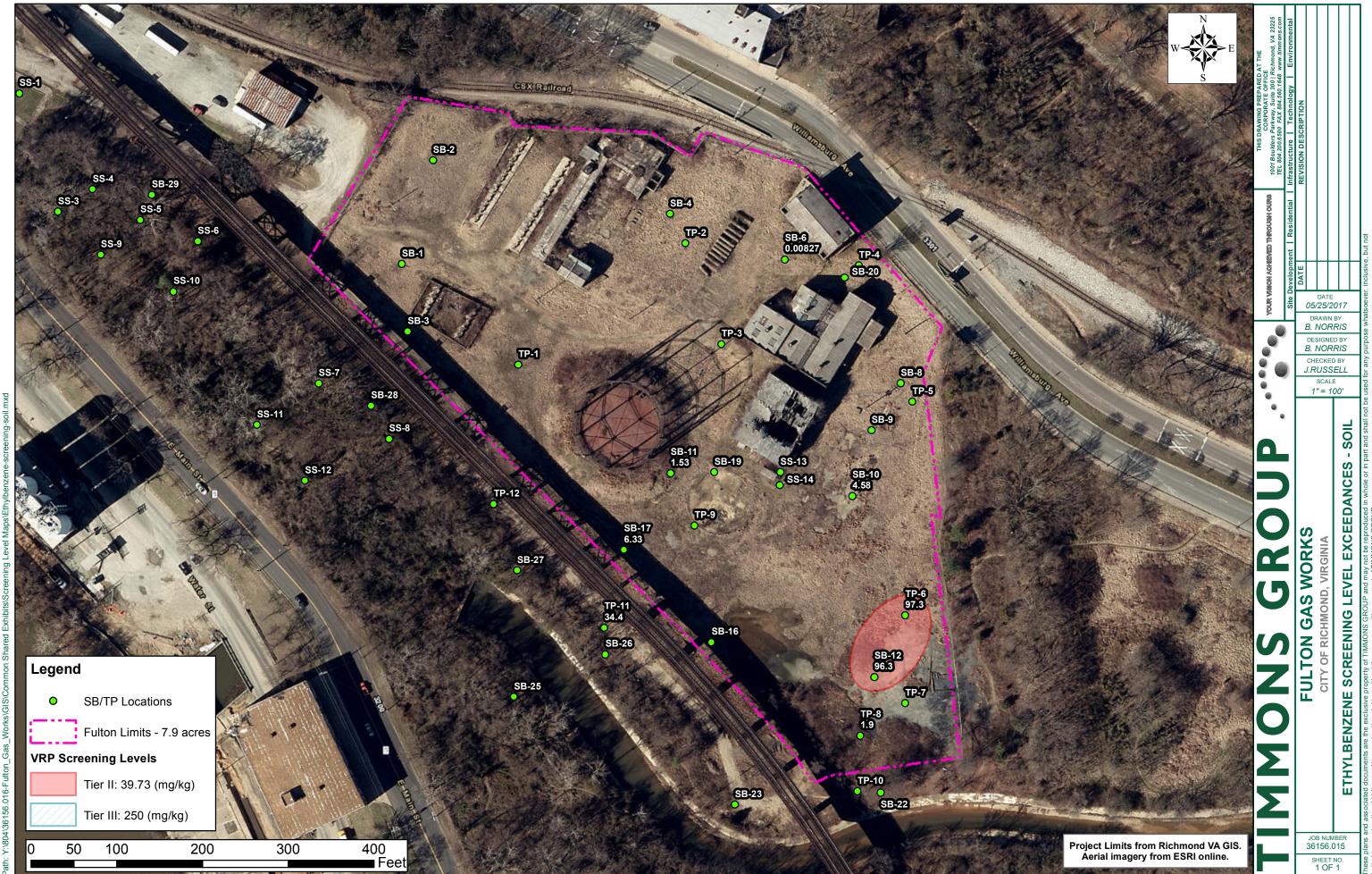


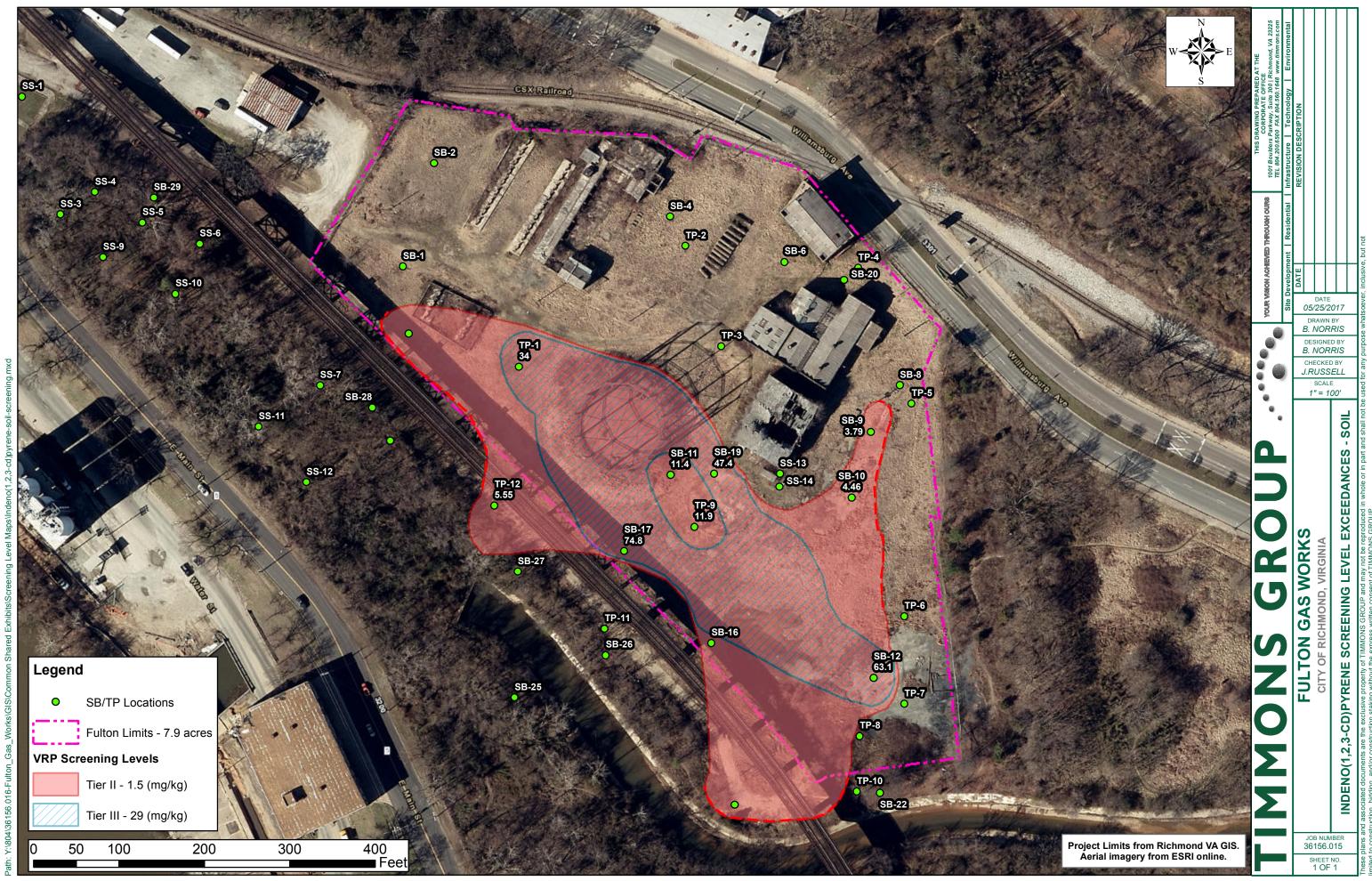


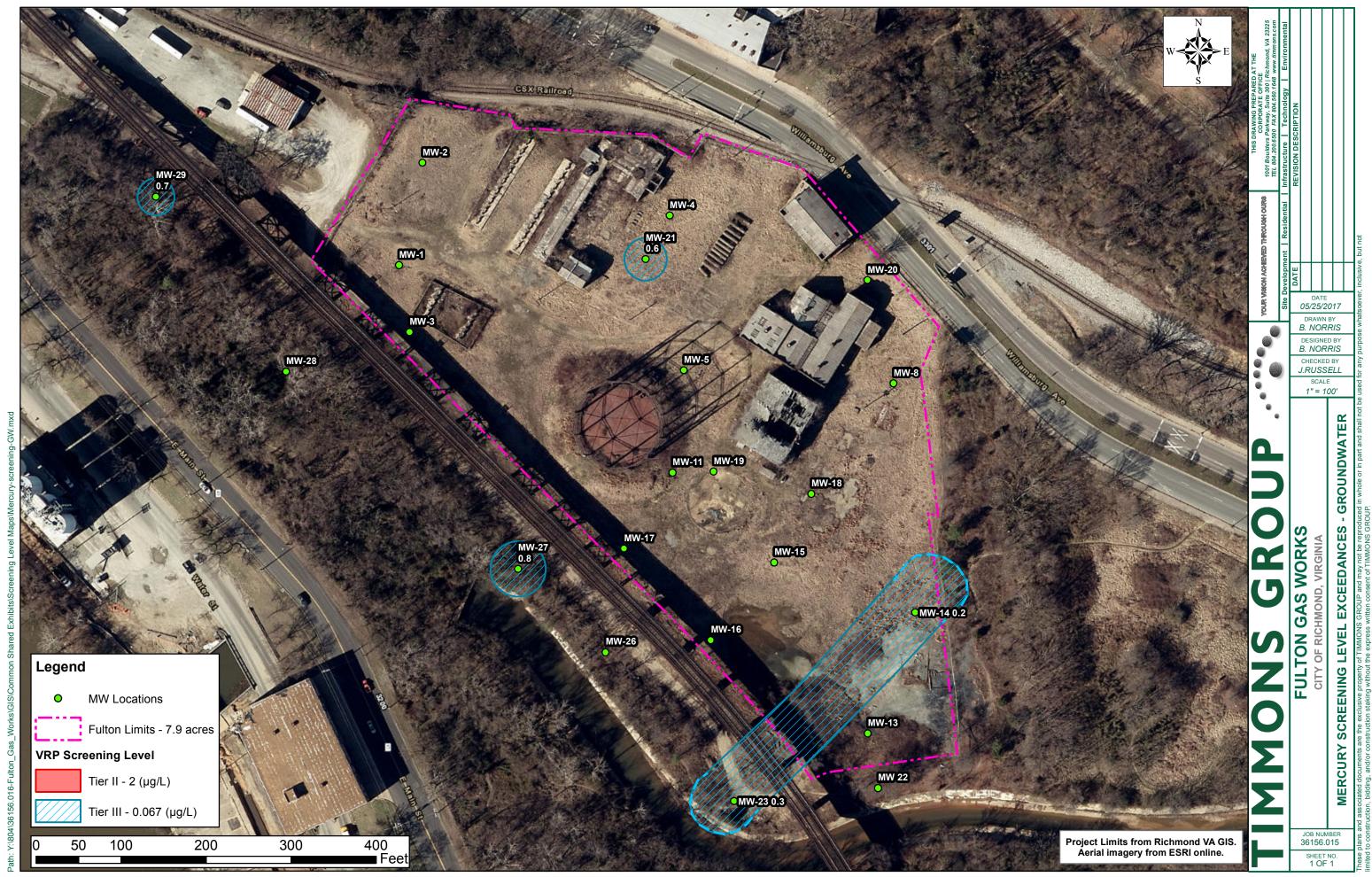
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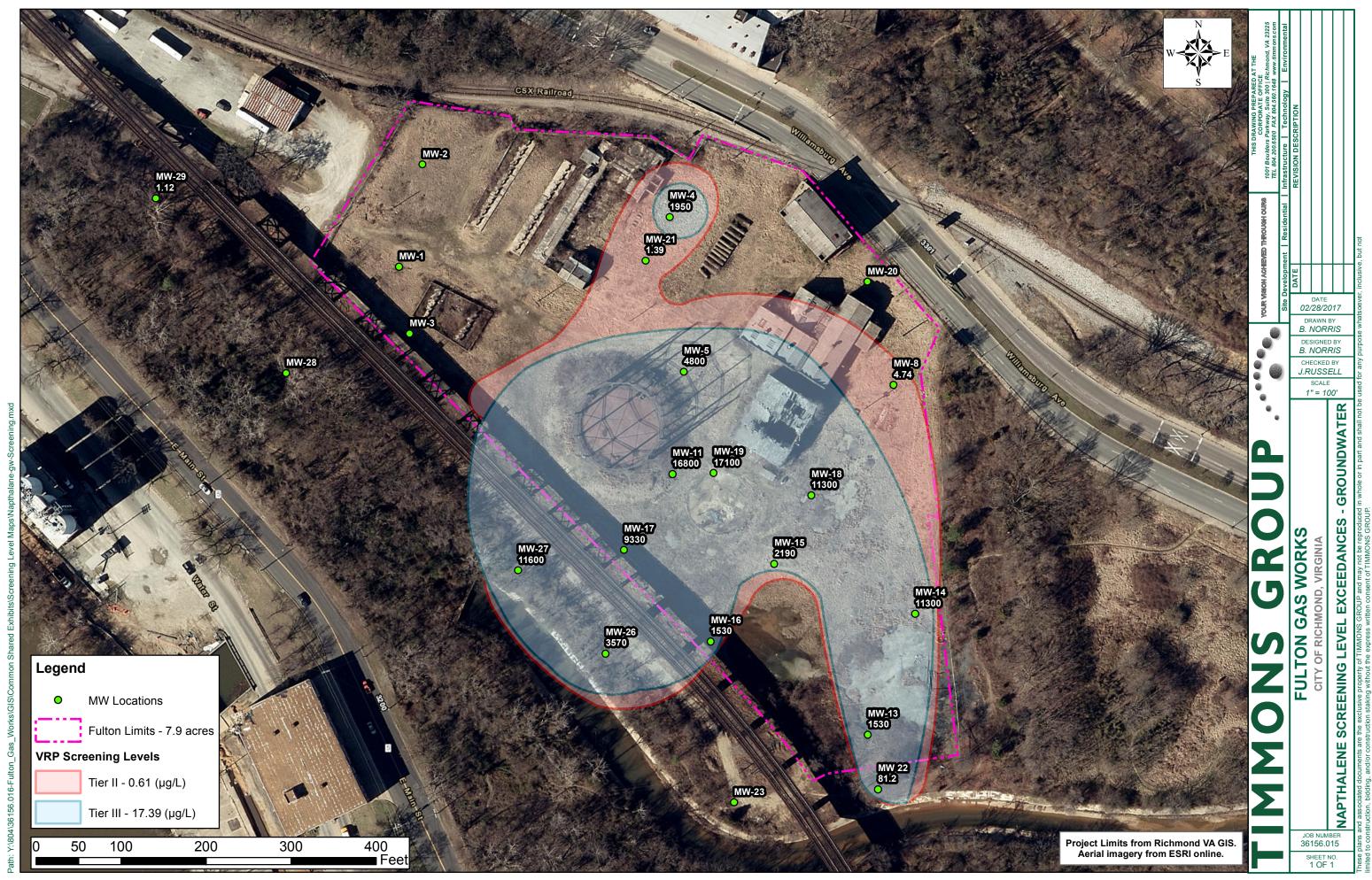


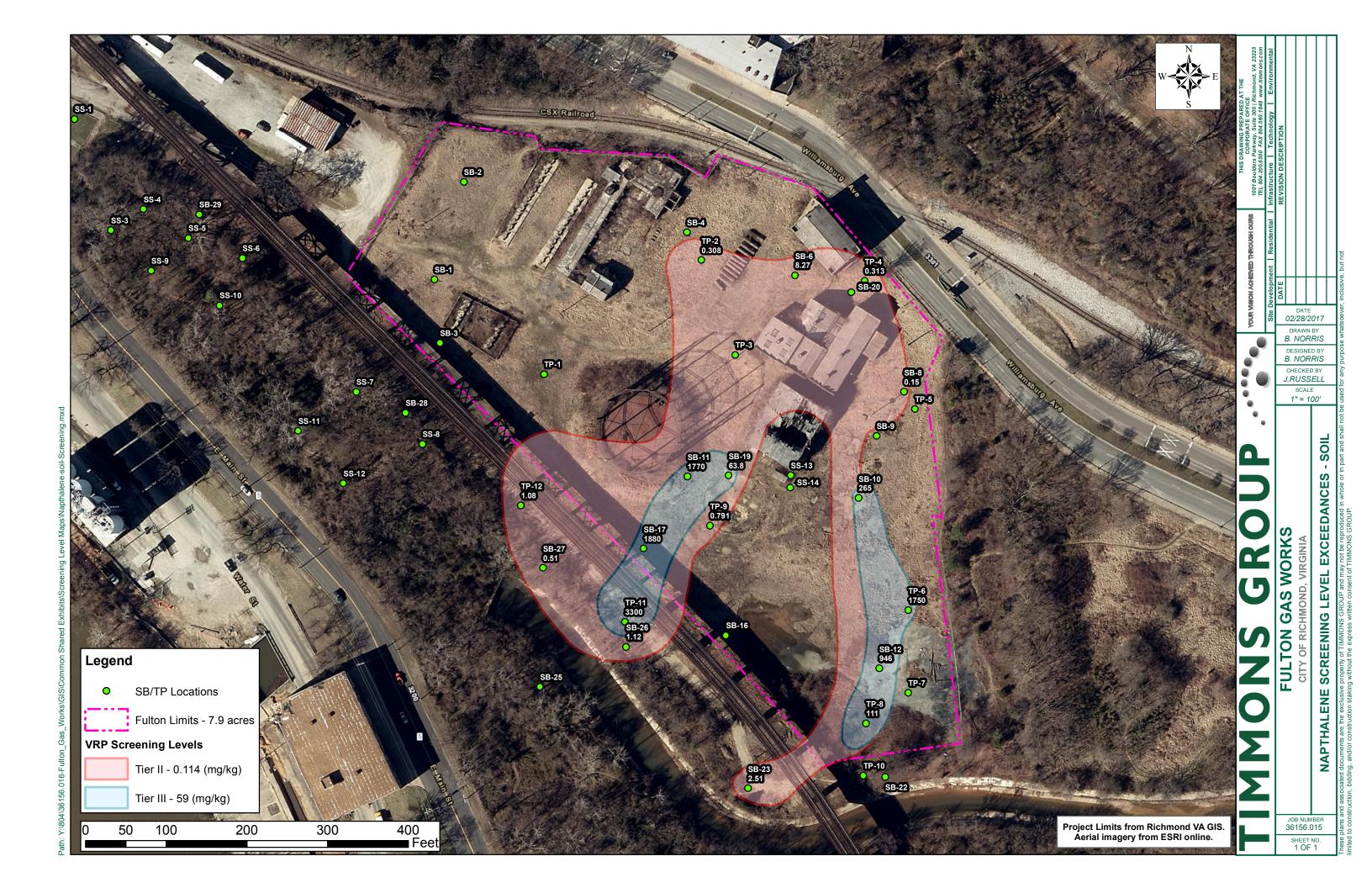


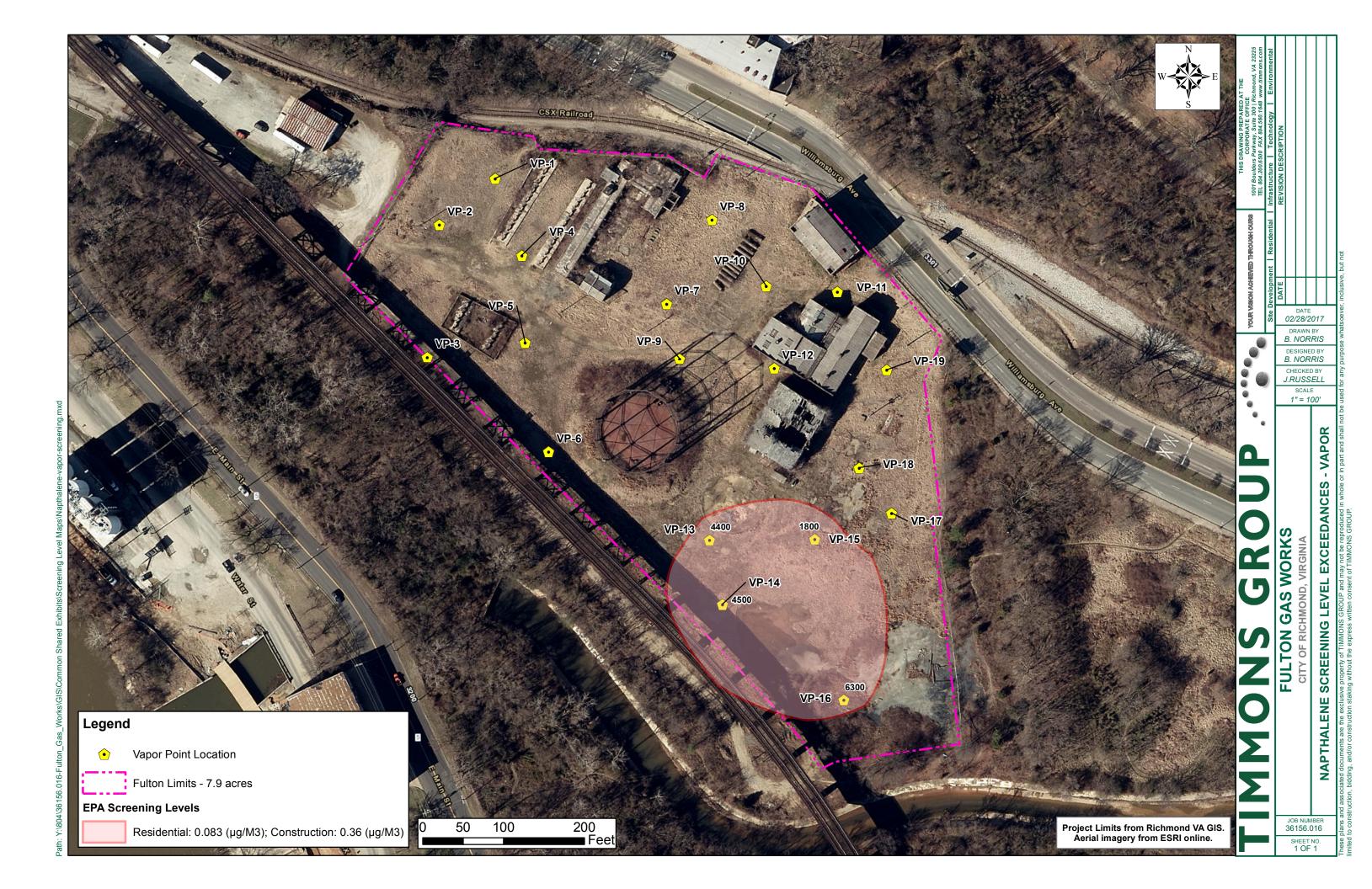


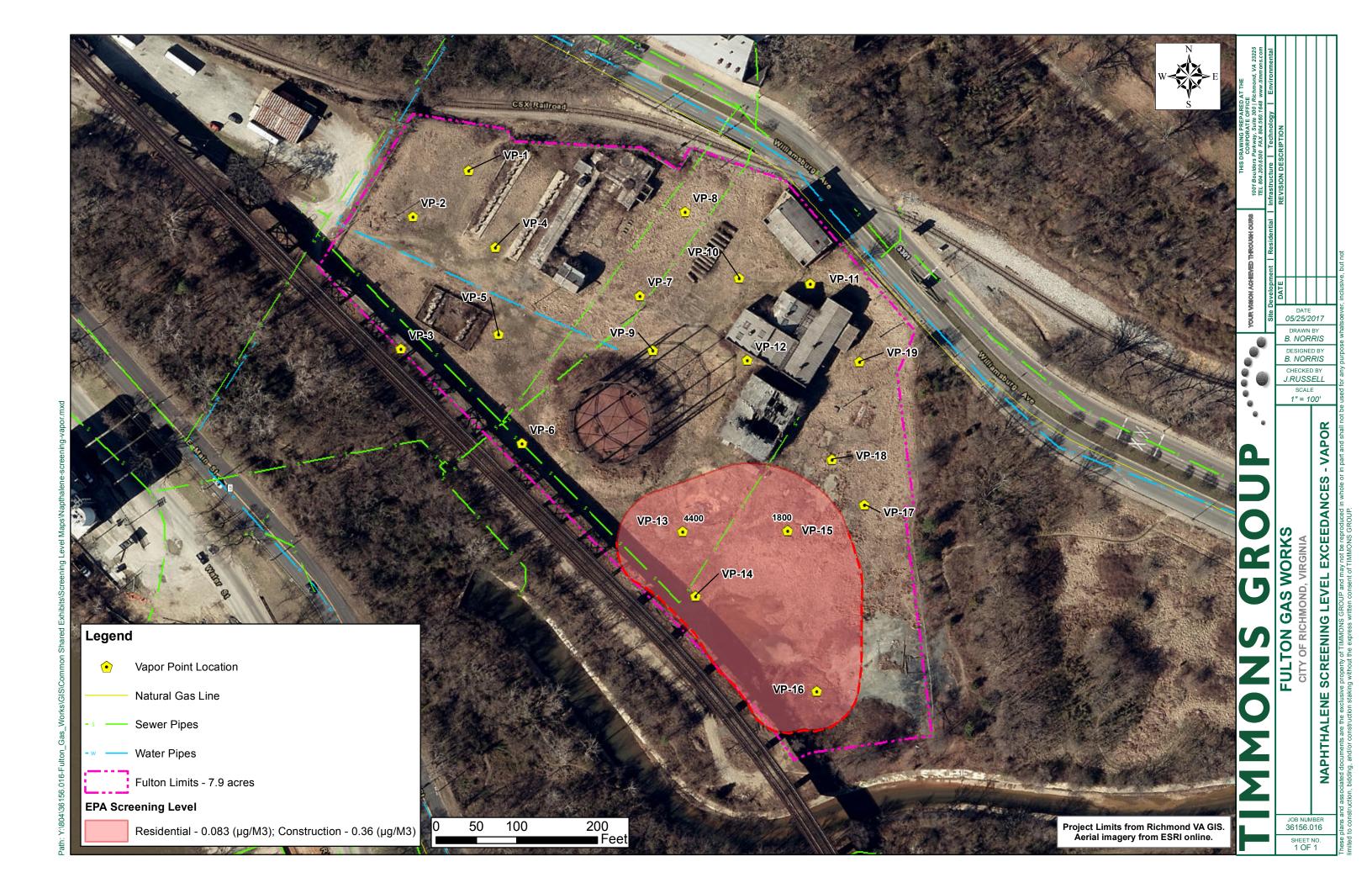


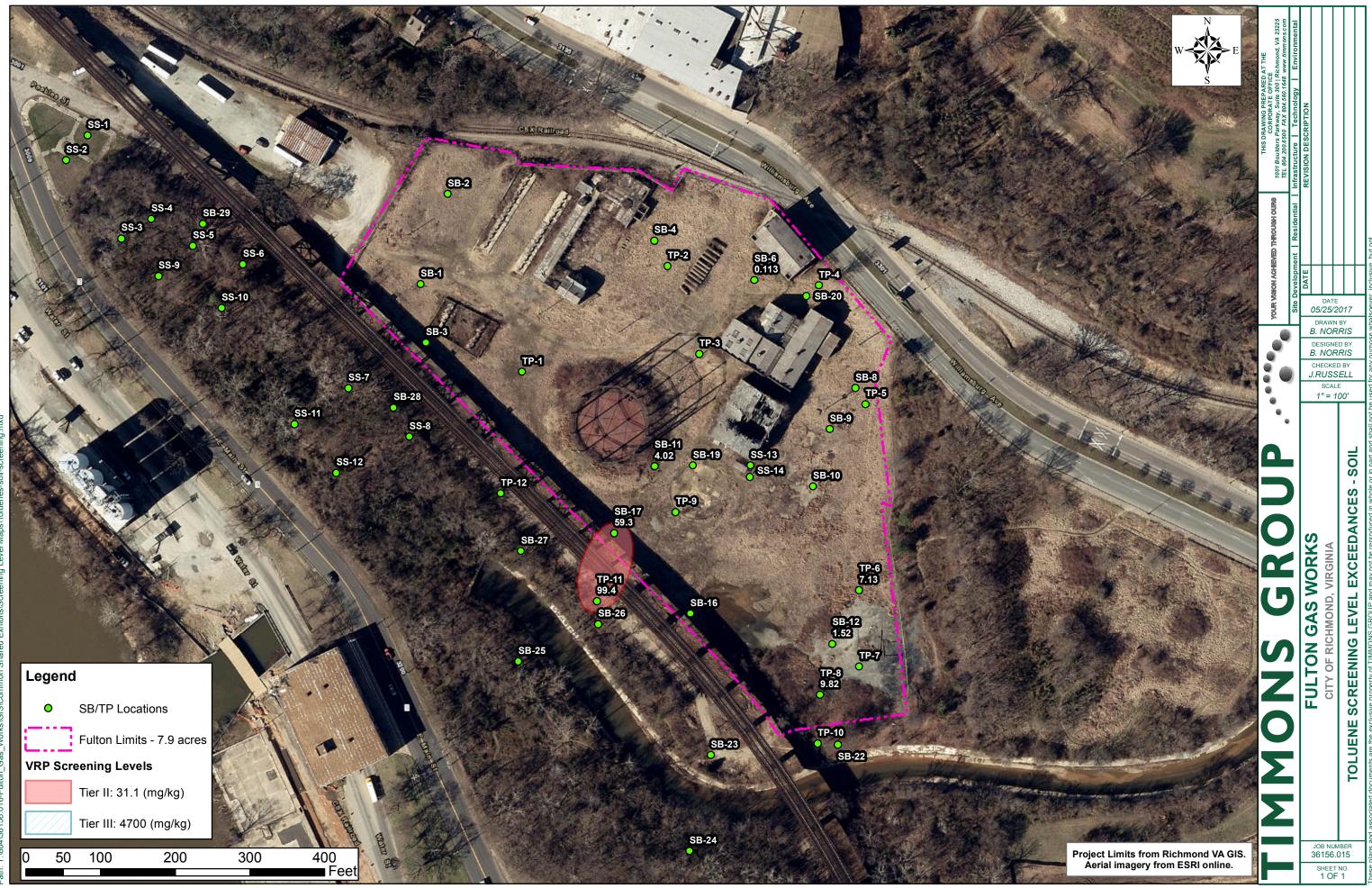




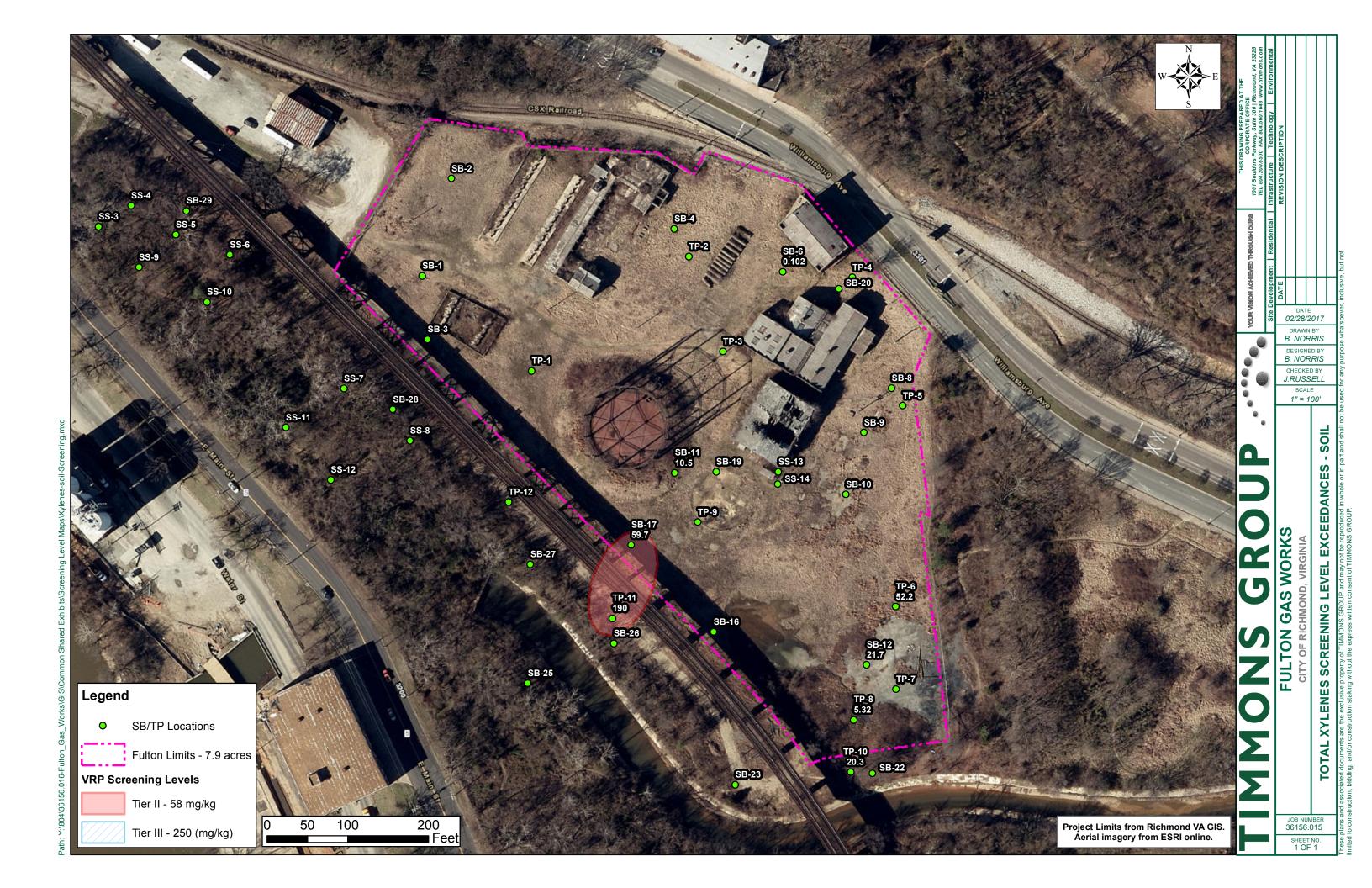


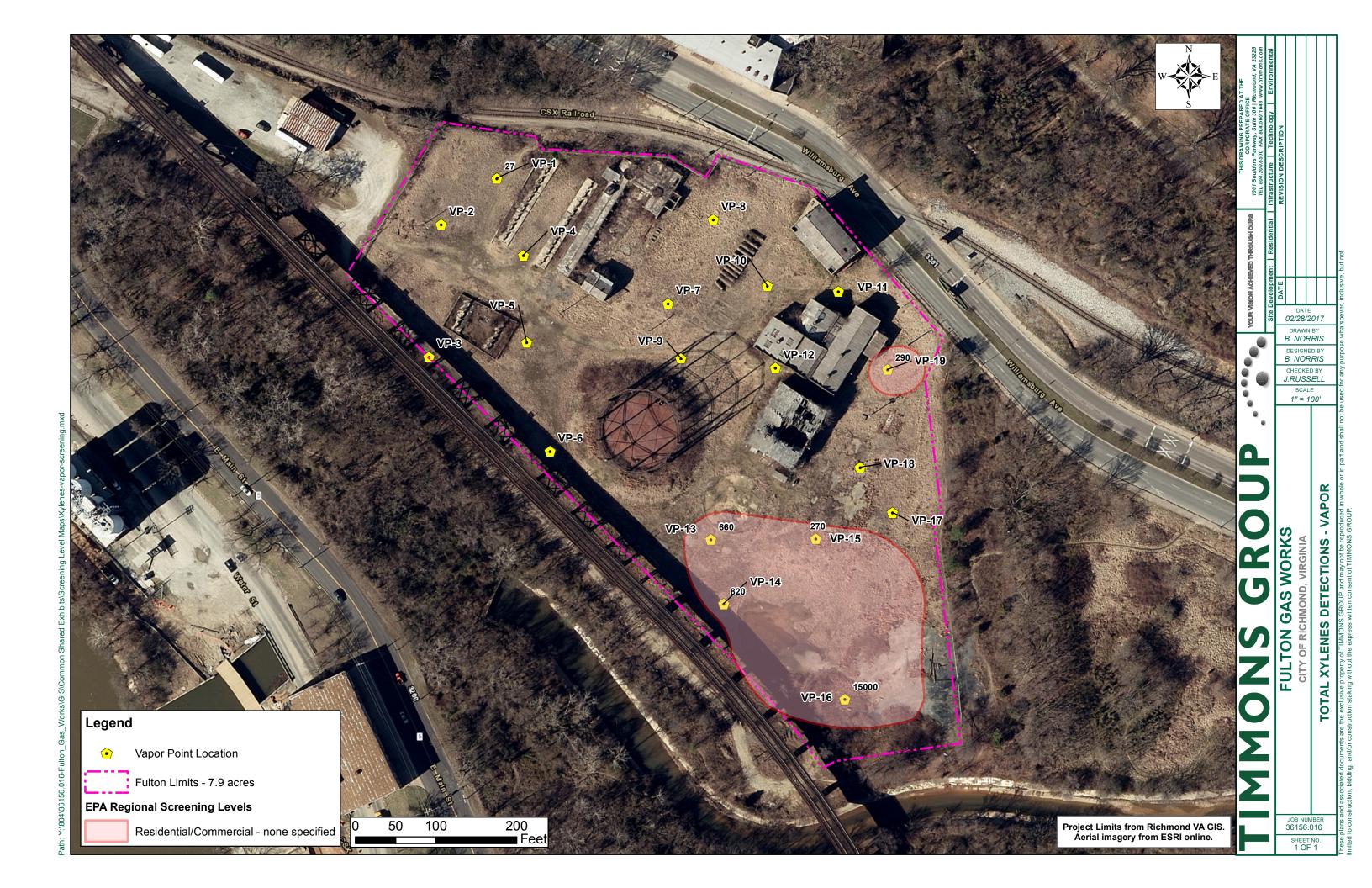






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APPENDIX K LABORATORY ANALYTICAL REPORTS



Certificate of Analysis

Final Report

Laboratory Order ID 17A0186

Client Name: Timmons Group Date Received: January 6, 2017 16:12

1001 Boulders Parkway, Suite 300 Date Issued: January 16, 2017 12:59

Richmond, VA 23225

Project Number: 36156.015

Submitted To: John Russell Purchase Order:

Client Site I.D.: Fulton Gas

Enclosed are the results of analyses for samples received by the laboratory on 01/06/2017 16:12. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

Ted Soyars

Laboratory Manager

50 To 1915

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

This report shall not be reproduced except in full without the expressed and written approval of an authorized representative of Air Water & Soil Laboratories, Inc.









Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

ANALYTICAL REPORT FOR SAMPLES Laboratory Order ID 17A0186

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-17	17A0186-01	Soil	01/04/2017 09:15	01/06/2017 16:12
SB-16	17A0186-02	Soil	01/04/2017 13:00	01/06/2017 16:12



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: John Russell

Project Number: 36156.015

Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Client Site I.D.:

Sample I.D. SB-17 Laboratory Sample ID: 17A0186-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,1,1-Trichloroethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,1,2,2-Tetrachloroethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,1,2-Trichloroethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,1-Dichloroethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,1-Dichloroethylene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,1-Dichloropropene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,2,3-Trichlorobenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,2,3-Trichloropropane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,2,4-Trichlorobenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,2,4-Trimethylbenzene	01	SW8260B	20600 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,2-Dibromo-3-chloropropane (DBCP)	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,2-Dibromoethane (EDB)	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,2-Dichlorobenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,2-Dichloroethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,2-Dichloropropane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,3,5-Trimethylbenzene	01	SW8260B	7390 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,3-Dichlorobenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,3-Dichloropropane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
1,4-Dichlorobenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
2,2-Dichloropropane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
2-Butanone (MEK)	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
2-Chlorotoluene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
2-Hexanone (MBK)	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
4-Chlorotoluene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
4-Isopropyltoluene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Laboratory Sample ID: 17A0186-01 Sample I.D. SB-17

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
4-Methyl-2-pentanone (MIBK)	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Acetone	01	SW8260B	<2000 ug/kg		2000	200	01/09/17 12:48	01/09/17 12:48	JDW
Benzene	01	SW8260B	36600 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Bromobenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Bromochloromethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Bromodichloromethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Bromoform	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Bromomethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Carbon disulfide	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Carbon tetrachloride	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Chlorobenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Chloroethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Chloroform	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Chloromethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
cis-1,2-Dichloroethylene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
cis-1,3-Dichloropropene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Dibromochloromethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Dibromomethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Dichlorodifluoromethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Di-isopropyl ether (DIPE)	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Ethylbenzene	01	SW8260B	6330 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Hexachlorobutadiene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Iodomethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Isopropylbenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
m+p-Xylenes	01	SW8260B	43000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Methylene chloride	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: John Russell

Project Number: 36156.015

Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Client Site I.D.:

Sample I.D. SB-17 Laboratory Sample ID: 17A0186-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Methyl-t-butyl ether (MTBE)	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Naphthalene	01RE2	SW8260B	1880000 ug/kg		25000	5000	01/09/17 16:16	01/09/17 16:16	JDW
n-Butylbenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
n-Propylbenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
o-Xylene	01	SW8260B	16700 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
sec-Butylbenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Styrene	01	SW8260B	9480 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
tert-Butylbenzene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Tetrachloroethylene (PCE)	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Toluene	01	SW8260B	59300 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
trans-1,2-Dichloroethylene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
trans-1,3-Dichloropropene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Trichloroethylene	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Trichlorofluoromethane	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Vinyl acetate	01	SW8260B	<2000 ug/kg		2000	200	01/09/17 12:48	01/09/17 12:48	JDW
Vinyl chloride	01	SW8260B	<1000 ug/kg		1000	200	01/09/17 12:48	01/09/17 12:48	JDW
Xylenes, Total	01	SW8260B	59700 ug/kg		3000	200	01/09/17 12:48	01/09/17 12:48	JDW
Surr: 1,2-Dichloroethane-d4	01	SW8260B	89.4 %		80-120		01/09/17 12:48	01/09/17 12:48	JDW
Surr: 4-Bromofluorobenzene	01	SW8260B	102 %		85-120		01/09/17 12:48	01/09/17 12:48	JDW
Surr: Dibromofluoromethane	01	SW8260B	91.1 %		80-119		01/09/17 12:48	01/09/17 12:48	JDW
Surr: Toluene-d8	01	SW8260B	98.2 %		85-115		01/09/17 12:48	01/09/17 12:48	JDW
Surr: 1,2-Dichloroethane-d4	01RE2	SW8260B	90.1 %		80-120		01/09/17 16:16	01/09/17 16:16	JDW
Surr: 4-Bromofluorobenzene	01RE2	SW8260B	102 %		85-120		01/09/17 16:16	01/09/17 16:16	JDW
Surr: Dibromofluoromethane	01RE2	SW8260B	92.8 %		80-119		01/09/17 16:16	01/09/17 16:16	JDW
Surr: Toluene-d8		SW8260B	101 %		85-115		01/09/17 16:16	01/09/17 16:16	JDW
Semivolatile Organic Compou	inds by GC	MS							



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

36156.015

Project Number:

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Sample I.D. SB-17 Laboratory Sample ID: 17A0186-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
1,2,4,5-Tetrachlorobenzene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
1,2,4-Trichlorobenzene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
1,2-Dichlorobenzene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
1,2-Diphenylhydrazine	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
1,3-Dichlorobenzene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
1,4-Dichlorobenzene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
1-Chloronaphthalene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
1-Naphthylamine	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2,3,4,6-Tetrachlorophenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2,4,5-Trichlorophenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2,4,6-Trichlorophenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2,4-Dichlorophenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2,4-Dimethylphenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2,4-Dinitrophenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2,4-Dinitrotoluene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2,6-Dichlorophenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2,6-Dinitrotoluene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2-Chloronaphthalene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2-Chlorophenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2-Methylnaphthalene	01RE1	SW8270D	559000 ug/kg		151000	1000	01/10/17 08:54	01/13/17 09:38	SKS
2-Naphthylamine	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2-Nitroaniline	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
2-Nitrophenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
3,3'-Dichlorobenzidine	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
3-Methylcholanthrene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
3-Nitroaniline	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Sample I.D. SB-17 Laboratory Sample ID: 17A0186-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
4,6-Dinitro-2-methylphenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
4-Aminobiphenyl	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
4-Bromophenyl phenyl ether	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
4-Chloroaniline	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
4-Chlorophenyl phenyl ether	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
4-Nitroaniline	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
4-Nitrophenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
7,12-Dimethylbenz (a) anthracene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Acenaphthene	01	SW8270D	132000 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Acenaphthylene	01	SW8270D	118000 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Acetophenone	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Aniline	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Anthracene	01RE1	SW8270D	1330000 ug/kg		151000	1000	01/10/17 08:54	01/13/17 09:38	SKS
Benzidine	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Benzo (a) anthracene	01	SW8270D	296000 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Benzo (a) pyrene	01	SW8270D	246000 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Benzo (b) fluoranthene	01	SW8270D	317000 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Benzo (g,h,i) perylene	01	SW8270D	95100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Benzo (k) fluoranthene	01	SW8270D	91400 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Benzoic acid	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Benzyl alcohol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
bis (2-Chloroethoxy) methane	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
bis (2-Chloroethyl) ether	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
bis (2-Chloroisopropyl) ether	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
bis (2-Ethylhexyl) phthalate	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Butyl benzyl phthalate	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: John Russell

Project Number: 36156.015

Purchase Order:

Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Client Site I.D.:

Sample I.D. SB-17 Laboratory Sample ID: 17A0186-01

Parameter	Samp ID	Method	Result	Reportin Qual Limit	ng D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS						
Chrysene	01	SW8270D	304000 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Dibenz (a,h) anthracene	01	SW8270D	32900 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Dibenz (a,j) acridine	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Dibenzofuran	01	SW8270D	236000 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Diethyl phthalate	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Dimethyl phthalate	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Di-n-butyl phthalate	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Di-n-octyl phthalate	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Diphenylamine	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Ethyl methanesulfonate	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Fluoranthene	01RE1	SW8270D	643000 ug/kg	15100	1000	01/10/17 08:54	01/13/17 09:38	SKS
Fluorene	01	SW8270D	401000 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Hexachlorobenzene	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Hexachlorobutadiene	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Hexachlorocyclopentadiene	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Hexachloroethane	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Indeno (1,2,3-cd) pyrene	01	SW8270D	74800 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Isophorone	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
m+p-Cresols	01	SW8270D	22100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Methyl methanesulfonate	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Naphthalene	01RE1	SW8270D	2000000 ug/kg	15100	1000	01/10/17 08:54	01/13/17 09:38	SKS
Nitrobenzene	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
n-Nitrosodimethylamine	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
n-Nitrosodi-n-butylamine	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
n-Nitrosodi-n-propylamine	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS
n-Nitrosodiphenylamine	01	SW8270D	<15100 ug/kg	15100	100	01/10/17 08:54	01/13/17 04:06	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/

1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Sample I.D. SB-17 Laboratory Sample ID: 17A0186-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
n-Nitrosopiperidine	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
o+m+p-Cresols	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
o-Cresol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
p-(Dimethylamino) azobenzene	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
p-Chloro-m-cresol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Pentachloronitrobenzene (quintozene)	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Pentachlorophenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Phenacetin	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Phenanthrene	01RE1	SW8270D	1350000 ug/kg		151000	1000	01/10/17 08:54	01/13/17 09:38	SKS
Phenol	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Pronamide	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Pyrene	01RE1	SW8270D	609000 ug/kg		151000	1000	01/10/17 08:54	01/13/17 09:38	SKS
Pyridine	01	SW8270D	<15100 ug/kg		15100	100	01/10/17 08:54	01/13/17 04:06	SKS
Surr: 2,4,6-Tribromophenol	01	SW8270D	155 %	DS	35-125		01/10/17 08:54	01/13/17 04:06	SKS
Surr: 2-Fluorobiphenyl	01	SW8270D	53.4 %		45-105		01/10/17 08:54	01/13/17 04:06	SKS
Surr: 2-Fluorophenol	01	SW8270D	%	DS	35-105		01/10/17 08:54	01/13/17 04:06	SKS
Surr: Nitrobenzene-d5	01	SW8270D	49.4 %		35-100		01/10/17 08:54	01/13/17 04:06	SKS
Surr: Phenol-d5	01	SW8270D	%	DS	40-100		01/10/17 08:54	01/13/17 04:06	SKS
Surr: p-Terphenyl-d14	01	SW8270D	111 %		30-125		01/10/17 08:54	01/13/17 04:06	SKS
Surr: 2,4,6-Tribromophenol	01RE1	SW8270D	%	DS	35-125		01/10/17 08:54	01/13/17 09:38	SKS
Surr: 2-Fluorobiphenyl	01RE1	SW8270D	534 %	DS	45-105		01/10/17 08:54	01/13/17 09:38	SKS
Surr: 2-Fluorophenol	01RE1	SW8270D	%	DS	35-105		01/10/17 08:54	01/13/17 09:38	SKS
Surr: Nitrobenzene-d5	01RE1	SW8270D	316 %	DS	35-100		01/10/17 08:54	01/13/17 09:38	SKS
Surr: Phenol-d5	01RE1	SW8270D	%	DS	40-100		01/10/17 08:54	01/13/17 09:38	SKS
Surr: p-Terphenyl-d14	01RE1	SW8270D	998 %	DS	30-125		01/10/17 08:54	01/13/17 09:38	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: John Russell

Project Number: 36156.015

Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Client Site I.D.:

Sample I.D. SB-16 Laboratory Sample ID: 17A0186-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,1,1-Trichloroethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,1,2,2-Tetrachloroethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,1,2-Trichloroethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,1-Dichloroethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,1-Dichloroethylene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,1-Dichloropropene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,2,3-Trichlorobenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,2,3-Trichloropropane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,2,4-Trichlorobenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,2,4-Trimethylbenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,2-Dibromo-3-chloropropane (DBCP)	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,2-Dibromoethane (EDB)	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,2-Dichlorobenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,2-Dichloroethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,2-Dichloropropane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,3,5-Trimethylbenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,3-Dichlorobenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,3-Dichloropropane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
1,4-Dichlorobenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
2,2-Dichloropropane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
2-Butanone (MEK)	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
2-Chlorotoluene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
2-Hexanone (MBK)	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
4-Chlorotoluene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
4-Isopropyltoluene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Sample I.D. SB-16 Laboratory Sample ID: 17A0186-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
4-Methyl-2-pentanone (MIBK)	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Acetone	02	SW8260B	<1910 ug/kg		1910	200	01/09/17 12:24	01/09/17 12:24	JDW
Benzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Bromobenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Bromochloromethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Bromodichloromethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Bromoform	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Bromomethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Carbon disulfide	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Carbon tetrachloride	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Chlorobenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Chloroethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Chloroform	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Chloromethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
cis-1,2-Dichloroethylene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
cis-1,3-Dichloropropene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Dibromochloromethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Dibromomethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Dichlorodifluoromethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Di-isopropyl ether (DIPE)	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Ethylbenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Hexachlorobutadiene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
lodomethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Isopropylbenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
m+p-Xylenes	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Methylene chloride	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Sample I.D. SB-16

Laboratory Sample ID: 17A0186-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Methyl-t-butyl ether (MTBE)	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Naphthalene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
n-Butylbenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
n-Propylbenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
o-Xylene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
sec-Butylbenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Styrene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
tert-Butylbenzene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Tetrachloroethylene (PCE)	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Toluene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
trans-1,2-Dichloroethylene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
trans-1,3-Dichloropropene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Trichloroethylene	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Trichlorofluoromethane	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Vinyl acetate	02	SW8260B	<1910 ug/kg		1910	200	01/09/17 12:24	01/09/17 12:24	JDW
Vinyl chloride	02	SW8260B	<957 ug/kg		957	200	01/09/17 12:24	01/09/17 12:24	JDW
Xylenes, Total	02	SW8260B	<2870 ug/kg		2870	200	01/09/17 12:24	01/09/17 12:24	JDW
Surr: 1,2-Dichloroethane-d4	02	SW8260B	93.1 %		80-120		01/09/17 12:24	01/09/17 12:24	JDW
Surr: 4-Bromofluorobenzene	02	SW8260B	102 %		85-120		01/09/17 12:24	01/09/17 12:24	JDW
Surr: Dibromofluoromethane	02	SW8260B	93.6 %		80-119		01/09/17 12:24	01/09/17 12:24	JDW
Surr: Toluene-d8	02	SW8260B	101 %		85-115		01/09/17 12:24	01/09/17 12:24	JDW
Semivolatile Organic Compo	unds by GC	MS							
1,2,4,5-Tetrachlorobenzene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
1,2,4-Trichlorobenzene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
1,2-Dichlorobenzene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
1,2-Diphenylhydrazine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: John Russell

Project Number: 36156.015

Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Client Site I.D.:

Sample I.D. SB-16 Laboratory Sample ID: 17A0186-02

	0 ID				Reporting		Sample Prep	Analysis	A l 4
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
1,3-Dichlorobenzene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
1,4-Dichlorobenzene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
1-Chloronaphthalene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
1-Naphthylamine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2,3,4,6-Tetrachlorophenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2,4,5-Trichlorophenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2,4,6-Trichlorophenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2,4-Dichlorophenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2,4-Dimethylphenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2,4-Dinitrophenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2,4-Dinitrotoluene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2,6-Dichlorophenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2,6-Dinitrotoluene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2-Chloronaphthalene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2-Chlorophenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2-Methylnaphthalene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2-Naphthylamine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2-Nitroaniline	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
2-Nitrophenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
3,3'-Dichlorobenzidine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
3-Methylcholanthrene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
3-Nitroaniline	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
4,6-Dinitro-2-methylphenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
4-Aminobiphenyl	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
4-Bromophenyl phenyl ether	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
4-Chloroaniline	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Sample I.D. SB-16 Laboratory Sample ID: 17A0186-02

Parameter	Samp ID	Method	Result	F Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
4-Chlorophenyl phenyl ether	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
4-Nitroaniline	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
4-Nitrophenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
7,12-Dimethylbenz (a) anthracene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Acenaphthene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Acenaphthylene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Acetophenone	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Aniline	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Anthracene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Benzidine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Benzo (a) anthracene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Benzo (a) pyrene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Benzo (b) fluoranthene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Benzo (g,h,i) perylene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Benzo (k) fluoranthene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Benzoic acid	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Benzyl alcohol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
bis (2-Chloroethoxy) methane	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
bis (2-Chloroethyl) ether	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
bis (2-Chloroisopropyl) ether	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
bis (2-Ethylhexyl) phthalate	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Butyl benzyl phthalate	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Chrysene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Dibenz (a,h) anthracene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Dibenz (a,j) acridine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Dibenzofuran	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Sample I.D. SB-16 Laboratory Sample ID: 17A0186-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Diethyl phthalate	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Dimethyl phthalate	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Di-n-butyl phthalate	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Di-n-octyl phthalate	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Diphenylamine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Ethyl methanesulfonate	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Fluoranthene	02	SW8270D	2850 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Fluorene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Hexachlorobenzene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Hexachlorobutadiene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Hexachlorocyclopentadiene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Hexachloroethane	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Indeno (1,2,3-cd) pyrene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Isophorone	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
m+p-Cresols	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Methyl methanesulfonate	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Naphthalene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Nitrobenzene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
n-Nitrosodimethylamine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
n-Nitrosodi-n-butylamine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
n-Nitrosodi-n-propylamine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
n-Nitrosodiphenylamine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
n-Nitrosopiperidine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
o+m+p-Cresols	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
o-Cresol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
p-(Dimethylamino) azobenzene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/

1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0186

Analytical Results

Sample I.D. SB-16

Laboratory Sample ID: 17A0186-02

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
p-Chloro-m-cresol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Pentachloronitrobenzene (quintozene)	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Pentachlorophenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Phenacetin	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Phenanthrene	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Phenol	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Pronamide	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Pyrene	02	SW8270D	3780 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Pyridine	02	SW8270D	<1400 ug/kg		1400	10	01/10/17 08:54	01/13/17 10:12	SKS
Surr: 2,4,6-Tribromophenol	02	SW8270D	63.3 %		35-125		01/10/17 08:54	01/13/17 10:12	SKS
Surr: 2-Fluorobiphenyl	02	SW8270D	70.9 %		45-105		01/10/17 08:54	01/13/17 10:12	SKS
Surr: 2-Fluorophenol	02	SW8270D	78.5 %		35-105		01/10/17 08:54	01/13/17 10:12	SKS
Surr: Nitrobenzene-d5	02	SW8270D	80.2 %		35-100		01/10/17 08:54	01/13/17 10:12	SKS
Surr: Phenol-d5	02	SW8270D	66.7 %		40-100		01/10/17 08:54	01/13/17 10:12	SKS
Surr: p-Terphenyl-d14	02	SW8270D	71.7 %		30-125		01/10/17 08:54	01/13/17 10:12	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Client Site I.D.:

Project Number: 36156.015

Purchase Order:

- Analytical Summary

Fulton Gas

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
	IIIItiai / Filiai			·	
Semivolatile Organic	Compounds by GCMS	Preparation Method:	SW3550C		
17A0186-01	16.5 g / 1.00 mL	SW8270D	BAA0187	SAA0276	AA70049
17A0186-01RE1	16.5 g / 1.00 mL	SW8270D	BAA0187	SAA0276	AA70049
17A0186-02	17.8 g / 1.00 mL	SW8270D	BAA0187	SAA0276	AA70049
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Organic Con	npounds by GCMS	Preparation Method:	SW5030B		
17A0186-01	10.0 g / 10.0 mL	SW8260B	BAA0204	SAA0201	AL60097
17A0186-01RE1	10.0 g / 10.0 mL	SW8260B	BAA0204	SAA0201	AL60097
17A0186-01RE2	10.0 g / 10.0 mL	SW8260B	BAA0204	SAA0201	AL60097
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Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/1

1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0204 - SW5030B

Blank (BAA0204-BLK1)			Prepared & Analyzed: 01/09/2017
1,1,1,2-Tetrachloroethane	<5.00 ug/kg	5.00	ug/kg
1,1,1-Trichloroethane	<5.00 ug/kg	5.00	ug/kg
1,1,2,2-Tetrachloroethane	<5.00 ug/kg	5.00	ug/kg
1,1,2-Trichloroethane	<5.00 ug/kg	5.00	ug/kg
1,1-Dichloroethane	<5.00 ug/kg	5.00	ug/kg
1,1-Dichloroethylene	<5.00 ug/kg	5.00	ug/kg
1,1-Dichloropropene	<5.00 ug/kg	5.00	ug/kg
1,2,3-Trichlorobenzene	<5.00 ug/kg	5.00	ug/kg
1,2,3-Trichloropropane	<5.00 ug/kg	5.00	ug/kg
1,2,4-Trichlorobenzene	<5.00 ug/kg	5.00	ug/kg
1,2,4-Trimethylbenzene	<5.00 ug/kg	5.00	ug/kg
1,2-Dibromo-3-chloropropane (DBCP)	<5.00 ug/kg	5.00	ug/kg
1,2-Dibromoethane (EDB)	<5.00 ug/kg	5.00	ug/kg
1,2-Dichlorobenzene	<5.00 ug/kg	5.00	ug/kg
1,2-Dichloroethane	<5.00 ug/kg	5.00	ug/kg
1,2-Dichloropropane	<5.00 ug/kg	5.00	ug/kg
1,3,5-Trimethylbenzene	<5.00 ug/kg	5.00	ug/kg
1,3-Dichlorobenzene	<5.00 ug/kg	5.00	ug/kg
1,3-Dichloropropane	<5.00 ug/kg	5.00	ug/kg
1,4-Dichlorobenzene	<5.00 ug/kg	5.00	ug/kg
2,2-Dichloropropane	<5.00 ug/kg	5.00	ug/kg
2-Butanone (MEK)	<5.00 ug/kg	5.00	ug/kg
2-Chlorotoluene	<5.00 ug/kg	5.00	ug/kg
2-Hexanone (MBK)	<5.00 ug/kg	5.00	ug/kg
4-Chlorotoluene	<5.00 ug/kg	5.00	ug/kg
4-Isopropyltoluene	<5.00 ug/kg	5.00	ug/kg
4-Methyl-2-pentanone (MIBK)	<5.00 ug/kg	5.00	ug/kg
Acetone	<10.0 ug/kg	10.0	ug/kg
Benzene	<5.00 ug/kg	5.00	ug/kg
Bromobenzene	<5.00 ug/kg	5.00	ug/kg
Bromochloromethane	<5.00 ug/kg	5.00	ug/kg



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0204 - SW5030B

Blank (BAA0204-BLK1)			Prepared & Analyzed: 01/09/2017
Bromodichloromethane	<5.00 ug/kg	5.00	ug/kg
Bromoform	<5.00 ug/kg	5.00	ug/kg
Bromomethane	<5.00 ug/kg	5.00	ug/kg
Carbon disulfide	<5.00 ug/kg	5.00	ug/kg
Carbon tetrachloride	<5.00 ug/kg	5.00	ug/kg
Chlorobenzene	<5.00 ug/kg	5.00	ug/kg
Chloroethane	<5.00 ug/kg	5.00	ug/kg
Chloroform	<5.00 ug/kg	5.00	ug/kg
Chloromethane	<5.00 ug/kg	5.00	ug/kg
cis-1,2-Dichloroethylene	<5.00 ug/kg	5.00	ug/kg
cis-1,3-Dichloropropene	<5.00 ug/kg	5.00	ug/kg
Dibromochloromethane	<5.00 ug/kg	5.00	ug/kg
Dibromomethane	<5.00 ug/kg	5.00	ug/kg
Dichlorodifluoromethane	<5.00 ug/kg	5.00	ug/kg
Di-isopropyl ether (DIPE)	<5.00 ug/kg	5.00	ug/kg
Ethylbenzene	<5.00 ug/kg	5.00	ug/kg
Hexachlorobutadiene	<5.00 ug/kg	5.00	ug/kg
Iodomethane	<5.00 ug/kg	5.00	ug/kg
Isopropylbenzene	<5.00 ug/kg	5.00	ug/kg
m+p-Xylenes	<5.00 ug/kg	5.00	ug/kg
Methylene chloride	<5.00 ug/kg	5.00	ug/kg
Methyl-t-butyl ether (MTBE)	<5.00 ug/kg	5.00	ug/kg
Naphthalene	<5.00 ug/kg	5.00	ug/kg
n-Butylbenzene	<5.00 ug/kg	5.00	ug/kg
n-Propylbenzene	<5.00 ug/kg	5.00	ug/kg
o-Xylene	<5.00 ug/kg	5.00	ug/kg
sec-Butylbenzene	<5.00 ug/kg	5.00	ug/kg
Styrene	<5.00 ug/kg	5.00	ug/kg
tert-Butylbenzene	<5.00 ug/kg	5.00	ug/kg
Tetrachloroethylene (PCE)	<5.00 ug/kg	5.00	ug/kg
Toluene	<5.00 ug/kg	5.00	ug/kg



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

1/16/2017 12:59

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: **Fulton Gas**

Trichlorofluoromethane

Vinyl acetate

Vinyl chloride

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BAA0204 - SW5030B										
Blank (BAA0204-BLK1)				Prepared	& Analyzed	d: 01/09/20	017			
trans-1,2-Dichloroethylene	<5.00 ug/kg	5.00	ug/kg							
trans-1,3-Dichloropropene	<5.00 ug/kg	5.00	ug/kg							
Trichloroethylene	<5.00 ug/kg	5.00	ug/kg							

ug/kg

ug/kg

ug/kg

Xylenes, Total	<15.0 ug/kg	15.0	ug/kg			
Surr: 1,2-Dichloroethane-d4	46.4		ug/kg	50.0	92.9	80-120
Surr: 4-Bromofluorobenzene	50.8		ug/kg	50.0	102	85-120
Surr: Dibromofluoromethane	47.0		ug/kg	50.0	93.9	80-119

5.00

10.0

5.00

<5.00 ug/kg

<10.0 ug/kg

<5.00 ug/kg

Surr: Toluene-d8	50.8		ug/kg	50.0	102	85-115	
LCS (BAA0204-BS1)				Prepared &	Analyzed: 01/09/	2017	
1,1,1,2-Tetrachloroethane	46.1 ug/L	5	ug/L	50.0 ug/	L 92.1	75-125	
1,1,1-Trichloroethane	44.4 ug/L	5	ug/L	50.0 ug/	L 88.8	70-135	
1,1,2,2-Tetrachloroethane	42.7 ug/L	5	ug/L	50.0 ug/	L 85.3	55-130	
1,1,2-Trichloroethane	45.0 ug/L	5	ug/L	50.0 ug/	L 90.0	60-125	
1,1-Dichloroethane	46.8 ug/L	5	ug/L	50.0 ug/	L 93.6	75-125	
1,1-Dichloroethylene	44.1 ug/L	5	ug/L	50.0 ug/	L 88.2	65-135	
1,1-Dichloropropene	42.5 ug/L	5	ug/L	50.0 ug/	L 85.1	70-135	
1,2,3-Trichlorobenzene	44.7 ug/L	5	ug/L	50.0 ug/	L 89.4	60-135	
1,2,3-Trichloropropane	42.0 ug/L	5	ug/L	50.0 ug/	L 83.9	65-130	
1,2,4-Trichlorobenzene	43.9 ug/L	5	ug/L	50.0 ug/	L 87.8	65-130	
		_					

1,2,0 11101110100	.2.0 09.2	•	~g. =	00.0	~g, =	00.0	00 .00
1,2,4-Trichlorobenzene	43.9 ug/L	5	ug/L	50.0	ug/L	87.8	65-130
1,2,4-Trimethylbenzene	45.0 ug/L	5	ug/L	50.0	ug/L	90.1	65-135
1,2-Dibromo-3-chloropropane (DBCP)	42.8 ug/L	5	ug/L	50.0	ug/L	85.7	40-135
1,2-Dibromoethane (EDB)	43.8 ug/L	5	ug/L	50.0	ug/L	87.6	70-125
1,2-Dichlorobenzene	43.5 ug/L	5	ug/L	50.0	ug/L	87.0	75-120
1,2-Dichloroethane	40.9 ug/L	5	ug/L	50.0	ug/L	81.8	70-135
1,2-Dichloropropane	44.2 ug/L	5	ug/L	50.0	ug/L	88.3	70-120
1,3,5-Trimethylbenzene	45.0 ug/L	5	ug/L	50.0	ug/L	90.1	65-135
1,3-Dichlorobenzene	43.3 ug/L	5	ug/L	50.0	ug/L	86.6	70-125



Certificate of Analysis

Final Report

Client Name: **Timmons Group** Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell Project Number:

36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

	Reporting		Spike	Source	Source			RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0204 - SW5030B LCS (BAA0204-BS1) Prepared & Analyzed: 01/09/2017 1,3-Dichloropropane 44.8 ug/L 5 ug/L 50.0 ug/L 89.6 75-125 42.9 ug/L 1,4-Dichlorobenzene 5 ug/L 50.0 ug/L 85.8 70-125 50.0 2,2-Dichloropropane 47.1 ug/L 5 ug/L 94.3 65-135 ug/L 2-Butanone (MEK) 48.1 ug/L 5 30-160 ug/L 50.0 ug/L 96.2 5 2-Chlorotoluene 45.3 ug/L 90.6 70-130 ug/L 50.0 ug/L 2-Hexanone (MBK) 52.9 ug/L 5 ug/L 50.0 ug/L 106 45-145 4-Chlorotoluene 44.0 ug/L 5 ug/L 50.0 ug/L 87.9 75-125 5 4-Isopropyltoluene 44.3 ug/L ug/L 50.0 ug/L 88.6 75-135 4-Methyl-2-pentanone (MIBK) 48.8 ug/L 5 ug/L 50.0 ug/L 97.6 45-145 Acetone 47.4 ug/L 10 ug/L 50.0 ug/L 94.7 20-160 75-125 Benzene 45.9 ug/L 5 ug/L 50.0 ug/L 91.8 5 65-120 Bromobenzene 43.4 ug/L ug/L 50.0 86.8 ug/L 5 70-125 Bromochloromethane 44.4 ug/L ug/L 50.0 ug/L 88.7 Bromodichloromethane 48.7 ug/L 5 ug/L 50.0 ug/L 97.5 70-130 Bromoform 50.8 ug/L 5 ug/L 50.0 102 55-135 ug/L 50.0 92.3 Bromomethane 46.2 ug/L 5 30-160 ug/L ug/L Carbon disulfide 51.0 ug/L 5 ug/L 50.0 ug/L 102 45-160 Carbon tetrachloride 44.3 ug/L 5 ug/L 50.0 88.6 65-135 ug/L 5 Chlorobenzene 44.0 ug/L ug/L 50.0 ug/L 87.9 75-125 Chloroethane 41.6 ug/L 5 ug/L 50.0 ug/L 83.1 40-155 Chloroform 44.1 ug/L 5 ug/L 50.0 ug/L 88.2 70-125 Chloromethane 41.9 ug/L 5 ug/L 50.0 ug/L 83.9 50-130 5 85.9 cis-1,2-Dichloroethylene 43.0 ug/L ug/L 50.0 ug/L 65-125 cis-1,3-Dichloropropene 45.1 ug/L 5 ug/L 50.0 ug/L 90.1 70-125 Dibromochloromethane 5 50.0 102 65-130 50.9 ug/L ug/L ug/L Dibromomethane 45.9 ug/L 5 ug/L 50.0 ug/L 91.7 75-130 Dichlorodifluoromethane 43.7 ug/L 5 ug/L 87.5 35-135 50.0 ug/L Ethylbenzene 43.5 ug/L 5 ug/L 50.0 ug/L 87.0 75-125 Hexachlorobutadiene 43.4 ug/L 5 ug/L 50.0 ug/L 86.7 55-140 44.1 ug/L 5 75-130 Isopropylbenzene ug/L 50.0 ug/L 88.1 m+p-Xylenes 89.8 ug/L 5 ug/L 100 ug/L 89.8 80-125



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/16/2017 12:59

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gas

Purchase Order:

Source

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BAA0204 - SW5030B										
_CS (BAA0204-BS1)				Prepared	d & Analyzed	d: 01/09/20	017			
Methylene chloride	39.2 ug/L	5	ug/L	50.0	ug/L	78.4	55-140			
Methyl-t-butyl ether (MTBE)	45.5 ug/L	5	ug/L	50.0	ug/L	91.0	65-125			
Naphthalene	45.7 ug/L	5	ug/L	50.0	ug/L	91.4	40-125			
n-Butylbenzene	45.4 ug/L	5	ug/L	50.0	ug/L	90.7	65-140			
n-Propylbenzene	47.5 ug/L	5	ug/L	50.0	ug/L	94.9	65-135			
o-Xylene	44.8 ug/L	5	ug/L	50.0	ug/L	89.6	75-125			
ec-Butylbenzene	44.4 ug/L	5	ug/L	50.0	ug/L	88.7	65-130			
Styrene	47.9 ug/L	5	ug/L	50.0	ug/L	95.9	75-125			
ert-Butylbenzene	45.8 ug/L	5	ug/L	50.0	ug/L	91.5	65-130			
Tetrachloroethylene (PCE)	59.2 ug/L	5	ug/L	50.0	ug/L	118	65-140			
oluene	45.2 ug/L	5	ug/L	50.0	ug/L	90.5	70-125			
rans-1,2-Dichloroethylene	45.9 ug/L	5	ug/L	50.0	ug/L	91.8	65-135			
rans-1,3-Dichloropropene	47.2 ug/L	5	ug/L	50.0	ug/L	94.4	65-125			
richloroethylene	45.0 ug/L	5	ug/L	50.0	ug/L	90.1	75-125			
richlorofluoromethane	39.8 ug/L	5	ug/L	50.0	ug/L	79.7	25-185			
inyl chloride	38.9 ug/L	5	ug/L	50.0	ug/L	77.8	60-125			
Surr: 1,2-Dichloroethane-d4	44.5		ug/kg	50.0	ug/kg	88.9	80-120			
Surr: 4-Bromofluorobenzene	50.6		ug/kg	50.0	ug/kg	101	85-120			
Surr: Dibromofluoromethane	46.3		ug/kg	50.0	ug/kg	92.7	80-119			
Surr: Toluene-d8	48.6		ug/kg	50.0	ug/kg	97.2	85-115			
Duplicate (BAA0204-DUP1)	Sour	ce: 17A018	6-01RE1	Prepared	d & Analyzed	d: 01/09/20	017			
,1,1,2-Tetrachloroethane	<10000 ug/kg	10000	ug/kg		<10000 ug/kg	J		NA	30	
,1,1-Trichloroethane	<10000 ug/kg	10000	ug/kg		<10000 ug/kg	J		NA	30	
1,1,2,2-Tetrachloroethane	<10000 ug/kg	10000	ug/kg		<10000 ug/kg	J		NA	30	
1,1,2-Trichloroethane	<10000 ug/kg	10000	ug/kg		<10000 ug/kg	J		NA	30	
,1-Dichloroethane	<10000 ug/kg	10000	ug/kg		<10000 ug/kg	J		NA	30	
,1-Dichloroethylene	<10000 ug/kg	10000	ug/kg		<10000 ug/kg	J		NA	30	
,1-Dichloropropene	<10000 ug/kg	10000	ug/kg		<10000 ug/kg	1		NA	30	
,2,3-Trichlorobenzene	<10000 ug/kg	10000	ug/kg		<10000 ug/kg]		NA	30	
,2,3-Trichloropropane	<10000 ug/kg	10000	ug/kg		<10000 ug/kg	1		NA	30	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2

1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0204 - SW5030B

Duplicate (BAA0204-DUP1)	Sourc	e: 17A0186	-01RE1	Prepared & Analyzed: 01/09/2017		
1,2,4-Trichlorobenzene	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
1,2,4-Trimethylbenzene	39700 ug/kg	10000	ug/kg	44200 ug/kg	10.7	30
1,2-Dibromo-3-chloropropane (DBCP)	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
1,2-Dibromoethane (EDB)	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
1,2-Dichlorobenzene	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
1,2-Dichloroethane	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
1,2-Dichloropropane	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
1,3,5-Trimethylbenzene	14000 ug/kg	10000	ug/kg	16100 ug/kg	13.6	30
1,3-Dichlorobenzene	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
1,3-Dichloropropane	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
1,4-Dichlorobenzene	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
2,2-Dichloropropane	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
2-Butanone (MEK)	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
2-Chlorotoluene	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
2-Hexanone (MBK)	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
4-Chlorotoluene	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
4-Isopropyltoluene	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
4-Methyl-2-pentanone (MIBK)	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
Acetone	<20000 ug/kg	20000	ug/kg	<20000 ug/kg	NA	30
Benzene	71100 ug/kg	10000	ug/kg	82100 ug/kg	14.5	30
Bromobenzene	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
Bromochloromethane	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
Bromodichloromethane	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
Bromoform	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
Bromomethane	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
Carbon disulfide	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
Carbon tetrachloride	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
Chlorobenzene	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
Chloroethane	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
Chloroform	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30
Chloromethane	<10000 ug/kg	10000	ug/kg	<10000 ug/kg	NA	30



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2

1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0204 - SW5030B Source: 17A0186-01RE1 Prepared & Analyzed: 01/09/2017 Duplicate (BAA0204-DUP1) <10000 ug/kg <10000 ug/kg cis-1,2-Dichloroethylene 10000 ug/kg NA 30 <10000 ug/kg 10000 <10000 ug/kg 30 cis-1,3-Dichloropropene ug/kg NA <10000 ug/kg Dibromochloromethane 10000 <10000 ug/kg 30 ug/kg NA Dibromomethane <10000 ug/kg 10000 <10000 ug/kg 30 ug/kg NA 10000 30 Dichlorodifluoromethane <10000 ug/kg <10000 ug/kg NA ug/kg Di-isopropyl ether (DIPE) <10000 ug/kg 10000 ug/kg <10000 ug/kg NA 30 12000 ug/kg Ethylbenzene 10000 13400 ug/kg 10.7 30 ug/kg Hexachlorobutadiene <10000 ug/kg 10000 ug/kg <10000 ug/kg NA 30 Iodomethane <10000 ug/kg 10000 ug/kg <10000 ug/kg NA 30 <10000 ug/kg Isopropylbenzene <10000 ug/kg 10000 ug/kg NA 30 m+p-Xylenes 80700 ug/kg 10000 ug/kg 90600 ug/kg 11.6 30 10000 Methylene chloride <10000 ug/kg <10000 ug/kg NA 30 ug/kg Methyl-t-butyl ether (MTBE) <10000 ug/kg <10000 ug/kg 10000 ug/kg NA 30 30 Naphthalene 1520000 ug/kg 10000 1690000 ug/kg 10 4 ug/kg n-Butylbenzene <10000 ug/kg 10000 <10000 ug/kg NA 30 ug/kg 10000 n-Propylbenzene <10000 ug/kg <10000 ug/kg NA 30 ug/kg o-Xylene 31900 ug/kg 10000 ug/kg 36900 ug/kg 14.6 30 sec-Butylbenzene <10000 ug/kg 10000 <10000 ug/kg NA 30 ug/kg Styrene 18300 ug/kg 10000 ug/kg 20300 ug/kg 10.0 30 tert-Butylbenzene <10000 ug/kg 10000 ug/kg <10000 ug/kg NA 30 Tetrachloroethylene (PCE) <10000 ug/kg 10000 ug/kg <10000 ug/kg NA 30 Toluene 113000 ug/kg 10000 ug/kg 126000 ug/kg 11.0 30 10000 30 trans-1,2-Dichloroethylene <10000 ug/kg <10000 ug/kg NA ug/kg trans-1,3-Dichloropropene <10000 ug/kg 10000 ug/kg <10000 ug/kg NA 30 Trichloroethylene <10000 ug/kg 10000 <10000 ug/kg 30 NA ug/kg Trichlorofluoromethane <10000 ug/kg 10000 <10000 ug/kg NA 30 ug/kg Vinyl acetate <20000 ug/kg 20000 <20000 ug/kg 30 ug/kg NA Vinyl chloride <10000 ug/kg 10000 ug/kg <10000 ug/kg NA 30 Xylenes, Total 113000 ug/kg 30000 ug/kg 128000 ug/kg 12.5 30 Surr: 1,2-Dichloroethane-d4 22.3 ug/kg 25.0 ug/kg 89.2 80-120 Surr: 4-Bromofluorobenzene 25.6 25.0 ug/kg 103 85-120 ug/kg



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/20

1/16/2017 12:59

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0204 - SW5030B

Duplicate (BAA0204-DUP1)	Source	: 17A0186-01RE1	Prepare	d & Analy	/zed: 01/09/20	17	
Surr: Dibromofluoromethane	23.1	ug/kg	25.0	ug/kg	92.6	80-119	
Surr: Toluene-d8	25.0	ug/kg	25.0	ug/kg	100	85-115	



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Final Report

Client Name: Timmons Group

Date Issued: 1/16

1/16/2017 12:59

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BAA0187-BLK1)			Pre	pared: 01/10/2017 Analyzed: 01/13/2017
1,2,4,5-Tetrachlorobenzene	<83.3 ug/kg	83.3	ug/kg	
1,2,4-Trichlorobenzene	<83.3 ug/kg	83.3	ug/kg	
1,2-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg	
1,2-Diphenylhydrazine	<83.3 ug/kg	83.3	ug/kg	
1,3-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg	
1,4-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg	
1-Chloronaphthalene	<83.3 ug/kg	83.3	ug/kg	
1-Naphthylamine	<83.3 ug/kg	83.3	ug/kg	
2,3,4,6-Tetrachlorophenol	<83.3 ug/kg	83.3	ug/kg	
2,4,5-Trichlorophenol	<83.3 ug/kg	83.3	ug/kg	
2,4,6-Trichlorophenol	<83.3 ug/kg	83.3	ug/kg	
2,4-Dichlorophenol	<83.3 ug/kg	83.3	ug/kg	
2,4-Dimethylphenol	<83.3 ug/kg	83.3	ug/kg	
2,4-Dinitrophenol	<83.3 ug/kg	83.3	ug/kg	
2,4-Dinitrotoluene	<83.3 ug/kg	83.3	ug/kg	
2,6-Dichlorophenol	<83.3 ug/kg	83.3	ug/kg	
2,6-Dinitrotoluene	<83.3 ug/kg	83.3	ug/kg	
2-Chloronaphthalene	<83.3 ug/kg	83.3	ug/kg	
2-Chlorophenol	<83.3 ug/kg	83.3	ug/kg	
2-Methylnaphthalene	<83.3 ug/kg	83.3	ug/kg	
2-Naphthylamine	<83.3 ug/kg	83.3	ug/kg	
2-Nitroaniline	<83.3 ug/kg	83.3	ug/kg	
2-Nitrophenol	<83.3 ug/kg	83.3	ug/kg	
3,3'-Dichlorobenzidine	<83.3 ug/kg	83.3	ug/kg	
3-Methylcholanthrene	<83.3 ug/kg	83.3	ug/kg	
3-Nitroaniline	<83.3 ug/kg	83.3	ug/kg	
4,6-Dinitro-2-methylphenol	<83.3 ug/kg	83.3	ug/kg	
4-Aminobiphenyl	<83.3 ug/kg	83.3	ug/kg	
4-Bromophenyl phenyl ether	<83.3 ug/kg	83.3	ug/kg	
4-Chloroaniline	<83.3 ug/kg	83.3	ug/kg	
4-Chlorophenyl phenyl ether	<83.3 ug/kg	83.3	ug/kg	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/

1/16/2017 12:59

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BAA0187-BLK1)			Prepared: 01/10/2017 Analyzed: 01/13/2017
4-Nitroaniline	<83.3 ug/kg	83.3	ug/kg
4-Nitrophenol	<83.3 ug/kg	83.3	ug/kg
7,12-Dimethylbenz (a) anthracene	<83.3 ug/kg	83.3	ug/kg
Acenaphthene	<83.3 ug/kg	83.3	ug/kg
Acenaphthylene	<83.3 ug/kg	83.3	ug/kg
Acetophenone	<83.3 ug/kg	83.3	ug/kg
Aniline	<83.3 ug/kg	83.3	ug/kg
Anthracene	<83.3 ug/kg	83.3	ug/kg
Benzidine	<83.3 ug/kg	83.3	ug/kg
Benzo (a) anthracene	<83.3 ug/kg	83.3	ug/kg
Benzo (a) pyrene	<83.3 ug/kg	83.3	ug/kg
Benzo (b) fluoranthene	<83.3 ug/kg	83.3	ug/kg
Benzo (g,h,i) perylene	<83.3 ug/kg	83.3	ug/kg
Benzo (k) fluoranthene	<83.3 ug/kg	83.3	ug/kg
Benzoic acid	<83.3 ug/kg	83.3	ug/kg
Benzyl alcohol	<83.3 ug/kg	83.3	ug/kg
bis (2-Chloroethoxy) methane	<83.3 ug/kg	83.3	ug/kg
bis (2-Chloroethyl) ether	<83.3 ug/kg	83.3	ug/kg
bis (2-Chloroisopropyl) ether	<83.3 ug/kg	83.3	ug/kg
bis (2-Ethylhexyl) phthalate	<83.3 ug/kg	83.3	ug/kg
Butyl benzyl phthalate	<83.3 ug/kg	83.3	ug/kg
Chrysene	<83.3 ug/kg	83.3	ug/kg
Dibenz (a,h) anthracene	<83.3 ug/kg	83.3	ug/kg
Dibenz (a,j) acridine	<83.3 ug/kg	83.3	ug/kg
Dibenzofuran	<83.3 ug/kg	83.3	ug/kg
Diethyl phthalate	<83.3 ug/kg	83.3	ug/kg
Dimethyl phthalate	<83.3 ug/kg	83.3	ug/kg
Di-n-butyl phthalate	<83.3 ug/kg	83.3	ug/kg
Di-n-octyl phthalate	<83.3 ug/kg	83.3	ug/kg
Diphenylamine	<83.3 ug/kg	83.3	ug/kg
Ethyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/16/2017 12:59

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BAA0187-BLK1)				Prepared: 01/10/2017 Analyzed: 01/13/2017
Fluoranthene	<83.3 ug/kg	83.3	ug/kg	
Fluorene	<83.3 ug/kg	83.3	ug/kg	
Hexachlorobenzene	<83.3 ug/kg	83.3	ug/kg	
Hexachlorobutadiene	<83.3 ug/kg	83.3	ug/kg	
Hexachlorocyclopentadiene	<83.3 ug/kg	83.3	ug/kg	
Hexachloroethane	<83.3 ug/kg	83.3	ug/kg	
Indeno (1,2,3-cd) pyrene	<83.3 ug/kg	83.3	ug/kg	
Isophorone	<83.3 ug/kg	83.3	ug/kg	
m+p-Cresols	<83.3 ug/kg	83.3	ug/kg	
Methyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg	
Naphthalene	<83.3 ug/kg	83.3	ug/kg	
Nitrobenzene	<83.3 ug/kg	83.3	ug/kg	
n-Nitrosodimethylamine	<83.3 ug/kg	83.3	ug/kg	
n-Nitrosodi-n-butylamine	<83.3 ug/kg	83.3	ug/kg	
n-Nitrosodi-n-propylamine	<83.3 ug/kg	83.3	ug/kg	
n-Nitrosodiphenylamine	<83.3 ug/kg	83.3	ug/kg	
n-Nitrosopiperidine	<83.3 ug/kg	83.3	ug/kg	
o+m+p-Cresols	<83.3 ug/kg	83.3	ug/kg	
o-Cresol	<83.3 ug/kg	83.3	ug/kg	
p-(Dimethylamino) azobenzene	<83.3 ug/kg	83.3	ug/kg	
p-Chloro-m-cresol	<83.3 ug/kg	83.3	ug/kg	
Pentachloronitrobenzene (quintozene)	<83.3 ug/kg	83.3	ug/kg	
Pentachlorophenol	<83.3 ug/kg	83.3	ug/kg	
Phenacetin	<83.3 ug/kg	83.3	ug/kg	
Phenanthrene	<83.3 ug/kg	83.3	ug/kg	
Phenol	<83.3 ug/kg	83.3	ug/kg	
Pronamide	<83.3 ug/kg	83.3	ug/kg	
Pyrene	<83.3 ug/kg	83.3	ug/kg	
Pyridine	<83.3 ug/kg	83.3	ug/kg	
Surr: 2,4,6-Tribromophenol	2200		ug/kg	3150 69.6 35-125
Surr: 2-Fluorobiphenyl	1390		ug/kg	1580 87.9 45-105



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/1

1/16/2017 12:59

RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gas

Purchase Order:

Source

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BAA0187 - SW3550C										
Blank (BAA0187-BLK1)				Prepared	l: 01/10/201	7 Analyze	d: 01/13/2	017		
Surr: 2-Fluorophenol	2820		ug/kg	3150		89.4	35-105			
Surr: Nitrobenzene-d5	1350		ug/kg	1580		85.6	35-100			
Surr: Phenol-d5	2660		ug/kg	3150		84.3	40-100			
Surr: p-Terphenyl-d14	1510		ug/kg	1580		95.8	30-125			
LCS (BAA0187-BS1)				Prepared	l: 01/10/201	7 Analyze	d: 01/13/2	017		
1,2,4-Trichlorobenzene	1200 ug/kg	83.3	ug/kg	1530	ug/kg	78.2	44-142			
1,4-Dichlorobenzene	1220 ug/kg	83.3	ug/kg	1540	ug/kg	79.2	20-124			
4-Nitrophenol	1820 ug/kg	83.3	ug/kg	3090	ug/kg	59.0	15-140			
Acenaphthene	1150 ug/kg	83.3	ug/kg	1540	ug/kg	74.7	45-110			
n-Nitrosodi-n-propylamine	1150 ug/kg	83.3	ug/kg	1540	ug/kg	74.9	40-115			
Pentachlorophenol	2330 ug/kg	83.3	ug/kg	3060	ug/kg	76.4	25-120			
Phenol	2210 ug/kg	83.3	ug/kg	3090	ug/kg	71.6	40-100			
Pyrene	1700 ug/kg	83.3	ug/kg	1540	ug/kg	110	45-125			
Surr: 2,4,6-Tribromophenol	2420		ug/kg	3090	ug/kg	78.3	35-125			
Surr: 2-Fluorobiphenyl	1240		ug/kg	1540	ug/kg	80.5	45-105			
Surr: 2-Fluorophenol	2550		ug/kg	3090	ug/kg	82.5	35-105			
Surr: Nitrobenzene-d5	1240		ug/kg	1540	ug/kg	80.4	35-100			
Surr: Phenol-d5	2480		ug/kg	3090	ug/kg	80.2	40-100			
Surr: p-Terphenyl-d14	1260		ug/kg	1540	ug/kg	81.8	30-125			
Duplicate (BAA0187-DUP1)	Sour	ce: 17A018	6-02	Prepared	I: 01/10/201	7 Analyze	d: 01/13/2	017		
1,2,4,5-Tetrachlorobenzene	<1310 ug/kg	1310	ug/kg	•	<1310 ug/kg			NA	20	
1,2,4-Trichlorobenzene	<1310 ug/kg	1310	ug/kg	•	<1310 ug/kg			NA	20	
1,2-Dichlorobenzene	<1310 ug/kg	1310	ug/kg	•	<1310 ug/kg			NA	20	
1,2-Diphenylhydrazine	<1310 ug/kg	1310	ug/kg	•	<1310 ug/kg			NA	20	
1,3-Dichlorobenzene	<1310 ug/kg	1310	ug/kg	•	<1310 ug/kg			NA	20	
,4-Dichlorobenzene	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
1-Chloronaphthalene	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
1-Naphthylamine	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
2,3,4,6-Tetrachlorophenol	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
2,4,5-Trichlorophenol	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	



Certificate of Analysis

Final Report

Client Name: **Timmons Group** Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: 36156.015

Client Site I.D.: **Fulton Gas** Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Duplicate (BAA0187-DUP1)	Source	: 17A0186	-02	Prepared: 01/10/2017 Analyzed: 01/2	13/2017	
2,4,6-Trichlorophenol	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
2,4-Dichlorophenol	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
2,4-Dimethylphenol	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
2,4-Dinitrophenol	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
2,4-Dinitrotoluene	<1310 ug/kg	1310	ug/kg	1390 ug/kg	NA	20
2,6-Dichlorophenol	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
2,6-Dinitrotoluene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
2-Chloronaphthalene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
2-Chlorophenol	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
2-Methylnaphthalene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
2-Naphthylamine	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
2-Nitroaniline	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
2-Nitrophenol	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
3,3'-Dichlorobenzidine	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
3-Methylcholanthrene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
3-Nitroaniline	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
4,6-Dinitro-2-methylphenol	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
4-Aminobiphenyl	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
4-Bromophenyl phenyl ether	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
4-Chloroaniline	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
4-Chlorophenyl phenyl ether	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
4-Nitroaniline	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
4-Nitrophenol	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
7,12-Dimethylbenz (a) anthracene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
Acenaphthene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
Acenaphthylene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
Acetophenone	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
Aniline	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
Anthracene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
Benzidine	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20
Benzo (a) anthracene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Duplicate (BAA0187-DUP1)	Source	: 17A0186-	02	Prepared: 01/10/2017 Analyzed: 01/1	3/2017		
Benzo (a) pyrene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Benzo (b) fluoranthene	<1310 ug/kg	1310	ug/kg	1340 ug/kg	NA	20	
Benzo (g,h,i) perylene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Benzo (k) fluoranthene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Benzoic acid	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Benzyl alcohol	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
bis (2-Chloroethoxy) methane	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
bis (2-Chloroethyl) ether	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
bis (2-Chloroisopropyl) ether	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
bis (2-Ethylhexyl) phthalate	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Butyl benzyl phthalate	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Chrysene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Dibenz (a,h) anthracene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Dibenz (a,j) acridine	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Dibenzofuran	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Diethyl phthalate	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Dimethyl phthalate	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Di-n-butyl phthalate	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Di-n-octyl phthalate	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Diphenylamine	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Ethyl methanesulfonate	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Fluoranthene	1460 ug/kg	1310	ug/kg	2850 ug/kg	64.4	20	Р
Fluorene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Hexachlorobenzene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Hexachlorobutadiene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Hexachlorocyclopentadiene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Hexachloroethane	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Indeno (1,2,3-cd) pyrene	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Isophorone	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
m+p-Cresols	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	
Methyl methanesulfonate	<1310 ug/kg	1310	ug/kg	<1310 ug/kg	NA	20	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Duplicate (BAA0187-DUP1)	Source: 17A0186-02		Prepared: 01/10/2017 Analyzed: 01/13/20				017			
Naphthalene	<1310 ug/kg	1310	ug/kg		<1310 ug/kg	,u., _u		NA	20	
Nitrobenzene	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
n-Nitrosodimethylamine	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
n-Nitrosodi-n-butylamine	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
n-Nitrosodi-n-propylamine	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
n-Nitrosodiphenylamine	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
n-Nitrosopiperidine	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
o+m+p-Cresols	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
o-Cresol	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
p-(Dimethylamino) azobenzene	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
p-Chloro-m-cresol	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
Pentachloronitrobenzene (quintozene)	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
Pentachlorophenol	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
Phenacetin	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
Phenanthrene	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
Phenol	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
Pronamide	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
Pyrene	2090 ug/kg	1310	ug/kg		3780 ug/kg			57.3	20	Р
Pyridine	<1310 ug/kg	1310	ug/kg		<1310 ug/kg			NA	20	
Surr: 2,4,6-Tribromophenol	2630		ug/kg	5240	ug/kg	50.2	35-125			
Surr: 2-Fluorobiphenyl	140		ug/kg	2620	ug/kg	5.34	45-105			DS
Surr: 2-Fluorophenol	3260		ug/kg	5240	ug/kg	62.2	35-105			
Surr: Nitrobenzene-d5	1580		ug/kg	2620	ug/kg	60.5	35-100			
Surr: Phenol-d5	2960		ug/kg	5240	ug/kg	56.6	40-100			
Surr: p-Terphenyl-d14	1630		ug/kg	2620	ug/kg	62.1	30-125			



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Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Analyte	Certifications
SW8260B in Solids	
1,1,1,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1,1-Trichloroethane	NC,VELAP,WVDEP
1,1,2,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1,2-Trichloroethane	NC,VELAP,WVDEP
1,1-Dichloroethane	NC,VELAP,WVDEP
1,1-Dichloroethylene	NC,VELAP,WVDEP
1,1-Dichloropropene	NC,VELAP,WVDEP
1,2,3-Trichlorobenzene	NC,VELAP,WVDEP
1,2,3-Trichloropropane	NC,VELAP,WVDEP
1,2,4-Trichlorobenzene	NC,VELAP,WVDEP
1,2,4-Trimethylbenzene	NC,VELAP,WVDEP
1,2-Dibromo-3-chloropropane (DBCP)	NC,VELAP,WVDEP
1,2-Dibromoethane (EDB)	NC,VELAP,WVDEP
1,2-Dichlorobenzene	NC,VELAP,WVDEP
1,2-Dichloroethane	NC,VELAP,WVDEP
1,2-Dichloropropane	NC,VELAP,WVDEP
1,3,5-Trimethylbenzene	NC,VELAP,WVDEP
1,3-Dichlorobenzene	NC,VELAP,WVDEP
1,3-Dichloropropane	NC,VELAP,WVDEP
1,4-Dichlorobenzene	NC,VELAP,WVDEP
2,2-Dichloropropane	NC,VELAP,WVDEP
2-Butanone (MEK)	NC,VELAP,WVDEP
2-Chlorotoluene	NC,VELAP,WVDEP
2-Hexanone (MBK)	NC,VELAP,WVDEP
4-Chlorotoluene	NC,VELAP,WVDEP
4-Isopropyltoluene	NC,VELAP,WVDEP
4-Methyl-2-pentanone (MIBK)	NC,VELAP,WVDEP
Acetone	NC,VELAP,WVDEP
Benzene	NC,VELAP,WVDEP
Bromobenzene	NC,VELAP,WVDEP
Bromochloromethane	NC,VELAP,WVDEP
Bromodichloromethane	NC,VELAP,WVDEP
Bromoform	NC,VELAP,WVDEP
Bromomethane	NC,VELAP,WVDEP
Carbon disulfide	NC,VELAP,WVDEP
Carbon tetrachloride	NC,VELAP,WVDEP



Certificate of Analysis

Final Report

Client Name: Timmons Group

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Client Site I.D.: Fulton Gas

Date Issued: 1/16/2017 12:59

Project Number: 36156.015

Purchase Order:

Analyte	Certifications
Chlorobenzene	NC,VELAP,WVDEP
Chloroethane	NC,VELAP,WVDEP
Chloroform	NC,VELAP,WVDEP
Chloromethane	NC,VELAP,WVDEP
cis-1,2-Dichloroethylene	NC,VELAP,WVDEP
cis-1,3-Dichloropropene	NC,VELAP,WVDEP
Dibromochloromethane	NC,VELAP,WVDEP
Dibromomethane	NC,VELAP,WVDEP
Dichlorodifluoromethane	NC,VELAP,WVDEP
Di-isopropyl ether (DIPE)	NC,VELAP,WVDEP
Ethylbenzene	NC,VELAP,WVDEP
Hexachlorobutadiene	NC,VELAP,WVDEP
Iodomethane	NC,VELAP,WVDEP
Isopropylbenzene	NC,VELAP,WVDEP
m+p-Xylenes	NC,VELAP,WVDEP
Methylene chloride	NC,VELAP,WVDEP
Methyl-t-butyl ether (MTBE)	NC,VELAP,WVDEP
Naphthalene	NC,VELAP,WVDEP
n-Butylbenzene	NC,VELAP,WVDEP
n-Propylbenzene	NC,VELAP,WVDEP
o-Xylene	NC,VELAP,WVDEP
sec-Butylbenzene	NC,VELAP,WVDEP
Styrene	NC,VELAP,WVDEP
tert-Butylbenzene	NC,VELAP,WVDEP
Tetrachloroethylene (PCE)	NC,VELAP,WVDEP
Toluene	NC,VELAP,WVDEP
trans-1,2-Dichloroethylene	NC,VELAP,WVDEP
trans-1,3-Dichloropropene	NC,VELAP,WVDEP
Trichloroethylene	NC,VELAP,WVDEP
Trichlorofluoromethane	NC,VELAP,WVDEP
Vinyl acetate	NC,VELAP,WVDEP
Vinyl chloride	NC,VELAP,WVDEP
Xylenes, Total	NC,VELAP,WVDEP
Dibromofluoromethane	VELAP
SW8270D in Solids	
1,2,4,5-Tetrachlorobenzene	NC,VELAP,WVDEP
1,2,4-Trichlorobenzene	NC,VELAP,WVDEP



Certificate of Analysis

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Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Analyte	Certifications
1,2-Dichlorobenzene	NC,VELAP,WVDEP
1,2-Diphenylhydrazine	NC,VELAP,WVDEP
1,3-Dichlorobenzene	NC,VELAP,WVDEP
1,4-Dichlorobenzene	NC,VELAP,WVDEP
1-Chloronaphthalene	NC,VELAP,WVDEP
1-Naphthylamine	NC,VELAP,WVDEP
2,3,4,6-Tetrachlorophenol	NC,VELAP,WVDEP
2,4,5-Trichlorophenol	NC,VELAP,WVDEP
2,4,6-Trichlorophenol	NC,VELAP,WVDEP
2,4-Dichlorophenol	NC,VELAP,WVDEP
2,4-Dimethylphenol	NC,VELAP,WVDEP
2,4-Dinitrophenol	NC,VELAP,WVDEP
2,4-Dinitrotoluene	NC,VELAP,WVDEP
2,6-Dichlorophenol	NC,VELAP,WVDEP
2,6-Dinitrotoluene	NC,VELAP,WVDEP
2-Chloronaphthalene	NC,VELAP,WVDEP
2-Chlorophenol	NC,VELAP,WVDEP
2-Methylnaphthalene	NC,VELAP,WVDEP
2-Naphthylamine	NC,VELAP,WVDEP
2-Nitroaniline	NC,VELAP,WVDEP
2-Nitrophenol	NC,VELAP,WVDEP
3-Methylcholanthrene	NC,VELAP,WVDEP
3-Nitroaniline	NC,VELAP,WVDEP
4,6-Dinitro-2-methylphenol	NC,VELAP,WVDEP
4-Aminobiphenyl	NC,VELAP,WVDEP
4-Bromophenyl phenyl ether	NC,VELAP,WVDEP
4-Chloroaniline	NC,VELAP,WVDEP
4-Chlorophenyl phenyl ether	NC,VELAP,WVDEP
4-Nitroaniline	NC,VELAP,WVDEP
4-Nitrophenol	NC,VELAP,WVDEP
7,12-Dimethylbenz (a) anthracene	NC,VELAP,WVDEP
Acenaphthene	NC,VELAP,WVDEP
Acenaphthylene	NC,VELAP,WVDEP
Acetophenone	NC,VELAP,WVDEP
Aniline	NC,VELAP,WVDEP
Anthracene	NC,VELAP,WVDEP
Benzidine	NC,VELAP,WVDEP
Benzo (a) anthracene	NC,VELAP,WVDEP



Certificate of Analysis

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Client Name: Timmons Group

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Analyte	Certifications
Benzo (a) pyrene	NC,VELAP,WVDEP
Benzo (b) fluoranthene	NC,VELAP,WVDEP
Benzo (g,h,i) perylene	NC,VELAP,WVDEP
Benzo (k) fluoranthene	NC,VELAP,WVDEP
Benzoic acid	NC,VELAP,WVDEP
Benzyl alcohol	NC,VELAP,WVDEP
bis (2-Chloroethoxy) methane	NC,VELAP,WVDEP
bis (2-Chloroethyl) ether	NC,VELAP,WVDEP
bis (2-Chloroisopropyl) ether	NC,VELAP,WVDEP
bis (2-Ethylhexyl) phthalate	NC,VELAP,WVDEP
Butyl benzyl phthalate	NC,VELAP,WVDEP
Chrysene	NC,VELAP,WVDEP
Dibenz (a,h) anthracene	NC,VELAP,WVDEP
Dibenz (a,j) acridine	NC,VELAP,WVDEP
Dibenzofuran	NC,VELAP,WVDEP
Diethyl phthalate	NC,VELAP,WVDEP
Dimethyl phthalate	NC,VELAP,WVDEP
Di-n-butyl phthalate	NC,VELAP,WVDEP
Di-n-octyl phthalate	NC,VELAP,WVDEP
Diphenylamine	NC,VELAP,WVDEP
Ethyl methanesulfonate	NC,VELAP,WVDEP
Fluoranthene	NC,VELAP,WVDEP
Fluorene	NC,VELAP,WVDEP
Hexachlorobenzene	NC,VELAP,WVDEP
Hexachlorobutadiene	NC,VELAP,WVDEP
Hexachlorocyclopentadiene	NC,VELAP,WVDEP
Hexachloroethane	NC,VELAP,WVDEP
Indeno (1,2,3-cd) pyrene	NC,VELAP,WVDEP
Isophorone	NC,VELAP,WVDEP
m+p-Cresols	NC,VELAP,WVDEP
Methyl methanesulfonate	NC,VELAP,WVDEP
Naphthalene	NC,VELAP,WVDEP
Nitrobenzene	NC,VELAP,WVDEP
n-Nitrosodimethylamine	NC,VELAP,WVDEP
n-Nitrosodi-n-butylamine	NC,VELAP,WVDEP
n-Nitrosodi-n-propylamine	NC,VELAP,WVDEP
n-Nitrosodiphenylamine	NC,VELAP,WVDEP
n-Nitrosopiperidine	NC,VELAP,WVDEP
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Richmond VA, 23225

Submitted To: John Russell Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Analyte		Certifications					
o+m+p-Cresols		NC,VELAP,WVDEP					
o-Cresol		NC,VELAP,WVDEP					
p-(Dimethylamino) azobenzene		NC,VELAP,WVDEP					
p-Chloro-m-cresol		NC,VELAP,WVDEP					
Pentachloronitrobenzene (quintozene)		NC,WVDEP					
Pentachlorophenol		NC,VELAP,WVDEP					
Phenacetin		NC,VELAP,WVDEP					
Phenanthrene		NC,VELAP,WVDEP					
Phenol		NC,VELAP,WVDEP					
Pronamide		NC,VELAP,WVDEP					
Pyrene		NC,VELAP,WVDEP					
Pyridine		NC,VELAP,WVDEP					
Code	Description	Lab Number	Expires				
MdDOE	Maryland DE Drinking Water	341	12/31/2017				
NC	North Carolina DENR	495	12/31/2017				
PADEP	NELAC-Pennsylvania	001	10/31/2017				
VELAP	NELAC-Virginia Certificate #8886	460021	06/15/2017				
WVDEP	West Virginia DEP	350	11/30/2017				



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/16/2017 12:59

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Summary of Data Qualifiers

DS Surrogate concentration reflects a dilution factor.

P Duplicate analysis does not meet the acceptance criteria for precision

RPD Relative Percent Difference

Qual Qualifers

-RE Denotes sample was re-analyzed

D.F. Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.

TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library. A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.

PCBs, Total Total PCBs are defined as the sum of detected Aroclors 1016, 1221, 1232, 1248, 1254, 1260, 1262, and 1268.



1941 REYMET ROAD **RICHMOND, VIRGINIA 23237**

Chain of Custody Form #: D1331 Rev. 1.0 Effective: Feb 14, 2014

(804) 358-8295 PHONE (804)358-8297 FAX

LABORATORIES, INC.	CHAIN OF	CUSTODY		PAGE OF 1
COMPANY NAME: TIMMONI (Thoug	INVOICE TO: TIMMONS	grove	PROJECT NAME/Quo	ote #:
CONTACT: Julia lampus	INVOICE CONTACT:		SITE NAME: Ku 17	on gas
ADDRESS: 1001 GONILLS PKWY	INVOICE ADDRESS:	me	PROJECT NUMBER:	34156.015
PHONE #: 304 908 6043	INVOICE PHONE #:		P.O. #:	
FAX #: EMAIL	: Inlin. compris @ time	mons. com	Pretreatment Program	i: —
Is sample for compliance reporting? YE\$ NO	Is sample from a chloring		NO	PWS I.D. #:
SAMPLER NAME (PRINT): Julia (MAN)	SAMPLER SIGNATURE:	John Compr		Turn Around Time: 5 Day(s)
Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water	DW=Drinking Water S=Soil/Solids OR=Organ	7		COMMENTS
Composite Start Date	Composite Start Time Grab Date or Composite Stop Date Grab Time or Composite Stop Time	Matrix (See Codes) Number of Containers $V \partial \zeta_S / 4 ^{\circ}C$ $S V \partial \zeta_S / 4 ^{\circ}C$ $S V \partial \zeta_S / 4 ^{\circ}C$	LYSIS / (PRESERVATIV	Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol PLEASE NOTE PRESERVATIVE(S), INTERFERENCE CHECKS or PUMP RATE (L/min)
1) 513-17 4	1/4/17 9:15 9:20	5 1 × +		
2) 5B-16 X	114/17 13:00 13:05	5 /X X		ofor-excess
3)				water negent
4)				in sample
5)				
6)	6 1			
7)				
8)				
9)				ONTIE
10)				SEALES
EUNQUISHED: DATE / TIME BEE	DATE / DA	Z Level II Level II	TG Fulton Gasworks Recd: 01/06/2017	17A0186 Due: 01/13/2017



Certificate of Analysis

Final Report

Date Issued:

1/16/2017 12:59

Client Name: Timmons Group

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Sample Conditions Checklist

Samples Received at:	1.70°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes



Certificate of Analysis

Final Report

Laboratory Order ID 17A0384

Client Name: Timmons Group Date Received: January 16, 2017 15:10

1001 Boulders Parkway, Suite 300 Date Issued: January 23, 2017 17:10

Richmond, VA 23225

Project Number:

Submitted To: John Russell Purchase Order: 36156.015

Client Site I.D.: Fulton Gas Works

E0 70/415

Enclosed are the results of analyses for samples received by the laboratory on 01/16/2017 15:10. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

Ted Soyars

Laboratory Manager

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

This report shall not be reproduced except in full without the expressed and written approval of an authorized representative of Air Water & Soil Laboratories, Inc.







[none]



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas Works

Submitted To: John Russell

Client Site I.D.:

Project Number: [none]

Purchase Order:

36156.015

ANALYTICAL REPORT FOR SAMPLES

Laboratory Order ID 17A0384

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-19	17A0384-01	Soil	01/12/2017 10:30	01/16/2017 15:10
SS-13	17A0384-03	Soil	01/13/2017 09:30	01/16/2017 15:10
SS-14	17A0384-04	Soil	01/13/2017 09:45	01/16/2017 15:10

PCB results have been calculated based on dry weight.



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: [none] 36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Laboratory Order ID: 17A0384

Analytical Results

Sample I.D. SB-19 Laboratory Sample ID: 17A0384-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,1,1-Trichloroethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,1,2,2-Tetrachloroethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,1,2-Trichloroethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,1-Dichloroethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,1-Dichloroethylene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,1-Dichloropropene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,2,3-Trichlorobenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,2,3-Trichloropropane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,2,4-Trichlorobenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,2,4-Trimethylbenzene	01RE2	SW8260B	2080 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,2-Dibromo-3-chloropropane (DBCP)	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,2-Dibromoethane (EDB)	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,2-Dichlorobenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,2-Dichloroethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,2-Dichloropropane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,3,5-Trimethylbenzene	01RE2	SW8260B	723 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,3-Dichlorobenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,3-Dichloropropane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
1,4-Dichlorobenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
2,2-Dichloropropane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
2-Butanone (MEK)	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
2-Chlorotoluene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
2-Hexanone (MBK)	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
4-Chlorotoluene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
4-Isopropyltoluene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/23/2017 17:10

17A0384-01

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: [none] 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Laboratory Order ID: 17A0384

 Analytical Results Sample I.D. SB-19 **Laboratory Sample ID:**

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds I	by GCMS								
4-Methyl-2-pentanone (MIBK)	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Acetone	01RE2	SW8260B	<1000 ug/kg		1000	100	01/17/17 14:19	01/17/17 14:19	KCS
Benzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Bromobenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Bromochloromethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Bromodichloromethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Bromoform	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Bromomethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Carbon disulfide	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Carbon tetrachloride	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Chlorobenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Chloroethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Chloroform	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Chloromethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
cis-1,2-Dichloroethylene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
cis-1,3-Dichloropropene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Dibromochloromethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Dibromomethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Dichlorodifluoromethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Di-isopropyl ether (DIPE)	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Ethylbenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Hexachlorobutadiene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
lodomethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Isopropylbenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
m+p-Xylenes	01RE2	SW8260B	583 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Methylene chloride	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/23/2017 17:10

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

Project Number:

[none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Laboratory Order ID: 17A0384

Analytical Results

Sample I.D. SB-19 Laboratory Sample ID: 17A0384-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Methyl-t-butyl ether (MTBE)	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Naphthalene	01RE1	SW8260B	63800 ug/kg		1000	200	01/17/17 13:30	01/17/17 13:30	KCS
n-Butylbenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
n-Propylbenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
o-Xylene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
sec-Butylbenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Styrene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
tert-Butylbenzene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Tetrachloroethylene (PCE)	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Toluene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
trans-1,2-Dichloroethylene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
trans-1,3-Dichloropropene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Trichloroethylene	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Trichlorofluoromethane	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Vinyl acetate	01RE2	SW8260B	<1000 ug/kg		1000	100	01/17/17 14:19	01/17/17 14:19	KCS
Vinyl chloride	01RE2	SW8260B	<500 ug/kg		500	100	01/17/17 14:19	01/17/17 14:19	KCS
Xylenes, Total	01RE2	SW8260B	<1500 ug/kg		1500	100	01/17/17 14:19	01/17/17 14:19	KCS
Surr: 1,2-Dichloroethane-d4	01RE1	SW8260B	97.0 %		80-120		01/17/17 13:30	01/17/17 13:30	KCS
Surr: 4-Bromofluorobenzene	01RE1	SW8260B	97.6 %		85-120		01/17/17 13:30	01/17/17 13:30	KCS
Surr: Dibromofluoromethane	01RE1	SW8260B	98.3 %		80-119		01/17/17 13:30	01/17/17 13:30	KCS
Surr: Toluene-d8	01RE1	SW8260B	99.3 %		85-115		01/17/17 13:30	01/17/17 13:30	KCS
Surr: 1,2-Dichloroethane-d4	01RE2	SW8260B	99.8 %		80-120		01/17/17 14:19	01/17/17 14:19	KCS
Surr: 4-Bromofluorobenzene	01RE2	SW8260B	99.3 %		85-120		01/17/17 14:19	01/17/17 14:19	KCS
Surr: Dibromofluoromethane	01RE2	SW8260B	99.3 %		80-119		01/17/17 14:19	01/17/17 14:19	KCS
Surr: Toluene-d8	01RE2	SW8260B	99.3 %		85-115		01/17/17 14:19	01/17/17 14:19	KCS
Semivolatile Organic Compo	unds by GC	MS							



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: [none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Laboratory Order ID: 17A0384

Analytical Results

Sample I.D. SB-19 Laboratory Sample ID: 17A0384-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
1,2,4,5-Tetrachlorobenzene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
1,2,4-Trichlorobenzene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
1,2-Dichlorobenzene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
1,2-Diphenylhydrazine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
1,3-Dichlorobenzene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
1,4-Dichlorobenzene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
1-Chloronaphthalene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
1-Naphthylamine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2,3,4,6-Tetrachlorophenol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2,4,5-Trichlorophenol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2,4,6-Trichlorophenol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2,4-Dichlorophenol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2,4-Dimethylphenol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2,4-Dinitrophenol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2,4-Dinitrotoluene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2,6-Dichlorophenol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2,6-Dinitrotoluene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2-Chloronaphthalene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2-Chlorophenol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2-Methylnaphthalene	01	SW8270D	66500 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2-Naphthylamine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2-Nitroaniline	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
2-Nitrophenol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
3,3'-Dichlorobenzidine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
3-Methylcholanthrene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
3-Nitroaniline	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: [none] 36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Laboratory Order ID: 17A0384

Analytical Results

Sample I.D. SB-19 Laboratory Sample ID: 17A0384-01

Parameter	Samp ID	Method	Result	Reporting Qual Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS						
4,6-Dinitro-2-methylphenol	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
4-Aminobiphenyl	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
4-Bromophenyl phenyl ether	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
4-Chloroaniline	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
4-Chlorophenyl phenyl ether	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
4-Nitroaniline	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
4-Nitrophenol	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
7,12-Dimethylbenz (a) anthracene	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Acenaphthene	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Acenaphthylene	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Acetophenone	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Aniline	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Anthracene	01	SW8270D	34400 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Benzidine	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Benzo (a) anthracene	01	SW8270D	69600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Benzo (a) pyrene	01	SW8270D	56300 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Benzo (b) fluoranthene	01	SW8270D	58400 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Benzo (g,h,i) perylene	01	SW8270D	57400 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Benzo (k) fluoranthene	01	SW8270D	26700 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Benzoic acid	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Benzyl alcohol	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
bis (2-Chloroethoxy) methane	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
bis (2-Chloroethyl) ether	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
bis (2-Chloroisopropyl) ether	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
bis (2-Ethylhexyl) phthalate	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Butyl benzyl phthalate	01	SW8270D	<23600 ug/kg	23600	100	01/18/17 09:03	01/18/17 17:50	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: [none]

Client Site I.D.: Fulton Gas Works Purchase Order:

36156.015

Laboratory Order ID: 17A0384

Analytical Results

Sample I.D. SB-19 Laboratory Sample ID: 17A0384-01

Parameter	Samp ID	Method	Result	F Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Chrysene	01	SW8270D	63500 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Dibenz (a,h) anthracene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Dibenz (a,j) acridine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Dibenzofuran	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Diethyl phthalate	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Dimethyl phthalate	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Di-n-butyl phthalate	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Di-n-octyl phthalate	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Diphenylamine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Ethyl methanesulfonate	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Fluoranthene	01	SW8270D	178000 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Fluorene	01	SW8270D	26400 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Hexachlorobenzene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Hexachlorobutadiene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Hexachlorocyclopentadiene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Hexachloroethane	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Indeno (1,2,3-cd) pyrene	01	SW8270D	47400 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Isophorone	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
m+p-Cresols	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Methyl methanesulfonate	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Naphthalene	01	SW8270D	96300 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Nitrobenzene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
n-Nitrosodimethylamine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
n-Nitrosodi-n-butylamine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
n-Nitrosodi-n-propylamine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
n-Nitrosodiphenylamine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1

1/23/2017 17:10

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

Project Number:

[none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Laboratory Order ID: 17A0384

Analytical Results

Sample I.D. SB-19

Date/Time Sampled:

01/12/2017 10:30

Laboratory Sample ID: 17A0384-01

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
n-Nitrosopiperidine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
o+m+p-Cresols	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
o-Cresol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
p-(Dimethylamino) azobenzene	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
p-Chloro-m-cresol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Pentachloronitrobenzene (quintozene)	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Pentachlorophenol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Phenacetin	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Phenanthrene	01	SW8270D	227000 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Phenol	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Pronamide	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Pyrene	01	SW8270D	137000 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Pyridine	01	SW8270D	<23600 ug/kg		23600	100	01/18/17 09:03	01/18/17 17:50	SKS
Surr: 2,4,6-Tribromophenol	01	SW8270D	184 %	DS	35-125		01/18/17 09:03	01/18/17 17:50	SKS
Surr: 2-Fluorobiphenyl	01	SW8270D	113 %	DS	45-105		01/18/17 09:03	01/18/17 17:50	SKS
Surr: 2-Fluorophenol	01	SW8270D	19.1 %	DS	35-105		01/18/17 09:03	01/18/17 17:50	SKS
Surr: Nitrobenzene-d5	01	SW8270D	89.2 %	DS	35-100		01/18/17 09:03	01/18/17 17:50	SKS
Surr: Phenol-d5	01	SW8270D	6.40 %	DS	40-100		01/18/17 09:03	01/18/17 17:50	SKS
Surr: p-Terphenyl-d14	01	SW8270D	145 %	DS	30-125		01/18/17 09:03	01/18/17 17:50	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/23/2017 17:10

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John

John Russell

Project Number:

[none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Laboratory Order ID: 17A0384

Analytical Results

Sample I.D. SS-13 Laboratory Sample ID: 17A0384-03

Date/Time Gampica.	7171072017	0.00							
					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Organochlorine Pesticides a	and PCBs by	GC/ECD							
PCB as Aroclor 1016	03	SW8082A	<0.112 mg/kg dry		0.112	1	01/19/17 13:38	01/20/17 01:55	SKS
PCB as Aroclor 1221	03	SW8082A	<0.112 mg/kg dry		0.112	1	01/19/17 13:38	01/20/17 01:55	SKS
PCB as Aroclor 1232	03	SW8082A	<0.112 mg/kg dry		0.112	1	01/19/17 13:38	01/20/17 01:55	SKS
PCB as Aroclor 1242	03	SW8082A	<0.112 mg/kg dry		0.112	1	01/19/17 13:38	01/20/17 01:55	SKS
PCB as Aroclor 1248	03	SW8082A	<0.112 mg/kg dry		0.112	1	01/19/17 13:38	01/20/17 01:55	SKS
PCB as Aroclor 1254	03	SW8082A	<0.112 mg/kg dry		0.112	1	01/19/17 13:38	01/20/17 01:55	SKS
PCB as Aroclor 1260	03	SW8082A	<0.112 mg/kg dry		0.112	1	01/19/17 13:38	01/20/17 01:55	SKS
Surr: DCB	03	SW8082A	90.0 %		30-105		01/19/17 13:38	01/20/17 01:55	SKS
Surr: TCMX	03	SW8082A	20.0 %	S	30-105		01/19/17 13:38	01/20/17 01:55	SKS
Wet Chemistry Analysis									
Percent Solids	03	SM18 2540G	84.8 %		0.10	1	01/17/17 08:45	01/17/17 16:09	JCM



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

[none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Laboratory Order ID: 17A0384

Analytical Results

Sample I.D. SS-14 Laboratory Sample ID: 17A0384-04

					Donorting				
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides a	and PCBs by	GC/ECD							
PCB as Aroclor 1016	04	SW8082A	<0.123 mg/kg dry		0.123	1	01/19/17 13:38	01/20/17 02:14	SKS
PCB as Aroclor 1221	04	SW8082A	<0.123 mg/kg dry		0.123	1	01/19/17 13:38	01/20/17 02:14	SKS
PCB as Aroclor 1232	04	SW8082A	<0.123 mg/kg dry		0.123	1	01/19/17 13:38	01/20/17 02:14	SKS
PCB as Aroclor 1242	04	SW8082A	<0.123 mg/kg dry		0.123	1	01/19/17 13:38	01/20/17 02:14	SKS
PCB as Aroclor 1248	04	SW8082A	<0.123 mg/kg dry		0.123	1	01/19/17 13:38	01/20/17 02:14	SKS
PCB as Aroclor 1254	04	SW8082A	<0.123 mg/kg dry		0.123	1	01/19/17 13:38	01/20/17 02:14	SKS
PCB as Aroclor 1260	04	SW8082A	<0.123 mg/kg dry		0.123	1	01/19/17 13:38	01/20/17 02:14	SKS
Surr: DCB	04	SW8082A	70.0 %		30-105		01/19/17 13:38	01/20/17 02:14	SKS
Surr: TCMX	04	SW8082A	70.0 %		30-105		01/19/17 13:38	01/20/17 02:14	SKS
Wet Chemistry Analysis									
Percent Solids	04	SM18 2540G	76.1 %		0.10	1	01/17/17 08:45	01/17/17 16:09	JCM



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Client Site I.D.: Fulton Gas Works

Project Number: [none]

Purchase Order:

36156.015

- Analytical Summary

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analy	ysis	Preparation Method:	No Prep Halides		
17A0384-03	1.00 g / 1.00 mL	SM18 2540G	BAA0348	SAA0383	
17A0384-04	1.00 g / 1.00 mL	SM18 2540G	BAA0348	SAA0383	
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Organochlorine Pest	ticides and PCBs by GC/ECD	Preparation Method:	SW3550B		
17A0384-03	31.7 g / 5.00 mL	SW8082A	BAA0418	SAA0514	AA70064
17A0384-04	32.1 g / 5.00 mL	SW8082A	BAA0418	SAA0514	AA70064
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Semivolatile Organic	c Compounds by GCMS	Preparation Method:	SW3550C		
17A0384-01	10.6 g / 1.00 mL	SW8270D	BAA0362	SAA0403	AA70049
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Organic Con	npounds by GCMS	Preparation Method:	SW5030B		
17A0384-01	10.0 g / 10.0 mL	SW8260B	BAA0377	SAA0421	AA70077
17A0384-01RE1	10.0 g / 10.0 mL	SW8260B	BAA0377	SAA0421	AA70077



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas Works

Submitted To: John Russell

Client Site I.D.:

Project Number: [none]

Purchase Order:

36156.015

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0377 - SW5030B Blank (BAA0377-BLK1) Prepared & Analyzed: 01/17/2017

Blank (BAA0377-BLK1)				Prepared & Analyzed: 01/17/2017
1,1,1,2-Tetrachloroethane	<5.00 ug/kg	5.00	ug/kg	
1,1,1-Trichloroethane	<5.00 ug/kg	5.00	ug/kg	
1,1,2,2-Tetrachloroethane	<5.00 ug/kg	5.00	ug/kg	
1,1,2-Trichloroethane	<5.00 ug/kg	5.00	ug/kg	
1,1-Dichloroethane	<5.00 ug/kg	5.00	ug/kg	
1,1-Dichloroethylene	<5.00 ug/kg	5.00	ug/kg	
1,1-Dichloropropene	<5.00 ug/kg	5.00	ug/kg	
1,2,3-Trichlorobenzene	<5.00 ug/kg	5.00	ug/kg	
1,2,3-Trichloropropane	<5.00 ug/kg	5.00	ug/kg	
1,2,4-Trichlorobenzene	<5.00 ug/kg	5.00	ug/kg	
1,2,4-Trimethylbenzene	<5.00 ug/kg	5.00	ug/kg	
1,2-Dibromo-3-chloropropane (DBCP)	<5.00 ug/kg	5.00	ug/kg	
1,2-Dibromoethane (EDB)	<5.00 ug/kg	5.00	ug/kg	
1,2-Dichlorobenzene	<5.00 ug/kg	5.00	ug/kg	
1,2-Dichloroethane	<5.00 ug/kg	5.00	ug/kg	
1,2-Dichloropropane	<5.00 ug/kg	5.00	ug/kg	
1,3,5-Trimethylbenzene	<5.00 ug/kg	5.00	ug/kg	
1,3-Dichlorobenzene	<5.00 ug/kg	5.00	ug/kg	
1,3-Dichloropropane	<5.00 ug/kg	5.00	ug/kg	
1,4-Dichlorobenzene	<5.00 ug/kg	5.00	ug/kg	
2,2-Dichloropropane	<5.00 ug/kg	5.00	ug/kg	
2-Butanone (MEK)	<5.00 ug/kg	5.00	ug/kg	
2-Chlorotoluene	<5.00 ug/kg	5.00	ug/kg	
2-Hexanone (MBK)	<5.00 ug/kg	5.00	ug/kg	
4-Chlorotoluene	<5.00 ug/kg	5.00	ug/kg	
4-Isopropyltoluene	<5.00 ug/kg	5.00	ug/kg	
4-Methyl-2-pentanone (MIBK)	<5.00 ug/kg	5.00	ug/kg	
Acetone	<10.0 ug/kg	10.0	ug/kg	
Benzene	<5.00 ug/kg	5.00	ug/kg	
Bromobenzene	<5.00 ug/kg	5.00	ug/kg	
Bromochloromethane	<5.00 ug/kg	5.00	ug/kg	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: [none] 36156.015

Fulton Gas Works Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0377 - SW5030B

Client Site I.D.:

Blank (BAA0377-BLK1)			Prepared & Analyzed: 01/17/2017
Bromodichloromethane	<5.00 ug/kg	5.00	ug/kg
Bromoform	<5.00 ug/kg	5.00	ug/kg
Bromomethane	<5.00 ug/kg	5.00	ug/kg
Carbon disulfide	<5.00 ug/kg	5.00	ug/kg
Carbon tetrachloride	<5.00 ug/kg	5.00	ug/kg
Chlorobenzene	<5.00 ug/kg	5.00	ug/kg
Chloroethane	<5.00 ug/kg	5.00	ug/kg
Chloroform	<5.00 ug/kg	5.00	ug/kg
Chloromethane	<5.00 ug/kg	5.00	ug/kg
cis-1,2-Dichloroethylene	<5.00 ug/kg	5.00	ug/kg
cis-1,3-Dichloropropene	<5.00 ug/kg	5.00	ug/kg
Dibromochloromethane	<5.00 ug/kg	5.00	ug/kg
Dibromomethane	<5.00 ug/kg	5.00	ug/kg
Dichlorodifluoromethane	<5.00 ug/kg	5.00	ug/kg
Di-isopropyl ether (DIPE)	<5.00 ug/kg	5.00	ug/kg
Ethylbenzene	<5.00 ug/kg	5.00	ug/kg
Hexachlorobutadiene	<5.00 ug/kg	5.00	ug/kg
lodomethane	<5.00 ug/kg	5.00	ug/kg
Isopropylbenzene	<5.00 ug/kg	5.00	ug/kg
m+p-Xylenes	<5.00 ug/kg	5.00	ug/kg
Methylene chloride	<5.00 ug/kg	5.00	ug/kg
Methyl-t-butyl ether (MTBE)	<5.00 ug/kg	5.00	ug/kg
Naphthalene	<5.00 ug/kg	5.00	ug/kg
n-Butylbenzene	<5.00 ug/kg	5.00	ug/kg
n-Propylbenzene	<5.00 ug/kg	5.00	ug/kg
o-Xylene	<5.00 ug/kg	5.00	ug/kg
sec-Butylbenzene	<5.00 ug/kg	5.00	ug/kg
Styrene	<5.00 ug/kg	5.00	ug/kg
tert-Butylbenzene	<5.00 ug/kg	5.00	ug/kg
Tetrachloroethylene (PCE)	<5.00 ug/kg	5.00	ug/kg
Toluene	<5.00 ug/kg	5.00	ug/kg



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/23/2017 17:10

RPD

RPD

Limit

Qual

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Result

53.2 ug/L

Submitted To: John Russell

Analyte

1,3-Dichlorobenzene

Project Number:

[none]

%REC

Limits

%REC

Client Site I.D.: Fulton Gas Works

Purchase Order:

Source

Result

36156.015

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Units

Spike

Level

Reporting

Limit

Blank (BAA0377-BLK1)				Prepare	d & Analyz	zed: 01/17/2	2017
trans-1,2-Dichloroethylene	<5.00 ug/kg	5.00	ug/kg				
trans-1,3-Dichloropropene	<5.00 ug/kg	5.00	ug/kg				
Trichloroethylene	<5.00 ug/kg	5.00	ug/kg				
Trichlorofluoromethane	<5.00 ug/kg	5.00	ug/kg				
Vinyl acetate	<10.0 ug/kg	10.0	ug/kg				
Vinyl chloride	<5.00 ug/kg	5.00	ug/kg				
Xylenes, Total	<15.0 ug/kg	15.0	ug/kg				
Surr: 1,2-Dichloroethane-d4	52.0		ug/kg	50.0		104	80-120
Surr: 4-Bromofluorobenzene	49.3		ug/kg	50.0		98.7	85-120
Surr: Dibromofluoromethane	50.8		ug/kg	50.0		102	80-119
Surr: Toluene-d8	49.9		ug/kg	50.0		99.8	85-115
LCS (BAA0377-BS1)				Prepare	d & Analyz	zed: 01/17/2	2017
1,1,1,2-Tetrachloroethane	49.4 ug/L	5	ug/L	50.0	ug/L	98.7	75-125
1,1,1-Trichloroethane	50.6 ug/L	5	ug/L	50.0	ug/L	101	70-135
1,1,2,2-Tetrachloroethane	49.7 ug/L	5	ug/L	50.0	ug/L	99.4	55-130
1,1,2-Trichloroethane	50.2 ug/L	5	ug/L	50.0	ug/L	100	60-125
1,1-Dichloroethane	50.7 ug/L	5	ug/L	50.0	ug/L	101	75-125
1,1-Dichloroethylene	51.7 ug/L	5	ug/L	50.0	ug/L	103	65-135
1,1-Dichloropropene	48.6 ug/L	5	ug/L	50.0	ug/L	97.1	70-135
1,2,3-Trichlorobenzene	55.4 ug/L	5	ug/L	50.0	ug/L	111	60-135
1,2,3-Trichloropropane	49.7 ug/L	5	ug/L	50.0	ug/L	99.5	65-130
1,2,4-Trichlorobenzene	53.2 ug/L	5	ug/L	50.0	ug/L	106	65-130
1,2,4-Trimethylbenzene	51.5 ug/L	5	ug/L	50.0	ug/L	103	65-135
1,2-Dibromo-3-chloropropane (DBCP)	48.8 ug/L	5	ug/L	50.0	ug/L	97.7	40-135
1,2-Dibromoethane (EDB)	50.7 ug/L	5	ug/L	50.0	ug/L	101	70-125
1,2-Dichlorobenzene	52.6 ug/L	5	ug/L	50.0	ug/L	105	75-120
1,2-Dichloroethane	46.7 ug/L	5	ug/L	50.0	ug/L	93.4	70-135
1,2-Dichloropropane	48.6 ug/L	5	ug/L	50.0	ug/L	97.1	70-120
1,3,5-Trimethylbenzene	52.1 ug/L	5	ug/L	50.0	ug/L	104	65-135

ug/L

50.0 ug/L

106

70-125



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: [none]

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0377 - SW5030B

1,3-Dichloropropane 49.0 ug/L 5 ug/L 50.0 ug/L 98.1 75-125 1,4-Dichlorobenzene 51.7 ug/L 5 ug/L 50.0 ug/L 103 70-125 2,2-Dichloropropane 52.4 ug/L 5 ug/L 50.0 ug/L 105 65-135 2-Butanone (MEK) 59.9 ug/L 5 ug/L 50.0 ug/L 120 30-160 2-Chlorotoluene 52.6 ug/L 5 ug/L 50.0 ug/L 105 70-130 2-Hexanone (MBK) 64.2 ug/L 5 ug/L 50.0 ug/L 128 45-145 4-Chlorotoluene 50.9 ug/L 5 ug/L 50.0 ug/L 102 75-125 4-Isopropyltoluene 51.5 ug/L 5 ug/L 50.0 ug/L 102 75-125 4-Methyl-2-pentanone (MIBK) 60.3 ug/L 5 ug/L 50.0 ug/L 103 75-135 4-Methyl-2-pentanone (MIBK) 60.3 ug/L 5 ug/L 50.0 ug/L 114 20-160 Benzene 50.5 ug/L 5 ug/L 50.0 ug/L 114 20-160 Beromobenzene
2,2-Dichloropropane 52.4 ug/L 5 ug/L 50.0 ug/L 105 65-135 2-Butanone (MEK) 59.9 ug/L 5 ug/L 50.0 ug/L 120 30-160 2-Chlorotoluene 52.6 ug/L 5 ug/L 50.0 ug/L 105 70-130 2-Hexanone (MBK) 64.2 ug/L 5 ug/L 50.0 ug/L 128 45-145 4-Chlorotoluene 50.9 ug/L 5 ug/L 50.0 ug/L 102 75-125 4-Sopropyltoluene 51.5 ug/L 5 ug/L 50.0 ug/L 103 75-135 4-Methyl-2-pentanone (MIBK) 60.3 ug/L 5 ug/L 50.0 ug/L 103 75-135 4-Methyl-2-pentanone (MIBK) 60.3 ug/L 5 ug/L 50.0 ug/L 112 45-145 Acetone 56.8 ug/L 10 ug/L 50.0 ug/L 114 20-160 Benzene 50.5 ug/L 5 ug/L 50.0 ug/L 101 75-125 Bromochloromethane 52.3 ug/L 5
2-Butanone (MEK) 59.9 ug/L 5 ug/L 50.0 ug/L 120 30-160 22-Chlorotoluene 52.6 ug/L 5 ug/L 50.0 ug/L 105 70-130 22-Hexanone (MBK) 64.2 ug/L 5 ug/L 50.0 ug/L 128 45-145 42-Chlorotoluene 50.9 ug/L 5 ug/L 50.0 ug/L 102 75-125 42-Isopropyltoluene 51.5 ug/L 5 ug/L 50.0 ug/L 103 75-135 42-Methyl-2-pentanone (MIBK) 60.3 ug/L 5 ug/L 50.0 ug/L 121 45-145 42-Chlorotoluene 56.8 ug/L 5 ug/L 50.0 ug/L 121 45-145 42-Chlorotoluene 56.8 ug/L 5 ug/L 50.0 ug/L 121 45-145 42-Chlorotoluene 56.8 ug/L 5 ug/L 50.0 ug/L 121 45-145 42-Chlorotoluene 56.8 ug/L 5 ug/L 50.0 ug/L 114 20-160 Benzene 50.5 ug/L 5 ug/L 50.0 ug/L 114 20-160 Benzene 50.7 ug/L 5 ug/L 50.0 ug/L 101 75-125 Bromobenzene 50.7 ug/L 5 ug/L 50.0 ug/L 101 65-120 Bromochloromethane 52.3 ug/L 5 ug/L 50.0 ug/L 104 70-130 Bromochloromethane 52.1 ug/L 5 ug/L 50.0 ug/L 104 70-130 Bromoform 54.2 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 100 30-160 Carbon disulfide 59.2 ug/L 5 ug/L 50.0 ug/L 118 45-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 50.0 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 103 65-135
2-Chlorotoluene 52.6 ug/L 5 ug/L 50.0 ug/L 105 70-130 2-Hexanone (MBK) 64.2 ug/L 5 ug/L 50.0 ug/L 128 45-145 4-Chlorotoluene 50.9 ug/L 5 ug/L 50.0 ug/L 102 75-125 4-Isopropyltoluene 51.5 ug/L 5 ug/L 50.0 ug/L 103 75-135 4-Methyl-2-pentanone (MIBK) 60.3 ug/L 5 ug/L 50.0 ug/L 121 45-145 4-Methyl-2-pentanone (MIBK) 60.3 ug/L 5 ug/L 50.0 ug/L 121 45-145 4-Methyl-2-pentanone (MIBK) 60.3 ug/L 5 ug/L 50.0 ug/L 121 45-145 4-Methyl-2-pentanone (MIBK) 60.3 ug/L 5 ug/L 50.0 ug/L 114 20-160 Benzene 50.5 ug/L 5 ug/L 50.0 ug/L 101 75-125 Bromobenzene 50.7 ug/L 5 ug/L 50.0 ug/L 101 65-120 Bromochloromethane 52.3 ug/L 5 ug/L 50.0 ug/L 105 70-125 Bromochloromethane 52.1 ug/L 5 ug/L 50.0 ug/L 105 70-125 Bromoform 54.2 ug/L 5 ug/L 50.0 ug/L 104 70-130 Bromoform 54.2 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 59.2 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 59.2 ug/L 5 ug/L 50.0 ug/L 100 30-160 Carbon disulfide 59.2 ug/L 5 ug/L 50.0 ug/L 118 45-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 50.0 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 103 65-135
2-Hexanone (MBK) 64.2 ug/L 5 ug/L 50.0 ug/L 128 45-145 4-Chlorotoluene 50.9 ug/L 5 ug/L 5 ug/L 50.0 ug/L 102 75-125 4-Isopropyltoluene 51.5 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 103 75-135 4-Methyl-2-pentanone (MIBK) 60.3 ug/L 10 ug/L 50.0 ug/L 111 45-145 Acetone 56.8 ug/L 10 ug/L 50.0 ug/L 114 20-160 Benzene 50.5 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 101 75-125 Bromobenzene 50.7 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 101 75-125 Bromochloromethane 52.3 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 101 75-125 Bromochloromethane 52.1 ug/L 5 ug/L 104 70-130 Bromoform 54.2 ug/L 5 ug/
4-Chlorotoluene 50.9 ug/L 5 ug/L 50.0 ug/L 102 75-125 4-Isopropyltoluene 51.5 ug/L 5 ug/L 50.0 ug/L 103 75-135 4-Methyl-2-pentanone (MIBK) 60.3 ug/L 5 ug/L 50.0 ug/L 121 45-145 Acetone 56.8 ug/L 10 ug/L 50.0 ug/L 114 20-160 Benzene 50.5 ug/L 5 ug/L 5 ug/L 50.0 ug/L 101 75-125 Bromobenzene 50.7 ug/L 5 ug/L 5 ug/L 50.0 ug/L 101 65-120 Bromochloromethane 52.3 ug/L 5 ug/L 5 ug/L 50.0 ug/L 101 70-125 Bromodichloromethane 52.1 ug/L 5 ug/L 5 ug/L 50.0 ug/L 104 70-130 Bromoform 54.2 ug/L 5 ug/L 5 ug/L 50.0 ug/L 104 70-130 Bromomethane 50.1 ug/L 5 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 100 30-160 Carbon disulfide 59.2 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 100 30-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L
4-Isopropyltoluene 51.5 ug/L 5 ug/L 50.0 ug/L 103 75-135 4-Methyl-2-pentanone (MIBK) 60.3 ug/L 5 ug/L 50.0 ug/L 121 45-145 Acetone 56.8 ug/L 10 ug/L 50.0 ug/L 114 20-160 Benzene 50.5 ug/L 5 ug/L 5 ug/L 50.0 ug/L 101 75-125 Bromobenzene 50.7 ug/L 5 ug/L 50.0 ug/L 101 65-120 Bromochloromethane 52.3 ug/L 5 ug/L 50.0 ug/L 101 65-120 Bromodichloromethane 52.1 ug/L 5 ug/L 50.0 ug/L 105 70-125 Bromodichloromethane 52.1 ug/L 5 ug/L 5 ug/L 50.0 ug/L 104 70-130 Bromoform 54.2 ug/L 5 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 100 30-160 Carbon disulfide 59.2 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 103 65-135
4-Methyl-2-pentanone (MIBK) 60.3 ug/L 50.0 ug/L 121 45-145 Acetone 56.8 ug/L 10 ug/L 50.0 ug/L 114 20-160 Benzene 50.5 ug/L 5 ug/L 5 ug/L 50.0 ug/L 101 75-125 Bromobenzene 50.7 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 101 65-120 Bromochloromethane 52.3 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 105 70-125 Bromodichloromethane 52.1 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 105 70-125 Bromodichloromethane 52.1 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 104 70-130 Bromoform 54.2 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 108 55-135 Carbon disulfide 59.2 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 100 30-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 118 45-160 Carbon tetrachloride 51.1 ug/L 5 ug/L 5 ug/L 5 0.0 ug/L 103 65-135 Chlorobenzene
Acetone 56.8 ug/L 10 ug/L 50.0 ug/L 114 20-160 Benzene 50.5 ug/L 5 ug/L 50.0 ug/L 101 75-125 Bromobenzene 50.7 ug/L 5 ug/L 50.0 ug/L 101 65-120 Bromochloromethane 52.3 ug/L 5 ug/L 50.0 ug/L 105 70-125 Bromodichloromethane 52.1 ug/L 5 ug/L 50.0 ug/L 104 70-130 Bromoform 54.2 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 100 30-160 Carbon disulfide 59.2 ug/L 5 ug/L 50.0 ug/L 118 45-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 50.0 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 102 75-125
Benzene 50.5 ug/L 5 ug/L 50.0 ug/L 101 75-125 Bromobenzene 50.7 ug/L 5 ug/L 50.0 ug/L 101 65-120 Bromochloromethane 52.3 ug/L 5 ug/L 50.0 ug/L 105 70-125 Bromodichloromethane 52.1 ug/L 5 ug/L 50.0 ug/L 104 70-130 Bromoform 54.2 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 100 30-160 Carbon disulfide 59.2 ug/L 5 ug/L 50.0 ug/L 118 45-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 50.0 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 102 75-125
Bromobenzene 50.7 ug/L 5 ug/L 50.0 ug/L 101 65-120 Bromochloromethane 52.3 ug/L 5 ug/L 50.0 ug/L 105 70-125 Bromodichloromethane 52.1 ug/L 5 ug/L 50.0 ug/L 104 70-130 Bromoform 54.2 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 100 30-160 Carbon disulfide 59.2 ug/L 5 ug/L 50.0 ug/L 118 45-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 50.0 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 102 75-125
Bromochloromethane 52.3 ug/L 5 ug/L 50.0 ug/L 105 70-125 Bromodichloromethane 52.1 ug/L 5 ug/L 50.0 ug/L 104 70-130 Bromoform 54.2 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 100 30-160 Carbon disulfide 59.2 ug/L 5 ug/L 50.0 ug/L 118 45-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 50.0 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 102 75-125
Bromodichloromethane 52.1 ug/L 5 ug/L 50.0 ug/L 104 70-130 Bromodform 54.2 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 100 30-160 Carbon disulfide 59.2 ug/L 5 ug/L 50.0 ug/L 118 45-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 50.0 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 102 75-125
Bromoform 54.2 ug/L 5 ug/L 50.0 ug/L 108 55-135 Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 100 30-160 Carbon disulfide 59.2 ug/L 5 ug/L 50.0 ug/L 118 45-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 50.0 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 102 75-125
Bromomethane 50.1 ug/L 5 ug/L 50.0 ug/L 100 30-160 Carbon disulfide 59.2 ug/L 5 ug/L 50.0 ug/L 118 45-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 50.0 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 102 75-125
Carbon disulfide 59.2 ug/L 5 ug/L 50.0 ug/L 118 45-160 Carbon tetrachloride 51.5 ug/L 5 ug/L 50.0 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 102 75-125
Carbon tetrachloride 51.5 ug/L 5 ug/L 50.0 ug/L 103 65-135 Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 102 75-125
Chlorobenzene 51.1 ug/L 5 ug/L 50.0 ug/L 102 75-125
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Chloroethane 49.4 ug/L 5 ug/L 50.0 ug/L 98.8 40-155
Chloroform 49.0 ug/L 5 ug/L 50.0 ug/L 97.9 70-125
Chloromethane 48.2 ug/L 5 ug/L 50.0 ug/L 96.4 50-130
sis-1,2-Dichloroethylene 50.3 ug/L 5 ug/L 50.0 ug/L 101 65-125
sis-1,3-Dichloropropene 48.0 ug/L 5 ug/L 50.0 ug/L 96.0 70-125
Dibromochloromethane 56.0 ug/L 5 ug/L 50.0 ug/L 112 65-130
Dibromomethane 51.4 ug/L 5 ug/L 50.0 ug/L 103 75-130
Dichlorodifluoromethane 51.2 ug/L 5 ug/L 50.0 ug/L 102 35-135
Ethylbenzene 49.7 ug/L 5 ug/L 50.0 ug/L 99.4 75-125
Hexachlorobutadiene 50.0 ug/L 5 ug/L 50.0 ug/L 100 55-140
Sopropylbenzene 51.6 ug/L 5 ug/L 50.0 ug/L 103 75-130
m+p-Xylenes 103 ug/L 5 ug/L 100 ug/L 103 80-125



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

1/23/2017 17:10

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

[none]

%REC

Client Site I.D.: Fulton Gas Works

Purchase Order:

Source

36156.015

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	Limit	Qual
Batch BAA0377 - SW5030B										
				Dropara	d & Analyze	d: 01/17/20	017			
LCS (BAA0377-BS1) Methylene chloride	44.7 ug/L	5	ug/L	50.0	ug/L	89.4	55-140			
Nethyl-t-butyl ether (MTBE)	51.4 ug/L	5	ug/L	50.0	ug/L ug/L	103	65-125			
Naphthalene	55.5 ug/L	5	ug/L	50.0	ug/L	111	40-125			
n-Butylbenzene	52.0 ug/L	5	ug/L	50.0	ug/L	104	65-140			
n-Propylbenzene	51.8 ug/L	5	ug/L	50.0	ug/L	104	65-135			
p-Xylene	50.3 ug/L	5	ug/L	50.0	ug/L	101	75-125			
ec-Butylbenzene	51.5 ug/L	5	ug/L	50.0	ug/L	103	65-130			
Styrene	51.7 ug/L	5	ug/L	50.0	ug/L	103	75-125			
ert-Butylbenzene	51.4 ug/L	5	ug/L	50.0	ug/L	103	65-130			
etrachloroethylene (PCE)	62.5 ug/L	5	ug/L	50.0	ug/L	125	65-140			
oluene	50.8 ug/L	5	ug/L	50.0	ug/L	102	70-125			
rans-1,2-Dichloroethylene	52.1 ug/L	5	ug/L	50.0	ug/L	104	65-135			
rans-1,3-Dichloropropene	51.1 ug/L	5	ug/L	50.0	ug/L	102	65-125			
Trichloroethylene	49.9 ug/L	5	ug/L	50.0	ug/L	99.7	75-125			
richlorofluoromethane	45.0 ug/L	5	ug/L	50.0	ug/L	90.1	25-185			
/inyl chloride	48.0 ug/L	5	ug/L	50.0	ug/L	96.1	60-130			
Surr: 1,2-Dichloroethane-d4	50.2		ug/kg	50.0	ug/kg	100	80-120			
Surr: 4-Bromofluorobenzene	48.8		ug/kg	50.0	ug/kg	97.5	85-120			
Surr: Dibromofluoromethane	50.2		ug/kg	50.0	ug/kg	100	80-119			
Surr: Toluene-d8	49.5		ug/kg	50.0	ug/kg	99.1	85-115			
Matrix Spike (BAA0377-MS1)	Soui	ce: 17A038	4-01	Prepared	d & Analyze	d: 01/17/20	017			
,1,1,2-Tetrachloroethane	47.2 ug/L	5	ug/L	•	<5 ug/L	94.4	75-125			
,1,1-Trichloroethane	46.4 ug/L	5	ug/L		<5 ug/L	92.9	70-135			
,1,2,2-Tetrachloroethane	48.3 ug/L	5	ug/L	50.0	<5 ug/L	96.7	55-130			
,1,2-Trichloroethane	47.6 ug/L	5	ug/L		<5 ug/L	95.2	60-125			
,1-Dichloroethane	46.7 ug/L	5	ug/L	50.0	<5 ug/L	93.4	75-125			
,1-Dichloroethylene	47.3 ug/L	5	ug/L	50.0	<5 ug/L	94.6	65-135			
,1-Dichloropropene	44.4 ug/L	5	ug/L		<5 ug/L	88.9	70-135			
,2,3-Trichlorobenzene	51.4 ug/L	5	ug/L		<5 ug/L	103	60-135			
	•	5	•		<5 ug/L	97.1	65-130			



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

1/23/2017 17:10

Richmond VA, 23225

1001 Boulders Parkway, Suite 300

Submitted To: John Russell

Project Number:

[none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0377 - SW5030B

Matrix Spike (BAA0377-MS1)	Source:	17A0384	-01	Prepare	ed & Analyzed			
1,2,4-Trichlorobenzene	47.8 ug/L	5	ug/L	50.0	<5 ug/L	95.2	65-130	
1,2,4-Trimethylbenzene	48.7 ug/L	5	ug/L	50.0	<5 ug/L	96.8	65-135	
1,2-Dibromo-3-chloropropane (DBCP)	78.3 ug/L	5	ug/L	50.0	<5 ug/L	157	40-135	M
1,2-Dibromoethane (EDB)	49.1 ug/L	5	ug/L	50.0	<5 ug/L	98.1	70-125	
1,2-Dichlorobenzene	49.4 ug/L	5	ug/L	50.0	<5 ug/L	98.9	75-120	
1,2-Dichloroethane	44.7 ug/L	5	ug/L	50.0	<5 ug/L	89.4	70-135	
1,2-Dichloropropane	45.7 ug/L	5	ug/L	50.0	<5 ug/L	91.4	70-120	
1,3,5-Trimethylbenzene	48.9 ug/L	5	ug/L	50.0	<5 ug/L	97.6	65-135	
1,3-Dichlorobenzene	48.7 ug/L	5	ug/L	50.0	<5 ug/L	97.4	70-125	
1,3-Dichloropropane	47.4 ug/L	5	ug/L	50.0	<5 ug/L	94.7	75-125	
1,4-Dichlorobenzene	48.5 ug/L	5	ug/L	50.0	<5 ug/L	96.9	70-125	
2,2-Dichloropropane	46.9 ug/L	5	ug/L	50.0	<5 ug/L	93.7	65-135	
2-Butanone (MEK)	43.7 ug/L	5	ug/L	50.0	<5 ug/L	87.5	30-160	
2-Chlorotoluene	49.0 ug/L	5	ug/L	50.0	<5 ug/L	98.0	70-130	
2-Hexanone (MBK)	57.0 ug/L	5	ug/L	50.0	<5 ug/L	114	45-145	
4-Chlorotoluene	47.2 ug/L	5	ug/L	50.0	<5 ug/L	94.4	75-125	
4-Isopropyltoluene	48.6 ug/L	5	ug/L	50.0	<5 ug/L	97.1	75-135	
4-Methyl-2-pentanone (MIBK)	52.2 ug/L	5	ug/L	50.0	<5 ug/L	104	45-145	
Acetone	57.8 ug/L	10	ug/L	50.0	10.1 ug/L	95.4	20-160	
Benzene	46.9 ug/L	5	ug/L	50.0	<5 ug/L	93.8	75-125	
Bromobenzene	48.3 ug/L	5	ug/L	50.0	<5 ug/L	96.7	65-120	
Bromochloromethane	49.9 ug/L	5	ug/L	50.0	<5 ug/L	99.9	70-125	
Bromodichloromethane	49.5 ug/L	5	ug/L	50.0	<5 ug/L	99.0	70-130	
Bromoform	51.5 ug/L	5	ug/L	50.0	<5 ug/L	103	55-135	
Bromomethane	46.7 ug/L	5	ug/L	50.0	<5 ug/L	93.4	30-160	
Carbon disulfide	53.4 ug/L	5	ug/L	50.0	<5 ug/L	107	45-160	
Carbon tetrachloride	46.9 ug/L	5	ug/L	50.0	<5 ug/L	93.9	65-135	
Chlorobenzene	48.4 ug/L	5	ug/L	50.0	<5 ug/L	96.9	75-125	
Chloroethane	45.3 ug/L	5	ug/L	50.0	<5 ug/L	90.6	40-155	
Chloroform	45.6 ug/L	5	ug/L	50.0	<5 ug/L	91.2	70-125	
Chloromethane	44.0 ug/L	5	ug/L	50.0	<5 ug/L	88.0	50-130	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/23/2017 17:10

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

Project Number:

[none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0377 - SW5030B

Matrix Spike (BAA0377-MS1)	Source: 1	17A0384	-01	Prepare	d & Analyzed	d: 01/17/2	2017	
cis-1,2-Dichloroethylene	47.2 ug/L	5	ug/L	50.0	<5 ug/L	94.5	65-125	
cis-1,3-Dichloropropene	44.5 ug/L	5	ug/L	50.0	<5 ug/L	89.0	70-125	
Dibromochloromethane	54.3 ug/L	5	ug/L	50.0	<5 ug/L	109	65-130	
Dibromomethane	49.6 ug/L	5	ug/L	50.0	<5 ug/L	99.2	75-130	
Dichlorodifluoromethane	47.1 ug/L	5	ug/L	50.0	<5 ug/L	94.2	35-135	
Ethylbenzene	46.3 ug/L	5	ug/L	50.0	<5 ug/L	92.6	75-125	
Hexachlorobutadiene	46.2 ug/L	5	ug/L	50.0	<5 ug/L	92.5	55-140	
Isopropylbenzene	48.2 ug/L	5	ug/L	50.0	<5 ug/L	96.5	75-130	
m+p-Xylenes	95.2 ug/L	5	ug/L	100	<5 ug/L	95.2	80-125	
Methylene chloride	42.2 ug/L	5	ug/L	50.0	<5 ug/L	83.8	55-140	
Methyl-t-butyl ether (MTBE)	48.2 ug/L	5	ug/L	50.0	<5 ug/L	96.4	65-125	
Naphthalene	78.5 ug/L	5	ug/L	50.0	8.40 ug/L	140	40-125	M
n-Butylbenzene	48.4 ug/L	5	ug/L	50.0	<5 ug/L	96.8	65-140	
n-Propylbenzene	49.2 ug/L	5	ug/L	50.0	<5 ug/L	98.4	65-135	
o-Xylene	47.2 ug/L	5	ug/L	50.0	<5 ug/L	94.3	75-125	
sec-Butylbenzene	48.6 ug/L	5	ug/L	50.0	<5 ug/L	97.2	65-130	
Styrene	48.8 ug/L	5	ug/L	50.0	<5 ug/L	97.7	75-125	
tert-Butylbenzene	48.6 ug/L	5	ug/L	50.0	<5 ug/L	97.3	65-130	
Tetrachloroethylene (PCE)	47.4 ug/L	5	ug/L	50.0	<5 ug/L	94.8	65-140	
Toluene	46.7 ug/L	5	ug/L	50.0	<5 ug/L	93.4	70-125	
trans-1,2-Dichloroethylene	47.1 ug/L	5	ug/L	50.0	<5 ug/L	94.1	65-135	
trans-1,3-Dichloropropene	47.4 ug/L	5	ug/L	50.0	<5 ug/L	94.9	65-125	
Trichloroethylene	44.9 ug/L	5	ug/L	50.0	<5 ug/L	89.8	75-125	
Trichlorofluoromethane	41.6 ug/L	5	ug/L	50.0	<5 ug/L	83.2	25-185	
Vinyl chloride	43.6 ug/L	5	ug/L	50.0	<5 ug/L	87.2	60-130	
Surr: 1,2-Dichloroethane-d4	244000		ug/kg	250000	ug/kg	97.5	80-120	
Surr: 4-Bromofluorobenzene	242000		ug/kg	250000) ug/kg	96.7	85-120	
Surr: Dibromofluoromethane	244000		ug/kg	250000	ug/kg	97.7	80-119	
Surr: Toluene-d8	249000		ug/kg		ug/kg	99.6	85-115	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/23/2017 17:10

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

Project Number:

[none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0377 - SW5030B Source: 17A0384-01 Prepared & Analyzed: 01/17/2017 Matrix Spike Dup (BAA0377-MSD1) 1,1,1,2-Tetrachloroethane 49.4 ug/L 5 ug/L 50.0 <5 ug/L 98.9 75-125 30 49.8 ug/L 50.0 <5 ug/L 30 1,1,1-Trichloroethane 5 ug/L 996 70-135 50.0 <5 ug/L 30 1,1,2,2-Tetrachloroethane 49.7 ug/L 5 ug/L 99.4 55-130 50.1 ug/L 5 50.0 <5 ug/L 30 1,1,2-Trichloroethane ug/L 100 60-125 5 30 50.0 <5 ug/L 100 75-125 1.1-Dichloroethane 50.2 ug/L ug/L 1,1-Dichloroethylene 50.4 ug/L 5 ug/L 50.0 <5 ug/L 101 65-135 30 1,1-Dichloropropene 47.8 ug/L 5 ug/L 50.0 <5 ug/L 95.7 70-135 30 5 1,2,3-Trichlorobenzene 54.1 ug/L ug/L 50.0 <5 ug/L 108 60-135 30 1,2,3-Trichloropropane 48.9 ug/L 5 ug/L 50.0 <5 ug/L 97.8 65-130 30 5 1,2,4-Trichlorobenzene 50.9 ug/L ug/L 50.0 <5 ug/L 101 65-130 30 1,2,4-Trimethylbenzene 51.5 ug/L 5 ug/L 50.0 <5 ug/L 103 65-135 30 5 50.0 <5 ug/L 1,2-Dibromo-3-chloropropane (DBCP) 59.4 ug/L 119 40-135 30 ug/L 5 50.0 <5 ug/L 1,2-Dibromoethane (EDB) 50.0 ug/L ug/L 100 70-125 30 75-120 30 1.2-Dichlorobenzene 52.6 ug/L 5 ug/L 50.0 <5 ug/L 105 1,2-Dichloroethane 46.4 ug/L 5 ug/L 50.0 <5 ug/L 92.8 70-135 30 30 49.0 ug/L 5 50.0 <5 ug/L 98.0 70-120 1,2-Dichloropropane ug/L 1,3,5-Trimethylbenzene 51.9 ug/L 5 ug/L 50.0 <5 ug/L 104 65-135 30 1,3-Dichlorobenzene 51.6 ug/L 5 ug/L 50.0 <5 ug/L 103 70-125 30 5 1,3-Dichloropropane 49.8 ug/L ug/L 50.0 <5 ug/L 99.5 75-125 30 1,4-Dichlorobenzene 51.3 ug/L 5 ug/L 50.0 <5 ug/L 103 70-125 30 5 2,2-Dichloropropane 49.9 ug/L ug/L 50.0 <5 ug/L 99.8 65-135 30 2-Butanone (MEK) 69.4 ug/L 5 ug/L 50.0 <5 ug/L 139 30-160 30 5 30 2-Chlorotoluene 52.4 ug/L ug/L 50.0 <5 ug/L 105 70-130 2-Hexanone (MBK) 60.5 ug/L 5 ug/L 50.0 <5 ug/L 121 45-145 30 4-Chlorotoluene 5 100 75-125 30 50.1 ug/L ug/L 50.0 <5 ug/L 4-Isopropyltoluene 52.4 ug/L 5 ug/L 50.0 <5 ug/L 105 75-135 30 4-Methyl-2-pentanone (MIBK) 60.9 ug/L 5 50.0 <5 ug/L 122 45-145 30 ug/L Acetone 61.2 ug/L 10 ug/L 50.0 10.1 ug/L 102 20-160 30 ug/L Benzene 50.4 ug/L 5 50.0 <5 ug/L 101 75-125 30 5 50.0 <5 ug/L 65-120 Bromobenzene 50.2 ug/L ug/L 100 30 Bromochloromethane 51.6 ug/L 5 ug/L 50.0 <5 ug/L 103 70-125 30



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell
Client Site I.D.: Fulton Gas Works

Project Number: [none]

Purchase Order:

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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0377 - SW5030B

Matrix Spike Dup (BAA0377-MSD1)	Source:	17A0384	-01	Prepare	ed & Analyze	d: 01/17/2	017	
Bromodichloromethane	52.8 ug/L	5	ug/L	50.0	<5 ug/L	106	70-130	30
Bromoform	52.7 ug/L	5	ug/L	50.0	<5 ug/L	105	55-135	30
Bromomethane	49.0 ug/L	5	ug/L	50.0	<5 ug/L	97.9	30-160	30
Carbon disulfide	61.9 ug/L	5	ug/L	50.0	<5 ug/L	124	45-160	30
Carbon tetrachloride	51.7 ug/L	5	ug/L	50.0	<5 ug/L	103	65-135	30
Chlorobenzene	50.9 ug/L	5	ug/L	50.0	<5 ug/L	102	75-125	30
Chloroethane	48.3 ug/L	5	ug/L	50.0	<5 ug/L	96.6	40-155	30
Chloroform	49.4 ug/L	5	ug/L	50.0	<5 ug/L	98.7	70-125	30
Chloromethane	46.6 ug/L	5	ug/L	50.0	<5 ug/L	93.1	50-130	30
cis-1,2-Dichloroethylene	50.5 ug/L	5	ug/L	50.0	<5 ug/L	101	65-125	30
cis-1,3-Dichloropropene	47.6 ug/L	5	ug/L	50.0	<5 ug/L	95.2	70-125	30
Dibromochloromethane	56.9 ug/L	5	ug/L	50.0	<5 ug/L	114	65-130	30
Dibromomethane	51.5 ug/L	5	ug/L	50.0	<5 ug/L	103	75-130	30
Dichlorodifluoromethane	51.3 ug/L	5	ug/L	50.0	<5 ug/L	103	35-135	30
Ethylbenzene	49.1 ug/L	5	ug/L	50.0	<5 ug/L	98.3	75-125	30
Hexachlorobutadiene	49.4 ug/L	5	ug/L	50.0	<5 ug/L	98.9	55-140	30
Isopropylbenzene	51.2 ug/L	5	ug/L	50.0	<5 ug/L	102	75-130	30
m+p-Xylenes	101 ug/L	5	ug/L	100	<5 ug/L	101	80-125	30
Methylene chloride	44.6 ug/L	5	ug/L	50.0	<5 ug/L	88.5	55-140	30
Methyl-t-butyl ether (MTBE)	50.3 ug/L	5	ug/L	50.0	<5 ug/L	101	65-125	30
Naphthalene	70.3 ug/L	5	ug/L	50.0	8.40 ug/L	124	40-125	30
n-Butylbenzene	51.9 ug/L	5	ug/L	50.0	<5 ug/L	104	65-140	30
n-Propylbenzene	52.7 ug/L	5	ug/L	50.0	<5 ug/L	105	65-135	30
o-Xylene	50.2 ug/L	5	ug/L	50.0	<5 ug/L	100	75-125	30
sec-Butylbenzene	51.9 ug/L	5	ug/L	50.0	<5 ug/L	104	65-130	30
Styrene	50.4 ug/L	5	ug/L	50.0	<5 ug/L	101	75-125	30
tert-Butylbenzene	52.8 ug/L	5	ug/L	50.0	<5 ug/L	106	65-130	30
Tetrachloroethylene (PCE)	49.3 ug/L	5	ug/L	50.0	<5 ug/L	98.6	65-140	30
Toluene	50.0 ug/L	5	ug/L	50.0	<5 ug/L	99.9	70-125	30
trans-1,2-Dichloroethylene	51.4 ug/L	5	ug/L	50.0	<5 ug/L	103	65-135	30
trans-1,3-Dichloropropene	49.7 ug/L	5	ug/L	50.0	<5 ug/L	99.4	65-125	30



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John

John Russell

Project Number:

[none]

Client Site I.D.:

Fulton Gas Works

Purchase Order:

36156.015

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0377 - SW5030B

Matrix Spike Dup (BAA0377-MSD1)	Source:	17A0384	-01	Prepared & Analyze	d: 01/17/2	017		
Trichloroethylene	48.4 ug/L	5	ug/L	50.0 <5 ug/L	96.9	75-125	30	
Trichlorofluoromethane	44.6 ug/L	5	ug/L	50.0 <5 ug/L	89.1	25-185	30	
Vinyl chloride	45.6 ug/L	5	ug/L	50.0 <5 ug/L	91.2	60-130	30	
Surr: 1,2-Dichloroethane-d4	249000		ug/kg	250000 ug/kg	99.4	80-120		
Surr: 4-Bromofluorobenzene	238000		ug/kg	250000 ug/kg	95.4	85-120		
Surr: Dibromofluoromethane	249000		ug/kg	250000 ug/kg	99.4	80-119		
Surr: Toluene-d8	251000		ug/kg	250000 ug/kg	100	85-115		



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas Works

Submitted To: John Russell

Project Number: [none]

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0362 - SW3550C

Client Site I.D.:

1,2,4,5-Tetrachlorobenzene <83.3 ug/kg 83.3 ug/kg 1,2,4-Trichlorobenzene <83.3 ug/kg 83.3 ug/kg	
1.2.4-Trichlorohenzene <83.3 ug/kg 83.3 ug/kg	
1,2,4-111011101000c112c110 400.0 dg/kg 00.0 dg/kg]
1,2-Dichlorobenzene <83.3 ug/kg 83.3 ug/kg	J
1,2-Diphenylhydrazine <83.3 ug/kg 83.3 ug/kg	I
1,3-Dichlorobenzene <83.3 ug/kg 83.3 ug/kg	I
1,4-Dichlorobenzene <83.3 ug/kg 83.3 ug/kg	J
1-Chloronaphthalene <83.3 ug/kg 83.3 ug/kg	I
1-Naphthylamine <83.3 ug/kg 83.3 ug/kg	I
2,3,4,6-Tetrachlorophenol <83.3 ug/kg 83.3 ug/kg	I
2,4,5-Trichlorophenol <83.3 ug/kg 83.3 ug/kg	I
2,4,6-Trichlorophenol <83.3 ug/kg 83.3 ug/kg	I
2,4-Dichlorophenol <83.3 ug/kg 83.3 ug/kg	I
2,4-Dimethylphenol <83.3 ug/kg 83.3 ug/kg	I
2,4-Dinitrophenol <83.3 ug/kg 83.3 ug/kg	I
2,4-Dinitrotoluene <83.3 ug/kg 83.3 ug/kg	I
2,6-Dichlorophenol <83.3 ug/kg 83.3 ug/kg	1
2,6-Dinitrotoluene <83.3 ug/kg 83.3 ug/kg	I
2-Chloronaphthalene <83.3 ug/kg 83.3 ug/kg	I
2-Chlorophenol <83.3 ug/kg 83.3 ug/kg	I
2-Methylnaphthalene <83.3 ug/kg 83.3 ug/kg	I
2-Naphthylamine <83.3 ug/kg 83.3 ug/kg	I
2-Nitroaniline <83.3 ug/kg 83.3 ug/kg	I
2-Nitrophenol <83.3 ug/kg 83.3 ug/kg	I
3,3'-Dichlorobenzidine <83.3 ug/kg 83.3 ug/kg	I
3-Methylcholanthrene <83.3 ug/kg 83.3 ug/kg	I
3-Nitroaniline <83.3 ug/kg 83.3 ug/kg	I
4,6-Dinitro-2-methylphenol <83.3 ug/kg 83.3 ug/kg	I
4-Aminobiphenyl <83.3 ug/kg 83.3 ug/kg	I
4-Bromophenyl phenyl ether <83.3 ug/kg 83.3 ug/kg	J
4-Chloroaniline <83.3 ug/kg 83.3 ug/kg	J
4-Chlorophenyl phenyl ether <83.3 ug/kg 83.3 ug/kg	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: [none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0362 - SW3550C

Blank (BAA0362-BLK1)			Prepared: 01/18/2017 Analyzed: 01/19/2017
4-Nitroaniline	<83.3 ug/kg	83.3	ug/kg
4-Nitrophenol	<83.3 ug/kg	83.3	ug/kg
7,12-Dimethylbenz (a) anthracene	<83.3 ug/kg	83.3	ug/kg
Acenaphthene	<83.3 ug/kg	83.3	ug/kg
Acenaphthylene	<83.3 ug/kg	83.3	ug/kg
Acetophenone	<83.3 ug/kg	83.3	ug/kg
Aniline	<83.3 ug/kg	83.3	ug/kg
Anthracene	<83.3 ug/kg	83.3	ug/kg
Benzidine	<83.3 ug/kg	83.3	ug/kg
Benzo (a) anthracene	<83.3 ug/kg	83.3	ug/kg
Benzo (a) pyrene	<83.3 ug/kg	83.3	ug/kg
Benzo (b) fluoranthene	<83.3 ug/kg	83.3	ug/kg
Benzo (g,h,i) perylene	<83.3 ug/kg	83.3	ug/kg
Benzo (k) fluoranthene	<83.3 ug/kg	83.3	ug/kg
Benzoic acid	<83.3 ug/kg	83.3	ug/kg
Benzyl alcohol	<83.3 ug/kg	83.3	ug/kg
ois (2-Chloroethoxy) methane	<83.3 ug/kg	83.3	ug/kg
ois (2-Chloroethyl) ether	<83.3 ug/kg	83.3	ug/kg
ois (2-Chloroisopropyl) ether	<83.3 ug/kg	83.3	ug/kg
ois (2-Ethylhexyl) phthalate	<83.3 ug/kg	83.3	ug/kg
Butyl benzyl phthalate	<83.3 ug/kg	83.3	ug/kg
Chrysene	<83.3 ug/kg	83.3	ug/kg
Dibenz (a,h) anthracene	<83.3 ug/kg	83.3	ug/kg
Dibenz (a,j) acridine	<83.3 ug/kg	83.3	ug/kg
Dibenzofuran	<83.3 ug/kg	83.3	ug/kg
Diethyl phthalate	<83.3 ug/kg	83.3	ug/kg
Dimethyl phthalate	<83.3 ug/kg	83.3	ug/kg
Di-n-butyl phthalate	<83.3 ug/kg	83.3	ug/kg
Di-n-octyl phthalate	<83.3 ug/kg	83.3	ug/kg
Diphenylamine	<83.3 ug/kg	83.3	ug/kg
Ethyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/23/2017 17:10

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

n Russell

Client Site I.D.: Fulton Gas Works

Project Number: [r

[none] 36156.015

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0362 - SW3550C

Blank (BAA0362-BLK1)				Prepared: 01/18/2017 Analyzed: 01/19/2017
Fluoranthene	<83.3 ug/kg	83.3	ug/kg	
Fluorene	<83.3 ug/kg	83.3	ug/kg	
Hexachlorobenzene	<83.3 ug/kg	83.3	ug/kg	
Hexachlorobutadiene	<83.3 ug/kg	83.3	ug/kg	
Hexachlorocyclopentadiene	<83.3 ug/kg	83.3	ug/kg	
Hexachloroethane	<83.3 ug/kg	83.3	ug/kg	
Indeno (1,2,3-cd) pyrene	<83.3 ug/kg	83.3	ug/kg	
Isophorone	<83.3 ug/kg	83.3	ug/kg	
m+p-Cresols	<83.3 ug/kg	83.3	ug/kg	
Methyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg	
Naphthalene	<83.3 ug/kg	83.3	ug/kg	
Nitrobenzene	<83.3 ug/kg	83.3	ug/kg	
n-Nitrosodimethylamine	<83.3 ug/kg	83.3	ug/kg	
n-Nitrosodi-n-butylamine	<83.3 ug/kg	83.3	ug/kg	
n-Nitrosodi-n-propylamine	<83.3 ug/kg	83.3	ug/kg	
n-Nitrosodiphenylamine	<83.3 ug/kg	83.3	ug/kg	
n-Nitrosopiperidine	<83.3 ug/kg	83.3	ug/kg	
o+m+p-Cresols	<83.3 ug/kg	83.3	ug/kg	
o-Cresol	<83.3 ug/kg	83.3	ug/kg	
p-(Dimethylamino) azobenzene	<83.3 ug/kg	83.3	ug/kg	
p-Chloro-m-cresol	<83.3 ug/kg	83.3	ug/kg	
Pentachloronitrobenzene (quintozene)	<83.3 ug/kg	83.3	ug/kg	
Pentachlorophenol	<83.3 ug/kg	83.3	ug/kg	
Phenacetin	<83.3 ug/kg	83.3	ug/kg	
Phenanthrene	<83.3 ug/kg	83.3	ug/kg	
Phenol	<83.3 ug/kg	83.3	ug/kg	
Pronamide	<83.3 ug/kg	83.3	ug/kg	
Pyrene	<83.3 ug/kg	83.3	ug/kg	
Pyridine	<83.3 ug/kg	83.3	ug/kg	
Surr: 2,4,6-Tribromophenol	2160		ug/kg	3140 68.6 35-125
Surr: 2-Fluorobiphenyl	1140		ug/kg	1570 72.2 45-105



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Final Report

Client Name: Timmons Group

Date Issued:

1/23/2017 17:10

RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: John Russell

Project Number:

[none]

%REC

Client Site I.D.: Fulto

Fulton Gas Works

Purchase Order:

Source

36156.015

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BAA0362 - SW3550C										
Blank (BAA0362-BLK1)				Prepared	l: 01/18/201	7 Analyze	d: 01/19/2	017		
Surr: 2-Fluorophenol	2390		ug/kg	3140		76.0	35-105			
Surr: Nitrobenzene-d5	1170		ug/kg	1570		74.4	35-100			
Surr: Phenol-d5	2330		ug/kg	3140		74.0	40-100			
Surr: p-Terphenyl-d14	1040		ug/kg	1570		66.1	30-125			
LCS (BAA0362-BS1)				Prepared	l & Analyzed	d: 01/18/2	017			
1,2,4-Trichlorobenzene	1080 ug/kg	83.3	ug/kg	1610	ug/kg	67.4	44-142			
1,4-Dichlorobenzene	1130 ug/kg	83.3	ug/kg	1620	ug/kg	69.8	20-124			
4-Nitrophenol	2260 ug/kg	83.3	ug/kg	3240	ug/kg	70.0	15-140			
Acenaphthene	1150 ug/kg	83.3	ug/kg	1610	ug/kg	71.6	45-110			
n-Nitrosodi-n-propylamine	1210 ug/kg	83.3	ug/kg	1610	ug/kg	75.2	40-115			
Pentachlorophenol	3100 ug/kg	83.3	ug/kg	3200	ug/kg	96.7	25-120			
Phenol	2240 ug/kg	83.3	ug/kg	3240	ug/kg	69.4	40-100			
Pyrene	1180 ug/kg	83.3	ug/kg	1620	ug/kg	72.7	45-125			
Surr: 2,4,6-Tribromophenol	2710		ug/kg	3240	ug/kg	83.7	35-125			
Surr: 2-Fluorobiphenyl	1230		ug/kg	1620	ug/kg	76.2	45-105			
Surr: 2-Fluorophenol	2510		ug/kg	3240	ug/kg	77.6	35-105			
Surr: Nitrobenzene-d5	1210		ug/kg	1620	ug/kg	74.6	35-100			
Surr: Phenol-d5	2520		ug/kg	3240	ug/kg	77.8	40-100			
Surr: p-Terphenyl-d14	1030		ug/kg	1620	ug/kg	63.4	30-125			
Duplicate (BAA0362-DUP1)	Sour	ce: 17A038	4-01	Prepared	I: 01/18/201	7 Analyze	d: 01/19/2	017		
1,2,4,5-Tetrachlorobenzene	<23100 ug/kg	23100	ug/kg		<23100 ug/kg	3		NA	20	
1,2,4-Trichlorobenzene	<23100 ug/kg	23100	ug/kg		<23100 ug/kg	j		NA	20	
1,2-Dichlorobenzene	<23100 ug/kg	23100	ug/kg		<23100 ug/kg	9		NA	20	
1,2-Diphenylhydrazine	<23100 ug/kg	23100	ug/kg		<23100 ug/kg	9		NA	20	
1,3-Dichlorobenzene	<23100 ug/kg	23100	ug/kg		<23100 ug/kg	9		NA	20	
1,4-Dichlorobenzene	<23100 ug/kg	23100	ug/kg		<23100 ug/kg	3		NA	20	
1-Chloronaphthalene	<23100 ug/kg	23100	ug/kg		<23100 ug/kg	3		NA	20	
1-Naphthylamine	<23100 ug/kg	23100	ug/kg		<23100 ug/kg	j		NA	20	
2,3,4,6-Tetrachlorophenol	<23100 ug/kg	23100	ug/kg		<23100 ug/kg	3		NA	20	
2,4,5-Trichlorophenol	<23100 ug/kg	23100	ug/kg		<23100 ug/kg	3		NA	20	



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Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: [none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

	Reporting			Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0362 - SW3550C

Duplicate (BAA0362-DUP1)	Sourc	e: 17A0384	-01	Prepared: 01/18/2017 Analyzed: 0	1/19/2017	
2,4,6-Trichlorophenol	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
2,4-Dichlorophenol	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
2,4-Dimethylphenol	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
2,4-Dinitrophenol	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
2,4-Dinitrotoluene	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
2,6-Dichlorophenol	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
2,6-Dinitrotoluene	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
2-Chloronaphthalene	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
2-Chlorophenol	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
2-Methylnaphthalene	68200 ug/kg	23100	ug/kg	66500 ug/kg	2.57	20
2-Naphthylamine	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
2-Nitroaniline	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
2-Nitrophenol	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
3,3'-Dichlorobenzidine	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
3-Methylcholanthrene	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
3-Nitroaniline	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
4,6-Dinitro-2-methylphenol	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
4-Aminobiphenyl	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
4-Bromophenyl phenyl ether	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
4-Chloroaniline	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
4-Chlorophenyl phenyl ether	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
4-Nitroaniline	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
4-Nitrophenol	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
7,12-Dimethylbenz (a) anthracene	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Acenaphthene	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Acenaphthylene	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Acetophenone	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Aniline	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Anthracene	33800 ug/kg	23100	ug/kg	34400 ug/kg	1.95	20
Benzidine	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Benzo (a) anthracene	63000 ug/kg	23100	ug/kg	69600 ug/kg	9.96	20



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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

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Project Number: [none]

Fulton Gas Works

Purchase Order: 3

36156.015

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0362 - SW3550C

Duplicate (BAA0362-DUP1)	Source	e: 17A0384	-01	Prepared: 01/18/2017 Analyzed: 01/19		
Benzo (a) pyrene	50500 ug/kg	23100	ug/kg	56300 ug/kg	10.9	20
Benzo (b) fluoranthene	56600 ug/kg	23100	ug/kg	58400 ug/kg	3.02	20
Benzo (g,h,i) perylene	48100 ug/kg	23100	ug/kg	57400 ug/kg	17.6	20
Benzo (k) fluoranthene	<23100 ug/kg	23100	ug/kg	26700 ug/kg	NA	20
Benzoic acid	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Benzyl alcohol	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
bis (2-Chloroethoxy) methane	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
bis (2-Chloroethyl) ether	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
bis (2-Chloroisopropyl) ether	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
bis (2-Ethylhexyl) phthalate	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Butyl benzyl phthalate	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Chrysene	57100 ug/kg	23100	ug/kg	63500 ug/kg	10.7	20
Dibenz (a,h) anthracene	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Dibenz (a,j) acridine	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Dibenzofuran	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Diethyl phthalate	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Dimethyl phthalate	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Di-n-butyl phthalate	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Di-n-octyl phthalate	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Diphenylamine	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Ethyl methanesulfonate	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Fluoranthene	179000 ug/kg	23100	ug/kg	178000 ug/kg	0.722	20
Fluorene	31300 ug/kg	23100	ug/kg	26400 ug/kg	17.2	20
Hexachlorobenzene	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Hexachlorobutadiene	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Hexachlorocyclopentadiene	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Hexachloroethane	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Indeno (1,2,3-cd) pyrene	41500 ug/kg	23100	ug/kg	47400 ug/kg	13.3	20
Isophorone	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
m+p-Cresols	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20
Methyl methanesulfonate	<23100 ug/kg	23100	ug/kg	<23100 ug/kg	NA	20



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Richmond VA, 23225

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Batch BAA0362 - SW3550C

4-Nitrophenol

Acenaphthene

Project Number:

[none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

15-140

45-110

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Duplicate (BAA0362-DUP1) Source: 17A0384-01 Prepared: 01/18/2017 Analyzed: 01/19/2017 120000 ug/kg Р Naphthalene 23100 ug/kg 96300 ug/kg 22.3 20 <23100 ug/kg 23100 <23100 ug/kg 20 Nitrobenzene ug/kg NA <23100 ug/kg 23100 <23100 ug/kg 20 n-Nitrosodimethylamine ug/kg NA n-Nitrosodi-n-butylamine <23100 ug/kg 23100 <23100 ug/kg 20 ug/kg NA n-Nitrosodi-n-propylamine 23100 20 <23100 ug/kg <23100 ug/kg NA ug/kg n-Nitrosodiphenylamine <23100 ug/kg 23100 ug/kg <23100 ug/kg NA 20 <23100 ug/kg <23100 ug/kg n-Nitrosopiperidine 23100 NA 20 ug/kg 23100 o+m+p-Cresols <23100 ug/kg ug/kg <23100 ug/kg NA 20 o-Cresol <23100 ug/kg 23100 ug/kg <23100 ug/kg NA 20 23100 <23100 ug/kg p-(Dimethylamino) azobenzene <23100 ug/kg ug/kg NA 20 <23100 ug/kg 23100 p-Chloro-m-cresol ug/kg <23100 ug/kg NA 20 Pentachloronitrobenzene (quintozene) 23100 20 <23100 ug/kg <23100 ug/kg NA ug/kg <23100 ug/kg 23100 <23100 ug/kg 20 Pentachlorophenol ug/kg NA 20 Phenacetin <23100 ug/kg 23100 ug/kg <23100 ug/kg NA Phenanthrene 247000 ug/kg 23100 ug/kg 227000 ug/kg 8.44 20 Phenol 23100 20 <23100 ug/kg <23100 ug/kg NA ug/kg Pronamide <23100 ug/kg 23100 ug/kg <23100 ug/kg NA 20 Pyrene 148000 ug/kg 23100 137000 ug/kg 7.85 20 ug/kg Pyridine <23100 ug/kg 23100 ug/kg <23100 ug/kg NA 20 16800 Surr: 2,4,6-Tribromophenol 9260 ug/kg 182 35-125 DS ug/kg Surr: 2-Fluorobiphenyl 5210 4630 ug/kg 113 45-105 DS ug/kg Surr: 2-Fluorophenol ND 9260 35-105 DS ug/kg ug/kg Surr: Nitrobenzene-d5 4050 4630 ug/kg 87.4 35-100 DS ug/kg Surr: Phenol-d5 ND 9260 ug/kg 40-100 DS ug/kg DS Surr: p-Terphenyl-d14 7000 30-125 ug/kg 4630 ug/kg 151 Prepared: 01/18/2017 Analyzed: 01/19/2017 Matrix Spike (BAA0362-MS1) Source: 17A0384-01 1,2,4-Trichlorobenzene <23800 ug/kg 23800 ug/kg 4730 <23800 ug/kg 44-142 Μ 1,4-Dichlorobenzene <23800 ug/kg 23800 ug/kg 4760 <23800 ug/kg 20-124 М

23800

23800

ug/kg

ug/kg

9520

<23800 ug/kg

4740 <23800 ug/kg

<23800 ug/kg

<23800 ug/kg

М

Μ



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Client Name: Timmons Group

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1/23/2017 17:10

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

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Project Number:

[none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0362 - SW3550C

Matrix Spike (BAA0362-MS1)	Sourc	e: 17A0384	I-01	Prepare	d: 01/18/2017	ed: 01/19/2017		
n-Nitrosodi-n-propylamine	<23800 ug/kg	23800	ug/kg	4740	<23800 ug/kg		40-115	M
Pentachlorophenol	<23800 ug/kg	23800	ug/kg	9430	<23800 ug/kg		25-120	M
Phenol	<23800 ug/kg	23800	ug/kg	9520	<23800 ug/kg		40-100	M
Pyrene	151000 ug/kg	23800	ug/kg	4760	137000 ug/kg	309	45-125	M
Surr: 2,4,6-Tribromophenol	16800		ug/kg	9520	ug/kg	177	35-125	М
Surr: 2-Fluorobiphenyl	5200		ug/kg	4760	ug/kg	109	45-105	M
Surr: 2-Fluorophenol	1740		ug/kg	9520	ug/kg	18.3	35-105	M
Surr: Nitrobenzene-d5	3900		ug/kg	4760	ug/kg	82.0	35-100	
Surr: Phenol-d5	581		ug/kg	9520	ug/kg	6.10	40-100	M
Surr: p-Terphenyl-d14	7100		ug/kg	4760	ug/kg	149	30-125	М



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Client Name: Timmons Group Date Issued:

1/23/2017 17:10

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number:

[none]

%REC

Client Site I.D.: Fulton Gas Works

Purchase Order:

Source

36156.015

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
 Batch BAA0418 - SW3550B										· · · · · · · · · · · · · · · · · · ·
					. 04/40/004	7 4 1	1 04/00/0	0.4.7		
Blank (BAA0418-BLK1)				Prepared	l: 01/19/201	/ Analyze	d: 01/20/2	017		
PCB as Aroclor 1016	<0.100 mg/kg wet	0.100	mg/kg wet							
PCB as Aroclor 1221	<0.100 mg/kg wet	0.100	mg/kg wet							
PCB as Aroclor 1232	<0.100 mg/kg wet	0.100	mg/kg wet							
PCB as Aroclor 1242	<0.100 mg/kg wet	0.100	mg/kg wet							
PCB as Aroclor 1248	<0.100 mg/kg wet	0.100	mg/kg wet							
PCB as Aroclor 1254	<0.100 mg/kg wet	0.100	mg/kg wet							
PCB as Aroclor 1260	<0.100 mg/kg wet	0.100	mg/kg wet							
Surr: DCB	0.0255		mg/kg wet	0.0318		80.0	30-105			
Surr: TCMX	0.0191		mg/kg wet	0.0318		60.0	30-105			
LCS (BAA0418-BS1)				Prepared	I: 01/19/201	7 Analyze	d: 01/20/2	017		
PCB as Aroclor 1016	0.145 mg/kg wet	0.100	mg/kg wet	0.167	mg/kg wet	87.0	60-140			
PCB as Aroclor 1260	0.120 mg/kg wet	0.100	mg/kg wet	0.167	mg/kg wet	72.0	60-140			
Surr: DCB	0.0283		mg/kg wet	0.0333	mg/kg wet	85.0	30-105			
Surr: TCMX	0.0267		mg/kg wet	0.0333	mg/kg wet	80.0	30-105			
Matrix Spike (BAA0418-MS1)	Sou	rce: 17A039	0-06	Prepared	I: 01/19/201	7 Analyze	d: 01/20/2	017		
PCB as Aroclor 1016	0.162 mg/kg dry	0.106	mg/kg dry	0.176	<0.106 mg/kg	dry92.0	60-140			
PCB as Aroclor 1260	0.149 mg/kg dry	0.106	mg/kg dry	0.176	<0.106 mg/kg	dry85.0	60-140			
Surr: DCB	0.0299		mg/kg dry	0.0352	mg/kg dry	85.0	30-105			
Surr: TCMX	0.0299		mg/kg dry	0.0352	mg/kg dry	85.0	30-105			
Matrix Spike Dup (BAA0418-MSD1)	Sou	rce: 17A039	0-06	Prepared	I: 01/19/201	7 Analyze	d: 01/20/2	017		
PCB as Aroclor 1016	0.171 mg/kg dry	0.110	mg/kg dry	0.184	<0.110 mg/kg	dry93.0	60-140	5.54	20	
PCB as Aroclor 1260	0.136 mg/kg dry	0.110	mg/kg dry	0.184	<0.110 mg/kg	dry74.0	60-140	9.39	20	
Surr: DCB	0.0257		mg/kg dry	0.0368	mg/kg dry	70.0	30-105			
Surr: TCMX	0.0294		mg/kg dry	0.0368	mg/kg dry	80.0	30-105			



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Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

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Fulton Gas Works

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Client Site I.D.:

Blank (BAA0348-BLK1)

Project Number: [none]

Purchase Order:

Prepared & Analyzed: 01/17/2017

36156.015

Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BAA0348 - No Prep Halides										

Percent Solids 100 % 0.10 %

 Duplicate (BAA0348-DUP1)
 Source: 17A0384-03
 Prepared & Analyzed: 01/17/2017

Percent Solids 86.0 % 0.10 % 84.8 % 1.34 20



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Final Report

Client Name: Timmons Group

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas Works

Submitted To: John Russell

Client Site I.D.:

Project Number: [none]

Purchase Order:

36156.015

Analyte	Certifications
SW8082A in Solids	
PCB as Aroclor 1016	VELAP,NC
PCB as Aroclor 1221	VELAP,NC
PCB as Aroclor 1232	VELAP,NC
PCB as Aroclor 1242	VELAP,NC
PCB as Aroclor 1248	VELAP,NC
PCB as Aroclor 1254	VELAP,NC
PCB as Aroclor 1260	VELAP,NC
SW8260B in Solids	
1,1,1,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1,1-Trichloroethane	NC,VELAP,WVDEP
1,1,2,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1,2-Trichloroethane	NC,VELAP,WVDEP
1,1-Dichloroethane	NC,VELAP,WVDEP
1,1-Dichloroethylene	NC,VELAP,WVDEP
1,1-Dichloropropene	NC,VELAP,WVDEP
1,2,3-Trichlorobenzene	NC,VELAP,WVDEP
1,2,3-Trichloropropane	NC,VELAP,WVDEP
1,2,4-Trichlorobenzene	NC,VELAP,WVDEP
1,2,4-Trimethylbenzene	NC,VELAP,WVDEP
1,2-Dibromo-3-chloropropane (DBCP)	NC,VELAP,WVDEP
1,2-Dibromoethane (EDB)	NC,VELAP,WVDEP
1,2-Dichlorobenzene	NC,VELAP,WVDEP
1,2-Dichloroethane	NC,VELAP,WVDEP
1,2-Dichloropropane	NC,VELAP,WVDEP
1,3,5-Trimethylbenzene	NC,VELAP,WVDEP
1,3-Dichlorobenzene	NC,VELAP,WVDEP
1,3-Dichloropropane	NC,VELAP,WVDEP
1,4-Dichlorobenzene	NC,VELAP,WVDEP
2,2-Dichloropropane	NC,VELAP,WVDEP
2-Butanone (MEK)	NC,VELAP,WVDEP
2-Chlorotoluene	NC,VELAP,WVDEP
2-Hexanone (MBK)	NC,VELAP,WVDEP
4-Chlorotoluene	NC,VELAP,WVDEP
4-Isopropyltoluene	NC,VELAP,WVDEP
4-Methyl-2-pentanone (MIBK)	NC,VELAP,WVDEP
Acetone	NC,VELAP,WVDEP



Certificate of Analysis

Final Report

Client Name: Timmons Group

1001 Boulders Parkway, Suite 300

1/23/2017 17:10

Richmond VA, 23225

Submitted To: John Russell

Project Number:

Date Issued:

[none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

Order: 36156.015

Analyte	Certifications
Benzene	NC,VELAP,WVDEP
Bromobenzene	NC,VELAP,WVDEP
Bromochloromethane	NC,VELAP,WVDEP
Bromodichloromethane	NC,VELAP,WVDEP
Bromoform	NC,VELAP,WVDEP
Bromomethane	NC,VELAP,WVDEP
Carbon disulfide	NC,VELAP,WVDEP
Carbon tetrachloride	NC,VELAP,WVDEP
Chlorobenzene	NC,VELAP,WVDEP
Chloroethane	NC,VELAP,WVDEP
Chloroform	NC,VELAP,WVDEP
Chloromethane	NC,VELAP,WVDEP
cis-1,2-Dichloroethylene	NC,VELAP,WVDEP
cis-1,3-Dichloropropene	NC,VELAP,WVDEP
Dibromochloromethane	NC,VELAP,WVDEP
Dibromomethane	NC,VELAP,WVDEP
Dichlorodifluoromethane	NC,VELAP,WVDEP
Di-isopropyl ether (DIPE)	NC,VELAP,WVDEP
Ethylbenzene	NC,VELAP,WVDEP
Hexachlorobutadiene	NC,VELAP,WVDEP
lodomethane	NC,VELAP,WVDEP
Isopropylbenzene	NC,VELAP,WVDEP
m+p-Xylenes	NC,VELAP,WVDEP
Methylene chloride	NC,VELAP,WVDEP
Methyl-t-butyl ether (MTBE)	NC,VELAP,WVDEP
Naphthalene	NC,VELAP,WVDEP
n-Butylbenzene	NC,VELAP,WVDEP
n-Propylbenzene	NC,VELAP,WVDEP
o-Xylene	NC,VELAP,WVDEP
sec-Butylbenzene	NC,VELAP,WVDEP
Styrene	NC,VELAP,WVDEP
tert-Butylbenzene	NC,VELAP,WVDEP
Tetrachloroethylene (PCE)	NC,VELAP,WVDEP
Toluene	NC,VELAP,WVDEP
trans-1,2-Dichloroethylene	NC,VELAP,WVDEP
trans-1,3-Dichloropropene	NC,VELAP,WVDEP
Trichloroethylene	NC,VELAP,WVDEP
Trichlorofluoromethane	NC,VELAP,WVDEP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Client Site I.D.:

Project Number: [none]

Fulton Gas Works Purchase Order:

Analyte	Certifications
Vinyl acetate	NC,VELAP,WVDEP
Vinyl chloride	NC,VELAP,WVDEP
Xylenes, Total	NC,VELAP,WVDEP
Dibromofluoromethane	VELAP
SW8270D in Solids	
1,2,4,5-Tetrachlorobenzene	NC,VELAP,WVDEP
1,2,4-Trichlorobenzene	NC,VELAP,WVDEP
1,2-Dichlorobenzene	NC,VELAP,WVDEP
1,2-Diphenylhydrazine	NC,VELAP,WVDEP
1,3-Dichlorobenzene	NC,VELAP,WVDEP
1,4-Dichlorobenzene	NC,VELAP,WVDEP
1-Chloronaphthalene	NC,VELAP,WVDEP
1-Naphthylamine	NC,VELAP,WVDEP
2,3,4,6-Tetrachlorophenol	NC,VELAP,WVDEP
2,4,5-Trichlorophenol	NC,VELAP,WVDEP
2,4,6-Trichlorophenol	NC,VELAP,WVDEP
2,4-Dichlorophenol	NC,VELAP,WVDEP
2,4-Dimethylphenol	NC,VELAP,WVDEP
2,4-Dinitrophenol	NC,VELAP,WVDEP
2,4-Dinitrotoluene	NC,VELAP,WVDEP
2,6-Dichlorophenol	NC,VELAP,WVDEP
2,6-Dinitrotoluene	NC,VELAP,WVDEP
2-Chloronaphthalene	NC,VELAP,WVDEP
2-Chlorophenol	NC,VELAP,WVDEP
2-Methylnaphthalene	NC,VELAP,WVDEP
2-Naphthylamine	NC,VELAP,WVDEP
2-Nitroaniline	NC,VELAP,WVDEP
2-Nitrophenol	NC,VELAP,WVDEP
3-Methylcholanthrene	NC,VELAP,WVDEP
3-Nitroaniline	NC,VELAP,WVDEP
4,6-Dinitro-2-methylphenol	NC,VELAP,WVDEP
4-Aminobiphenyl	NC,VELAP,WVDEP
4-Bromophenyl phenyl ether	NC,VELAP,WVDEP
4-Chloroaniline	NC,VELAP,WVDEP
4-Chlorophenyl phenyl ether	NC,VELAP,WVDEP
4-Nitroaniline	NC,VELAP,WVDEP
4-Nitrophenol	NC,VELAP,WVDEP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Client Site I.D.:

Project Number: [none] 36156.015

Fulton Gas Works Purchase Order:

Analyte	Certifications
7,12-Dimethylbenz (a) anthracene	NC,VELAP,WVDEP
Acenaphthene	NC,VELAP,WVDEP
Acenaphthylene	NC,VELAP,WVDEP
Acetophenone	NC,VELAP,WVDEP
Aniline	NC,VELAP,WVDEP
Anthracene	NC,VELAP,WVDEP
Benzidine	NC,VELAP,WVDEP
Benzo (a) anthracene	NC,VELAP,WVDEP
Benzo (a) pyrene	NC,VELAP,WVDEP
Benzo (b) fluoranthene	NC,VELAP,WVDEP
Benzo (g,h,i) perylene	NC,VELAP,WVDEP
Benzo (k) fluoranthene	NC,VELAP,WVDEP
Benzoic acid	NC,VELAP,WVDEP
Benzyl alcohol	NC,VELAP,WVDEP
bis (2-Chloroethoxy) methane	NC,VELAP,WVDEP
bis (2-Chloroethyl) ether	NC,VELAP,WVDEP
bis (2-Chloroisopropyl) ether	NC,VELAP,WVDEP
bis (2-Ethylhexyl) phthalate	NC,VELAP,WVDEP
Butyl benzyl phthalate	NC,VELAP,WVDEP
Chrysene	NC,VELAP,WVDEP
Dibenz (a,h) anthracene	NC,VELAP,WVDEP
Dibenz (a,j) acridine	NC,VELAP,WVDEP
Dibenzofuran	NC,VELAP,WVDEP
Diethyl phthalate	NC,VELAP,WVDEP
Dimethyl phthalate	NC,VELAP,WVDEP
Di-n-butyl phthalate	NC,VELAP,WVDEP
Di-n-octyl phthalate	NC,VELAP,WVDEP
Diphenylamine	NC,VELAP,WVDEP
Ethyl methanesulfonate	NC,VELAP,WVDEP
Fluoranthene	NC,VELAP,WVDEP
Fluorene	NC,VELAP,WVDEP
Hexachlorobenzene	NC,VELAP,WVDEP
Hexachlorobutadiene	NC,VELAP,WVDEP
Hexachlorocyclopentadiene	NC,VELAP,WVDEP
Hexachloroethane	NC,VELAP,WVDEP
Indeno (1,2,3-cd) pyrene	NC,VELAP,WVDEP
Isophorone	NC,VELAP,WVDEP
m+p-Cresols	NC,VELAP,WVDEP



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Client Site I.D.:

Project Number: [none] 36156.015

Fulton Gas Works Purchase Order:

Analyte		Certifications									
Methyl methanesulfonate		NC,VELAP,WVI	DEP								
Naphthalene		NC,VELAP,WVI	DEP								
Nitrobenzene		NC,VELAP,WVI	DEP								
n-Nitrosodimethylamine		NC,VELAP,WVI	DEP								
n-Nitrosodi-n-butylamine		NC,VELAP,WVDEP									
n-Nitrosodi-n-propylamine		NC,VELAP,WVDEP									
n-Nitrosodiphenylamine		NC,VELAP,WVI	DEP								
n-Nitrosopiperidine		NC,VELAP,WVI	DEP								
o+m+p-Cresols		NC,VELAP,WVI	DEP								
o-Cresol		NC,VELAP,WVDEP									
p-(Dimethylamino) azobenzene		NC,VELAP,WVDEP									
p-Chloro-m-cresol		NC,VELAP,WVDEP									
Pentachloronitrobenzene (quintozene)		NC,WVDEP									
Pentachlorophenol		NC,VELAP,WVDEP									
Phenacetin		NC,VELAP,WVDEP									
Phenanthrene		NC,VELAP,WVDEP									
Phenol		NC,VELAP,WVDEP									
Pronamide		NC,VELAP,WVDEP									
Pyrene		NC,VELAP,WVDEP									
Pyridine		NC,VELAP,WVI	DEP								
Code	Description		Lab Number	Expires							
MdDOE	Maryland DE Drinking Water		341	12/31/2017							
NC	North Carolina DENR		495	12/31/2017							
PADEP	NELAC-Pennsylvania		001	10/31/2017							
VELAP	NELAC-Virginia Certificate #8886		460021	06/15/2017							
WVDEP	West Virginia DEP		350	11/30/2017							



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: [none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Summary of Data Qualifiers

DS Surrogate concentration reflects a dilution factor.

M Matrix spike recovery is outside established acceptance limits

P Duplicate analysis does not meet the acceptance criteria for precision

S Surrogate recovery was outside acceptance criteria

RPD Relative Percent Difference

Qual Qualifers

-RE Denotes sample was re-analyzed

D.F. Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.

TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library.

A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated

and are calculated using an internal standard response factor of 1.

PCBs, Total Total PCBs are defined as the sum of detected Aroclors 1016, 1221, 1232, 1248, 1254, 1260, 1262, and 1268.



1941 REYMET ROAD **RICHMOND, VIRGINIA 23237** (804) 358-8295 PHONE (804)358-8297 FAX

Chain of Custody Form #: D1331 Rev. 1.0 Effective: Feb 14, 2014

v130325002

LABORA	TORIE	S, INC.				CHA	IN OF	CUS	TO	DY								PAGEOF
COMPANY NAME: Timmons	gro	rp		IN	VOICE TO	: nn	mons	gr	pup			PR	OJEC	Г NAM	E/Quo	te #:	Fu	Hon my Work
CONTACT: Juha Car	non.	1		IN	VOICE CO	ONTAC	T: /	1 100	2			SI	TE NAM	ЛЕ:		5421		
ADDRESS: 1001 Bon Ide	15 4	Ptwy		IN	VOICE AD	DRES	S: V	arre			17.44	PF	OJEC	T NUM	BER:		147	
	143	/		IN	VOICE PH	IONE #	<i>‡</i> :					P.0	D. #:	361	156.	015		F . 151 FW . 2
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Is sample for compliance repor	ting?	YES (NO	1	Is sample						YES	NO	>		1477	PWS	I.D. #:	1 18 84
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Matrix Codes: WW=Waste Water/Storm V	Vater G	W=Groun	d Water DW	=Drinking	Water S=Soi	I/Solids	OR=Orga	nie A=Ai	r WP:	=Wipe C	T=Other_			17 1			311	COMMENTS
CLIENT SAMPLE I.D. 1) 513-19		Composite Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time		Matrix (See Codes)	- Number of Containers	1. h / 5001 XX		PC3s/42	S / (PR	RESER	VATIV	(E)		Preservative Codes: N=Nitric Acic C=Hydrochloric Acid S=Sulfuric Aci H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol PLEASE NOTE PRESERVATIVE(S INTERFERENCE CHECKS or PUN RATE (L/min)
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of 40									Leve	IV			w strong	Rec	d: 01	/16/20	17 D	Due: 01/23/2017



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/23/2017 17:10

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: John Russell

Project Number: [none]

Client Site I.D.: Fulton Gas Works

Purchase Order:

36156.015

Sample Conditions Checklist

Samples Received at:	2.50°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes

As per Julia Campus, cancel analyses on SB-21. MMB 16:51 1/16/17



Certificate of Analysis

Final Report

Laboratory Order ID 17A0484

Client Name: Timmons Group Date Received: January 18, 2017 16:30

1001 Boulders Parkway, Suite 300 Date Issued: January 25, 2017 17:23

Richmond, VA 23225

Project Number: 36156.015

Submitted To: Julia Campus Purchase Order:

Client Site I.D.: Fulton Gas

Enclosed are the results of analyses for samples received by the laboratory on 01/18/2017 16:30. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

Ted Soyars

Laboratory Manager

E0 70/415

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

This report shall not be reproduced except in full without the expressed and written approval of an authorized representative of Air Water & Soil Laboratories, Inc.









Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

ANALYTICAL REPORT FOR SAMPLES Laboratory Order ID 17A0484

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-8	17A0484-01	Ground Water	01/17/2017 11:15	01/18/2017 16:30
MW-21	17A0484-02	Ground Water	01/17/2017 09:45	01/18/2017 16:30
MW-20	17A0484-03	Ground Water	01/17/2017 10:30	01/18/2017 16:30
MW-19	17A0484-04	Ground Water	01/17/2017 12:30	01/18/2017 16:30
MW-31	17A0484-05	Ground Water	01/17/2017 13:00	01/18/2017 16:30
MW-17	17A0484-06	Ground Water	01/17/2017 15:40	01/18/2017 16:30
MW-18	17A0484-07	Ground Water	01/17/2017 16:35	01/18/2017 16:30
MW-15	17A0484-08	Ground Water	01/17/2017 10:00	01/18/2017 16:30
MW-16	17A0484-09	Ground Water	01/17/2017 11:30	01/18/2017 16:30
MW-13	17A0484-10	Ground Water	01/17/2017 14:20	01/18/2017 16:30
MW-14	17A0484-11	Ground Water	01/17/2017 13:10	01/18/2017 16:30
Trip Blank	17A0484-12	Ground Water	12/01/2016 16:35	01/18/2017 16:30



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-8 Laboratory Sample ID: 17A0484-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	eries Method	ls							
Silver	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:36	CWO
Arsenic	01	EPA200.8 R5.4	2.57 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:08	BG
Beryllium	01	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:36	CWO
Cadmium	01	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:36	CWO
Chromium	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:36	CWO
Copper	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:36	CWO
Mercury	01	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	01/23/17 08:45	01/24/17 09:20	RCV
Nickel	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:36	CWO
Lead	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:36	CWO
Antimony	01	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:08	BG
Selenium	01	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:08	BG
Thallium	01	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:08	BG
Zinc	01	EPA200.7 Rev 4.4	0.0201 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:36	CWO
Volatile Organic Compounds	s by GCMS								
1,1,1,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	01/19/17 12:50	01/19/17 12:50	KCS
1,1,1-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,1,2,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	01/19/17 12:50	01/19/17 12:50	KCS
1,1,2-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,1-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,1-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,1-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,2,3-Trichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,2,3-Trichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,2,4-Trichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,2,4-Trimethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 361

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-8 Laboratory Sample ID: 17A0484-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	01	SW8260B	<4.00 ug/L		4.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,2-Dibromoethane (EDB)	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,2-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,2-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,2-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,3,5-Trimethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,3-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,3-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
1,4-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
2,2-Dichloropropane	01	SW8260B	<2.00 ug/L		2.00	1	01/19/17 12:50	01/19/17 12:50	KCS
2-Butanone (MEK)	01	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:50	01/19/17 12:50	KCS
2-Chlorotoluene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
2-Hexanone (MBK)	01	SW8260B	<5.00 ug/L		5.00	1	01/19/17 12:50	01/19/17 12:50	KCS
4-Chlorotoluene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
4-Isopropyltoluene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
4-Methyl-2-pentanone (MIBK)	01	SW8260B	<5.00 ug/L		5.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Acetone	01	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:50	01/19/17 12:50	KCS
Benzene	01	SW8260B	23.8 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Bromobenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Bromochloromethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Bromodichloromethane	01	SW8260B	<0.50 ug/L		0.50	1	01/19/17 12:50	01/19/17 12:50	KCS
Bromoform	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Bromomethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Carbon disulfide	01	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:50	01/19/17 12:50	KCS
Carbon tetrachloride	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Chlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number:

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-8 Laboratory Sample ID: 17A0484-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Chloroform	01	SW8260B	<0.50 ug/L		0.50	1	01/19/17 12:50	01/19/17 12:50	KCS
Chloromethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
cis-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
cis-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Dibromochloromethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Dibromomethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Dichlorodifluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Di-isopropyl ether (DIPE)	01	SW8260B	<5.00 ug/L		5.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Ethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Hexachlorobutadiene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
lodomethane	01	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:50	01/19/17 12:50	KCS
Isopropylbenzene	01	SW8260B	5.70 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
m+p-Xylenes	01	SW8260B	<2.00 ug/L		2.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Methylene chloride	01	SW8260B	<4.00 ug/L		4.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Methyl-t-butyl ether (MTBE)	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Naphthalene	01	SW8260B	4.74 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
n-Butylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
n-Propylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
o-Xylene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
sec-Butylbenzene	01	SW8260B	2.01 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Styrene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
tert-Butylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Tetrachloroethylene (PCE)	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Toluene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
trans-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 30

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-8 Laboratory Sample ID: 17A0484-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Trichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Trichlorofluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Vinyl acetate	01	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:50	01/19/17 12:50	KCS
Vinyl chloride	01	SW8260B	<0.50 ug/L		0.50	1	01/19/17 12:50	01/19/17 12:50	KCS
Xylenes, Total	01	SW8260B	<3.00 ug/L		3.00	1	01/19/17 12:50	01/19/17 12:50	KCS
Surr: 1,2-Dichloroethane-d4	01	SW8260B	102 %		70-120		01/19/17 12:50	01/19/17 12:50	KCS
Surr: 4-Bromofluorobenzene	01	SW8260B	96.9 %		75-120		01/19/17 12:50	01/19/17 12:50	KCS
Surr: Dibromofluoromethane	01	SW8260B	102 %		80-119		01/19/17 12:50	01/19/17 12:50	KCS
Surr: Toluene-d8	01	SW8260B	102 %		85-120		01/19/17 12:50	01/19/17 12:50	KCS
Semivolatile Organic Compou	ınds by GC	MS							
2,3,7,8-TCDD (SIM)	01	EPA625	Not Detected			1	01/20/17 09:03	01/25/17 12:02	SKS
1,2,4,5-Tetrachlorobenzene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
1,2,4-Trichlorobenzene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
1,2-Dichlorobenzene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
1,2-Diphenylhydrazine	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
1,3-Dichlorobenzene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
1,3-Dinitrobenzene	01	SW8270D	<11.2 ug/L		11.2	4	01/20/17 09:03	01/24/17 17:16	SKS
1,4-Dichlorobenzene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
1-Naphthylamine	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2,3,4,6-Tetrachlorophenol	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2,4,5-Trichlorophenol	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2,4,6-Trichlorophenol	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2,4-Dichlorophenol	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2,4-Dimethylphenol	01	SW8270D	<2.25 ug/L		2.25	4	01/20/17 09:03	01/24/17 17:16	SKS
2,4-Dinitrophenol	01	SW8270D	<225 ug/L		225	4	01/20/17 09:03	01/24/17 17:16	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-8 Laboratory Sample ID: 17A0484-01

Parameter	Samp ID	Method	Result	Reporting Qual Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS						
2,4-Dinitrotoluene	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2,6-Dichlorophenol	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2,6-Dinitrotoluene	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2-Chloronaphthalene	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2-Chlorophenol	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2-Methylnaphthalene	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2-Naphthylamine	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2-Nitroaniline	01	SW8270D	<89.9 ug/L	89.9	4	01/20/17 09:03	01/24/17 17:16	SKS
2-Nitrophenol	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
3,3'-Dichlorobenzidine	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
3-Methylcholanthrene	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
3-Nitroaniline	01	SW8270D	<89.9 ug/L	89.9	4	01/20/17 09:03	01/24/17 17:16	SKS
4,6-Dinitro-2-methylphenol	01	SW8270D	<225 ug/L	225	4	01/20/17 09:03	01/24/17 17:16	SKS
4-Aminobiphenyl	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
4-Bromophenyl phenyl ether	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
4-Chloroaniline	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
4-Chlorophenyl phenyl ether	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
4-Nitroaniline	01	SW8270D	<89.9 ug/L	89.9	4	01/20/17 09:03	01/24/17 17:16	SKS
4-Nitrophenol	01	SW8270D	<225 ug/L	225	4	01/20/17 09:03	01/24/17 17:16	SKS
7,12-Dimethylbenz (a) anthracene	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Acenaphthene	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Acenaphthylene	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Acetophenone	01	SW8270D	<89.9 ug/L	89.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Aniline	01	SW8270D	<225 ug/L	225	4	01/20/17 09:03	01/24/17 17:16	SKS
Anthracene	01	SW8270D	<44.9 ug/L	44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Benzidine	01	SW8270D	<225 ug/L	225	4	01/20/17 09:03	01/24/17 17:16	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Fulton Gas

Laboratory Order ID: 17A0484

Analytical Results

Client Site I.D.:

Laboratory Sample ID: 17A0484-01 Sample I.D. MW-8

Parameter	Samp ID	Method	Result	R Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	nds by GC	MS							
Benzo (a) anthracene	01	SW8270D	0.53 ug/L		0.22	4	01/20/17 09:03	01/24/17 17:16	SKS
Benzo (a) pyrene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Benzo (b) fluoranthene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Benzo (g,h,i) perylene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Benzo (k) fluoranthene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Benzoic acid	01	SW8270D	<225 ug/L		225	4	01/20/17 09:03	01/24/17 17:16	SKS
Benzyl alcohol	01	SW8270D	<89.9 ug/L		89.9	4	01/20/17 09:03	01/24/17 17:16	SKS
bis (2-Chloroethoxy) methane	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
bis (2-Chloroethyl) ether	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
bis (2-Chloroisopropyl) ether	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
bis (2-Ethylhexyl) phthalate	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Butyl benzyl phthalate	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Chrysene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Dibenz (a,h) anthracene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Dibenz (a,j) acridine	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Dibenzofuran	01	SW8270D	<22.5 ug/L		22.5	4	01/20/17 09:03	01/24/17 17:16	SKS
Diethyl phthalate	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Dimethyl phthalate	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Di-n-butyl phthalate	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Di-n-octyl phthalate	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Diphenylamine	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Ethyl methanesulfonate	01	SW8270D	<89.9 ug/L		89.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Fluoranthene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Fluorene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Hexachlorobenzene	01	SW8270D	<4.49 ug/L		4.49	4	01/20/17 09:03	01/24/17 17:16	SKS
Hexachlorobutadiene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-8 Laboratory Sample ID: 17A0484-01

Parameter	Samp ID	Method	Result	R Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Hexachlorocyclopentadiene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Hexachloroethane	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Indeno (1,2,3-cd) pyrene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Isophorone	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
m+p-Cresols	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Methyl methanesulfonate	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Naphthalene	01	SW8270D	<22.5 ug/L		22.5	4	01/20/17 09:03	01/24/17 17:16	SKS
Nitrobenzene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
n-Nitrosodimethylamine	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
n-Nitrosodi-n-butylamine	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
n-Nitrosodi-n-propylamine	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
n-Nitrosodiphenylamine	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
n-Nitrosopiperidine	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
o+m+p-Cresols	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
o-Cresol	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
p-(Dimethylamino) azobenzene	01	SW8270D	<11.2 ug/L		11.2	4	01/20/17 09:03	01/24/17 17:16	SKS
p-Chloro-m-cresol	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Pentachloronitrobenzene (quintozene)	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Pentachlorophenol	01	SW8270D	<89.9 ug/L		89.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Phenacetin	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Phenanthrene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Phenol	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Pronamide	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Pyrene	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS
Pyridine	01	SW8270D	<44.9 ug/L		44.9	4	01/20/17 09:03	01/24/17 17:16	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

1/25/2017 17:23

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Laboratory Order ID: 17A0484

 Analytical Results MW-8

Date/Time Sampled:

Sample I.D.

01/17/2017 11:15

17A0484-01 **Laboratory Sample ID:**

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Surr: 2,4,6-Tribromophenol	01	SW8270D	65.7 %		40-125		01/20/17 09:03	01/24/17 17:16	SKS
Surr: 2-Fluorobiphenyl	01	SW8270D	42.9 %		23-87		01/20/17 09:03	01/24/17 17:16	SKS
Surr: 2-Fluorophenol	01	SW8270D	35.4 %		14-52		01/20/17 09:03	01/24/17 17:16	SKS
Surr: Nitrobenzene-d5	01	SW8270D	49.5 %		40-110		01/20/17 09:03	01/24/17 17:16	SKS
Surr: Phenol-d5	01	SW8270D	18.6 %		5-33		01/20/17 09:03	01/24/17 17:16	SKS
Surr: p-Terphenyl-d14	01	SW8270D	61.6 %		27-133		01/20/17 09:03	01/24/17 17:16	SKS
Organochlorine Pesticides ar	nd PCBs by	GC/ECD							
4,4'-DDD	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
4,4'-DDE	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
4,4'-DDT	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Aldrin	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
alpha-BHC	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
beta-BHC	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Chlordane	01	SW8081B	<0.222 ug/L		0.222	1	01/19/17 17:44	01/19/17 17:44	SKS
delta-BHC	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Dieldrin	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Endosulfan I	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Endosulfan II	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Endosulfan sulfate	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Endrin	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Endrin aldehyde	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
gamma-BHC (Lindane)	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Heptachlor	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Heptachlor epoxide	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Methoxychlor	01	SW8081B	<0.056 ug/L		0.056	1	01/19/17 17:44	01/19/17 17:44	SKS
Toxaphene	01	SW8081B	<1.11 ug/L		1.11	1	01/19/17 17:44	01/19/17 17:44	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Laboratory Sample ID: 17A0484-01 Sample I.D. MW-8

Date/Time Sampled:	01/17/2017	11:15							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides	and PCBs by	GC/ECD							
Surr: TCMX	01	SW8081B	10.0 %	s	18-112		01/19/17 17:44	01/19/17 17:44	SKS
Surr: DCB	01	SW8081B	15.0 %	S	27-131		01/19/17 17:44	01/19/17 17:44	SKS
Wet Chemistry Analysis									
Cyanide	01	SW9012	0.43 mg/L		0.01	1	01/25/17 15:08	01/25/17 15:08	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-21 Laboratory Sample ID: 17A0484-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	eries Method	ls							
Silver	02	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:41	CWO
Arsenic	02	EPA200.8 R5.4	34.2 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:23	BG
Beryllium	02	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:41	CWO
Cadmium	02	EPA200.7 Rev 4.4	0.0129 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:41	CWO
Chromium	02	EPA200.7 Rev 4.4	0.0404 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:41	CWO
Copper	02	EPA200.7 Rev 4.4	0.817 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:41	CWO
Mercury	02	EPA245.1 R3.0	0.0006 mg/L		0.0002	1	01/23/17 08:45	01/24/17 09:23	RCV
Nickel	02	EPA200.7 Rev 4.4	0.0267 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:41	CWO
Lead	02	EPA200.7 Rev 4.4	0.0170 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:41	CWO
Antimony	02	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:23	BG
Selenium	02	EPA200.8 R5.4	2.28 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:23	BG
Thallium	02	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:23	BG
Zinc	02	EPA200.7 Rev 4.4	0.490 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:41	CWO
Volatile Organic Compounds	s by GCMS								
1,1,1,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	01/19/17 12:26	01/19/17 12:26	KCS
1,1,1-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,1,2,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	01/19/17 12:26	01/19/17 12:26	KCS
1,1,2-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,1-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,1-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,1-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,2,3-Trichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,2,3-Trichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,2,4-Trichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,2,4-Trimethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-21 Laboratory Sample ID: 17A0484-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	02	SW8260B	<4.00 ug/L		4.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,2-Dibromoethane (EDB)	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,2-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,2-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,2-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,3,5-Trimethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,3-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,3-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
1,4-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
2,2-Dichloropropane	02	SW8260B	<2.00 ug/L		2.00	1	01/19/17 12:26	01/19/17 12:26	KCS
2-Butanone (MEK)	02	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:26	01/19/17 12:26	KCS
2-Chlorotoluene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
2-Hexanone (MBK)	02	SW8260B	<5.00 ug/L		5.00	1	01/19/17 12:26	01/19/17 12:26	KCS
4-Chlorotoluene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
4-Isopropyltoluene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
4-Methyl-2-pentanone (MIBK)	02	SW8260B	<5.00 ug/L		5.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Acetone	02	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:26	01/19/17 12:26	KCS
Benzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Bromobenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Bromochloromethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Bromodichloromethane	02	SW8260B	<0.50 ug/L		0.50	1	01/19/17 12:26	01/19/17 12:26	KCS
Bromoform	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Bromomethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Carbon disulfide	02	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:26	01/19/17 12:26	KCS
Carbon tetrachloride	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Chlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3615

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-21 Laboratory Sample ID: 17A0484-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Chloroform	02	SW8260B	<0.50 ug/L		0.50	1	01/19/17 12:26	01/19/17 12:26	KCS
Chloromethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
cis-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
cis-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Dibromochloromethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Dibromomethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Dichlorodifluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Di-isopropyl ether (DIPE)	02	SW8260B	<5.00 ug/L		5.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Ethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Hexachlorobutadiene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
lodomethane	02	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:26	01/19/17 12:26	KCS
Isopropylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
m+p-Xylenes	02	SW8260B	<2.00 ug/L		2.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Methylene chloride	02	SW8260B	<4.00 ug/L		4.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Methyl-t-butyl ether (MTBE)	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Naphthalene	02	SW8260B	1.39 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
n-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
n-Propylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
o-Xylene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
sec-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Styrene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
tert-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Tetrachloroethylene (PCE)	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Toluene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
trans-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-21 Laboratory Sample ID: 17A0484-02

Parameter	Samp ID	Method	Result C)ual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Trichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Trichlorofluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Vinyl acetate	02	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:26	01/19/17 12:26	KCS
Vinyl chloride	02	SW8260B	<0.50 ug/L		0.50	1	01/19/17 12:26	01/19/17 12:26	KCS
Xylenes, Total	02	SW8260B	<3.00 ug/L		3.00	1	01/19/17 12:26	01/19/17 12:26	KCS
Surr: 1,2-Dichloroethane-d4	02	SW8260B	104 %		70-120		01/19/17 12:26	01/19/17 12:26	KCS
Surr: 4-Bromofluorobenzene	02	SW8260B	96.5 %		75-120		01/19/17 12:26	01/19/17 12:26	KCS
Surr: Dibromofluoromethane	02	SW8260B	102 %		80-119		01/19/17 12:26	01/19/17 12:26	KCS
Surr: Toluene-d8	02	SW8260B	100 %		85-120		01/19/17 12:26	01/19/17 12:26	KCS
Semivolatile Organic Compou	ınds by GC	MS							
2,3,7,8-TCDD (SIM)	02	EPA625	Not Detected			1	01/20/17 09:03	01/25/17 12:02	SKS
1,2,4,5-Tetrachlorobenzene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
1,2,4-Trichlorobenzene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
1,2-Dichlorobenzene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
1,2-Diphenylhydrazine	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
1,3-Dichlorobenzene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
1,3-Dinitrobenzene	02	SW8270D	<11.0 ug/L		11.0	4	01/20/17 09:03	01/24/17 17:51	SKS
1,4-Dichlorobenzene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
1-Naphthylamine	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
2,3,4,6-Tetrachlorophenol	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
2,4,5-Trichlorophenol	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
2,4,6-Trichlorophenol	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
2,4-Dichlorophenol	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
2,4-Dimethylphenol	02	SW8270D	<2.20 ug/L		2.20	4	01/20/17 09:03	01/24/17 17:51	SKS
2,4-Dinitrophenol	02	SW8270D	<220 ug/L		220	4	01/20/17 09:03	01/24/17 17:51	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-21 Laboratory Sample ID: 17A0484-02

Semivolatile Organic Compounds by GCMS 2.4-Dinitrotoluene 02 \$W8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2.6-Dichlorophenol 02 \$W8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2.6-Dichlorophenol 02 \$W8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Chlorophenol 02 \$W8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Chlorophenol 02 \$W8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Methylnaphthalene 02 \$W8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Naphthylamine 02 \$W8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Nitrophenol 02 \$W8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Nitrophenol 02 \$W8270D <44.0 ug/L<	Parameter	Samp ID	Method	Result	Reporting Qual Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
2,6-Dichlorophenol 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2,6-Dinitrotoluene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Chlorophenol 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Chlorophenol 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Mapthylamine 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Naphthylamine 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Nitrophenol 02 SW8270D <48.0 ug/L 87.9 4 01/20/17 09:03 01/24/17 17:51 2-Nitrophenol 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 3,3'-Dichlorobenzidine 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 3,3'-Dichlorobenzidine 02 SW8270D <44.	Semivolatile Organic Compo	unds by GC	MS						
2.6-Dinitrotoluene 02 SW8270D <44.0 ug/L	2,4-Dinitrotoluene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
2-Chloronaphthalene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Chlorophenol 02 SW8270D <44.0 ug/L	2,6-Dichlorophenol	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
2-Chlorophenol 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 2-Methylnaphthalene 02 SW8270D <44.0 ug/L	2,6-Dinitrotoluene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
2-Methylnaphthalene 02 SW8270D <44.0 ug/L	2-Chloronaphthalene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
2-Naphthylamine 02 SW8270D <44.0 ug/L	2-Chlorophenol	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
2-Nitroaniline 02 SW8270D <87.9 ug/L	2-Methylnaphthalene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
2-Nitrophenol 02 SW8270D	2-Naphthylamine	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
3,3'-Dichlorobenzidine 02 SW8270D	2-Nitroaniline	02	SW8270D	<87.9 ug/L	87.9	4	01/20/17 09:03	01/24/17 17:51	SKS
3-Methylcholanthrene 02 SW8270D	2-Nitrophenol	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
3-Nitroaniline 02 SW8270D	3,3'-Dichlorobenzidine	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
4,6-Dinitro-2-methylphenol 02 SW8270D <220 ug/L	3-Methylcholanthrene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
4-Aminobiphenyl 02 SW8270D <44.0 ug/L	3-Nitroaniline	02	SW8270D	<87.9 ug/L	87.9	4	01/20/17 09:03	01/24/17 17:51	SKS
4-Bromophenyl phenyl ether 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 4-Chloroaniline 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 4-Chlorophenyl phenyl ether 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 4-Nitrophenyl phenyl ether 02 SW8270D <87.9 ug/L 87.9 4 01/20/17 09:03 01/24/17 17:51 4-Nitrophenol 02 SW8270D <220 ug/L 220 4 01/20/17 09:03 01/24/17 17:51 7,12-Dimethylbenz (a) 2 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 anthracene Acenaphthene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Acetophenone 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Acetophenone 02 SW8270D <87.9 ug/L 87.9 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <87.9 ug/L 87.9 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51	4,6-Dinitro-2-methylphenol	02	SW8270D	<220 ug/L	220	4	01/20/17 09:03	01/24/17 17:51	SKS
4-Chloroaniline 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 4-Chlorophenyl phenyl ether 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 4-Nitroaniline 02 SW8270D <87.9 ug/L 87.9 4 01/20/17 09:03 01/24/17 17:51 4-Nitrophenol 02 SW8270D <220 ug/L 220 4 01/20/17 09:03 01/24/17 17:51 7,12-Dimethylbenz (a) 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 anthracene Acenaphthene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Acetophenone 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Acetophenone 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Acetophenone 02 SW8270D <87.9 ug/L 87.9 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51	4-Aminobiphenyl	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
4-Chlorophenyl phenyl ether 02 SW8270D <44.0 ug/L	4-Bromophenyl phenyl ether	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
4-Nitroaniline 02 SW8270D <87.9 ug/L	4-Chloroaniline	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
4-Nitrophenol 02 SW8270D <220 ug/L 220 4 01/20/17 09:03 01/24/17 17:51 7,12-Dimethylbenz (a) 02 SW8270D 44.0 ug/L 44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 anthracene Acenaphthylene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Acetophenone 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Acetophenone 02 SW8270D <87.9 ug/L 87.9 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <220 ug/L 220 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51	4-Chlorophenyl phenyl ether	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
7,12-Dimethylbenz (a) 02 SW8270D	4-Nitroaniline	02	SW8270D	<87.9 ug/L	87.9	4	01/20/17 09:03	01/24/17 17:51	SKS
anthracene Acenaphthene 02 SW8270D <44.0 ug/L	4-Nitrophenol	02	SW8270D	<220 ug/L	220	4	01/20/17 09:03	01/24/17 17:51	SKS
Acenaphthylene 02 SW8270D <44.0 ug/L		02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Acetophenone 02 SW8270D <87.9 ug/L 87.9 4 01/20/17 09:03 01/24/17 17:51 Aniline 02 SW8270D <220 ug/L	Acenaphthene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Aniline 02 SW8270D <220 ug/L 220 4 01/20/17 09:03 01/24/17 17:51 Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51	Acenaphthylene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Anthracene 02 SW8270D <44.0 ug/L 44.0 4 01/20/17 09:03 01/24/17 17:51	Acetophenone	02	SW8270D	<87.9 ug/L	87.9	4	01/20/17 09:03	01/24/17 17:51	SKS
· · · · · · · · · · · · · · · · · · ·	Aniline	02	SW8270D	<220 ug/L	220	4	01/20/17 09:03	01/24/17 17:51	SKS
Benzidine 02 SW8270D <220 ug/L 220 4 01/20/17 09:03 01/24/17 17:51	Anthracene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
	Benzidine	02	SW8270D	<220 ug/L	220	4	01/20/17 09:03	01/24/17 17:51	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Client Site I.D.:

Sample I.D. MW-21 Laboratory Sample ID: 17A0484-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	nds by GC	MS							
Benzo (a) anthracene	02	SW8270D	<0.22 ug/L		0.22	4	01/20/17 09:03	01/24/17 17:51	SKS
Benzo (a) pyrene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Benzo (b) fluoranthene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Benzo (g,h,i) perylene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Benzo (k) fluoranthene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Benzoic acid	02	SW8270D	<220 ug/L		220	4	01/20/17 09:03	01/24/17 17:51	SKS
Benzyl alcohol	02	SW8270D	<87.9 ug/L		87.9	4	01/20/17 09:03	01/24/17 17:51	SKS
bis (2-Chloroethoxy) methane	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
bis (2-Chloroethyl) ether	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
bis (2-Chloroisopropyl) ether	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
bis (2-Ethylhexyl) phthalate	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Butyl benzyl phthalate	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Chrysene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Dibenz (a,h) anthracene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Dibenz (a,j) acridine	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Dibenzofuran	02	SW8270D	<22.0 ug/L		22.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Diethyl phthalate	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Dimethyl phthalate	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Di-n-butyl phthalate	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Di-n-octyl phthalate	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Diphenylamine	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Ethyl methanesulfonate	02	SW8270D	<87.9 ug/L		87.9	4	01/20/17 09:03	01/24/17 17:51	SKS
Fluoranthene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Fluorene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Hexachlorobenzene	02	SW8270D	<4.40 ug/L		4.40	4	01/20/17 09:03	01/24/17 17:51	SKS
Hexachlorobutadiene	02	SW8270D	<44.0 ug/L		44.0	4	01/20/17 09:03	01/24/17 17:51	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/25/2017 17:23

Richmond VA, 23225

1001 Boulders Parkway, Suite 300

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D.

Laboratory Sample ID: 17A0484-02 MW-21

Parameter	Samp ID	Method	Result	Reporting Qual Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS						
Hexachlorocyclopentadiene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Hexachloroethane	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Indeno (1,2,3-cd) pyrene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Isophorone	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
m+p-Cresols	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Methyl methanesulfonate	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Naphthalene	02	SW8270D	<22.0 ug/L	22.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Nitrobenzene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
n-Nitrosodimethylamine	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
n-Nitrosodi-n-butylamine	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
n-Nitrosodi-n-propylamine	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
n-Nitrosodiphenylamine	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
n-Nitrosopiperidine	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
o+m+p-Cresols	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
o-Cresol	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
p-(Dimethylamino) azobenzene	02	SW8270D	<11.0 ug/L	11.0	4	01/20/17 09:03	01/24/17 17:51	SKS
p-Chloro-m-cresol	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Pentachloronitrobenzene (quintozene)	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Pentachlorophenol	02	SW8270D	<87.9 ug/L	87.9	4	01/20/17 09:03	01/24/17 17:51	SKS
Phenacetin	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Phenanthrene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Phenol	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Pronamide	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Pyrene	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS
Pyridine	02	SW8270D	<44.0 ug/L	44.0	4	01/20/17 09:03	01/24/17 17:51	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-21 Laboratory Sample ID: 17A0484-02

Parameter	Samp ID	Method	Result C	F Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
Surr: 2,4,6-Tribromophenol	02	SW8270D	51.9 %		40-125		01/20/17 09:03	01/24/17 17:51	SKS
Surr: 2-Fluorobiphenyl	02	SW8270D	55.4 %		23-87		01/20/17 09:03	01/24/17 17:51	SKS
Surr: 2-Fluorophenol	02	SW8270D	41.3 %		14-52		01/20/17 09:03	01/24/17 17:51	SKS
Surr: Nitrobenzene-d5	02	SW8270D	67.0 %		40-110		01/20/17 09:03	01/24/17 17:51	SKS
Surr: Phenol-d5	02	SW8270D	24.0 %		5-33		01/20/17 09:03	01/24/17 17:51	SKS
Surr: p-Terphenyl-d14	02	SW8270D	60.6 %		27-133		01/20/17 09:03	01/24/17 17:51	SKS
Organochlorine Pesticides and	d PCBs by 0	GC/ECD							
4,4'-DDD	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
4,4'-DDE	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
4,4'-DDT	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Aldrin	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
alpha-BHC	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
beta-BHC	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Chlordane	02	SW8081B	<0.222 ug/L		0.222	1	01/19/17 18:03	01/19/17 18:03	SKS
delta-BHC	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Dieldrin	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Endosulfan I	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Endosulfan II	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Endosulfan sulfate	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Endrin	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Endrin aldehyde	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
gamma-BHC (Lindane)	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Heptachlor	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Heptachlor epoxide	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Methoxychlor	02	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:03	01/19/17 18:03	SKS
Toxaphene	02	SW8081B	<1.11 ug/L		1.11	1	01/19/17 18:03	01/19/17 18:03	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

1/25/2017 17:23

17A0484-02

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Laboratory Sample ID:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-21

Date/Time Sampled:	01/17/2017 0	9:45							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides	and PCBs by	GC/ECD							
Surr: TCMX	02	SW8081B	55.0 %		18-112		01/19/17 18:03	01/19/17 18:03	SKS
Surr: DCB	02	SW8081B	50.0 %		27-131		01/19/17 18:03	01/19/17 18:03	SKS
Wet Chemistry Analysis									
Cyanide	02	SW9012	<0.01 mg/L	CI	0.01	1	01/25/17 15:32	01/25/17 15:32	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-20 Laboratory Sample ID: 17A0484-03

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	eries Method	s							
Silver	03	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:50	CWO
Arsenic	03	EPA200.8 R5.4	13.1 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:26	BG
Beryllium	03	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:50	CWO
Cadmium	03	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:50	CWO
Chromium	03	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:50	CWO
Copper	03	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:50	CWO
Mercury	03	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	01/23/17 08:45	01/24/17 09:25	RCV
Nickel	03	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:50	CWO
Lead	03	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:50	CWO
Antimony	03	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:26	BG
Selenium	03	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:26	BG
Thallium	03	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:26	BG
Zinc	03	EPA200.7 Rev 4.4	0.0193 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:50	CWO
Volatile Organic Compounds	s by GCMS								
1,1,1,2-Tetrachloroethane	03	SW8260B	<0.40 ug/L		0.40	1	01/19/17 12:02	01/19/17 12:02	KCS
1,1,1-Trichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,1,2,2-Tetrachloroethane	03	SW8260B	<0.40 ug/L		0.40	1	01/19/17 12:02	01/19/17 12:02	KCS
1,1,2-Trichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,1-Dichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,1-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,1-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,2,3-Trichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,2,3-Trichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,2,4-Trichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,2,4-Trimethylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-20 Laboratory Sample ID: 17A0484-03

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	03	SW8260B	<4.00 ug/L		4.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,2-Dibromoethane (EDB)	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,2-Dichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,2-Dichloroethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,2-Dichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,3,5-Trimethylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,3-Dichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,3-Dichloropropane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
1,4-Dichlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
2,2-Dichloropropane	03	SW8260B	<2.00 ug/L		2.00	1	01/19/17 12:02	01/19/17 12:02	KCS
2-Butanone (MEK)	03	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:02	01/19/17 12:02	KCS
2-Chlorotoluene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
2-Hexanone (MBK)	03	SW8260B	<5.00 ug/L		5.00	1	01/19/17 12:02	01/19/17 12:02	KCS
4-Chlorotoluene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
4-Isopropyltoluene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
4-Methyl-2-pentanone (MIBK)	03	SW8260B	<5.00 ug/L		5.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Acetone	03	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:02	01/19/17 12:02	KCS
Benzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Bromobenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Bromochloromethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Bromodichloromethane	03	SW8260B	<0.50 ug/L		0.50	1	01/19/17 12:02	01/19/17 12:02	KCS
Bromoform	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Bromomethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Carbon disulfide	03	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:02	01/19/17 12:02	KCS
Carbon tetrachloride	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Chlorobenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number:

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-20 Laboratory Sample ID: 17A0484-03

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Chloroform	03	SW8260B	<0.50 ug/L		0.50	1	01/19/17 12:02	01/19/17 12:02	KCS
Chloromethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
cis-1,2-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
cis-1,3-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Dibromochloromethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Dibromomethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Dichlorodifluoromethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Di-isopropyl ether (DIPE)	03	SW8260B	<5.00 ug/L		5.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Ethylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Hexachlorobutadiene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
lodomethane	03	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:02	01/19/17 12:02	KCS
Isopropylbenzene	03	SW8260B	1.39 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
m+p-Xylenes	03	SW8260B	<2.00 ug/L		2.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Methylene chloride	03	SW8260B	<4.00 ug/L		4.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Methyl-t-butyl ether (MTBE)	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Naphthalene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
n-Butylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
n-Propylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
o-Xylene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
sec-Butylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Styrene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
tert-Butylbenzene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Tetrachloroethylene (PCE)	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Toluene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
trans-1,2-Dichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-20

-20

Laboratory Sample ID:

17A0484-03

Parameter	Samp ID	Method	Result Q	(ual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Trichloroethylene	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Trichlorofluoromethane	03	SW8260B	<1.00 ug/L		1.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Vinyl acetate	03	SW8260B	<10.0 ug/L		10.0	1	01/19/17 12:02	01/19/17 12:02	KCS
Vinyl chloride	03	SW8260B	<0.50 ug/L		0.50	1	01/19/17 12:02	01/19/17 12:02	KCS
Xylenes, Total	03	SW8260B	<3.00 ug/L		3.00	1	01/19/17 12:02	01/19/17 12:02	KCS
Surr: 1,2-Dichloroethane-d4	03	SW8260B	104 %		70-120		01/19/17 12:02	01/19/17 12:02	KCS
Surr: 4-Bromofluorobenzene	03	SW8260B	95.6 %		75-120		01/19/17 12:02	01/19/17 12:02	KCS
Surr: Dibromofluoromethane	03	SW8260B	102 %		80-119		01/19/17 12:02	01/19/17 12:02	KCS
Surr: Toluene-d8	03	SW8260B	100 %		85-120		01/19/17 12:02	01/19/17 12:02	KCS
Semivolatile Organic Compou	inds by GC	MS							
1,2,4,5-Tetrachlorobenzene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
1,2,4-Trichlorobenzene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
1,2-Dichlorobenzene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
1,2-Diphenylhydrazine	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
1,3-Dichlorobenzene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
1,3-Dinitrobenzene	03	SW8270D	<11.1 ug/L		11.1	4	01/20/17 09:03	01/24/17 18:26	SKS
1,4-Dichlorobenzene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
1-Naphthylamine	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
2,3,4,6-Tetrachlorophenol	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
2,4,5-Trichlorophenol	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
2,4,6-Trichlorophenol	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
2,4-Dichlorophenol	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
2,4-Dimethylphenol	03	SW8270D	<2.22 ug/L		2.22	4	01/20/17 09:03	01/24/17 18:26	SKS
2,4-Dinitrophenol	03	SW8270D	<222 ug/L		222	4	01/20/17 09:03	01/24/17 18:26	SKS
2,4-Dinitrotoluene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-20 Laboratory Sample ID: 17A0484-03

Parameter	Samp ID	Method	Result	Reporting Qual Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS						
2,6-Dichlorophenol	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
2,6-Dinitrotoluene	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
2-Chloronaphthalene	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
2-Chlorophenol	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
2-Methylnaphthalene	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
2-Naphthylamine	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
2-Nitroaniline	03	SW8270D	<88.9 ug/L	88.9	4	01/20/17 09:03	01/24/17 18:26	SKS
2-Nitrophenol	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
3,3'-Dichlorobenzidine	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
3-Methylcholanthrene	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
3-Nitroaniline	03	SW8270D	<88.9 ug/L	88.9	4	01/20/17 09:03	01/24/17 18:26	SKS
4,6-Dinitro-2-methylphenol	03	SW8270D	<222 ug/L	222	4	01/20/17 09:03	01/24/17 18:26	SKS
4-Aminobiphenyl	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
4-Bromophenyl phenyl ether	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
4-Chloroaniline	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
4-Chlorophenyl phenyl ether	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
4-Nitroaniline	03	SW8270D	<88.9 ug/L	88.9	4	01/20/17 09:03	01/24/17 18:26	SKS
4-Nitrophenol	03	SW8270D	<222 ug/L	222	4	01/20/17 09:03	01/24/17 18:26	SKS
7,12-Dimethylbenz (a) anthracene	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Acenaphthene	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Acenaphthylene	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Acetophenone	03	SW8270D	<88.9 ug/L	88.9	4	01/20/17 09:03	01/24/17 18:26	SKS
Aniline	03	SW8270D	<222 ug/L	222	4	01/20/17 09:03	01/24/17 18:26	SKS
Anthracene	03	SW8270D	<44.4 ug/L	44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Benzidine	03	SW8270D	<222 ug/L	222	4	01/20/17 09:03	01/24/17 18:26	SKS
Benzo (a) anthracene	03	SW8270D	<0.22 ug/L	0.22	4	01/20/17 09:03	01/24/17 18:26	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-20 Laboratory Sample ID: 17A0484-03

5	Samp ID	Madhaal	Desult	01	Reporting Limit	ь.	Sample Prep	Analysis	Analyst
Parameter	Janip ID	Method	Result	Qual		D.F.	Date/Time	Date/Time	Allalys
Semivolatile Organic Compou	inds by GC	MS							
Benzo (a) pyrene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Benzo (b) fluoranthene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Benzo (g,h,i) perylene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Benzo (k) fluoranthene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Benzoic acid	03	SW8270D	<222 ug/L		222	4	01/20/17 09:03	01/24/17 18:26	SKS
Benzyl alcohol	03	SW8270D	<88.9 ug/L		88.9	4	01/20/17 09:03	01/24/17 18:26	SKS
bis (2-Chloroethoxy) methane	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
bis (2-Chloroethyl) ether	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
bis (2-Chloroisopropyl) ether	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
bis (2-Ethylhexyl) phthalate	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Butyl benzyl phthalate	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Chrysene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Dibenz (a,h) anthracene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Dibenz (a,j) acridine	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Dibenzofuran	03	SW8270D	<22.2 ug/L		22.2	4	01/20/17 09:03	01/24/17 18:26	SKS
Diethyl phthalate	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Dimethyl phthalate	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Di-n-butyl phthalate	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Di-n-octyl phthalate	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Diphenylamine	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Ethyl methanesulfonate	03	SW8270D	<88.9 ug/L		88.9	4	01/20/17 09:03	01/24/17 18:26	SKS
Fluoranthene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Fluorene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Hexachlorobenzene	03	SW8270D	<4.44 ug/L		4.44	4	01/20/17 09:03	01/24/17 18:26	SKS
Hexachlorobutadiene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Hexachlorocyclopentadiene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-20 Laboratory Sample ID: 17A0484-03

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Hexachloroethane	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Indeno (1,2,3-cd) pyrene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Isophorone	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
m+p-Cresols	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Methyl methanesulfonate	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Naphthalene	03	SW8270D	<22.2 ug/L		22.2	4	01/20/17 09:03	01/24/17 18:26	SKS
Nitrobenzene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
n-Nitrosodimethylamine	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
n-Nitrosodi-n-butylamine	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
n-Nitrosodi-n-propylamine	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
n-Nitrosodiphenylamine	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
n-Nitrosopiperidine	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
o+m+p-Cresols	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
o-Cresol	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
p-(Dimethylamino) azobenzene	03	SW8270D	<11.1 ug/L		11.1	4	01/20/17 09:03	01/24/17 18:26	SKS
p-Chloro-m-cresol	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Pentachloronitrobenzene (quintozene)	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Pentachlorophenol	03	SW8270D	<88.9 ug/L		88.9	4	01/20/17 09:03	01/24/17 18:26	SKS
Phenacetin	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Phenanthrene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Phenol	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Pronamide	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Pyrene	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Pyridine	03	SW8270D	<44.4 ug/L		44.4	4	01/20/17 09:03	01/24/17 18:26	SKS
Surr: 2,4,6-Tribromophenol	03	SW8270D	37.5 %	DS	40-125		01/20/17 09:03	01/24/17 18:26	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-20 Laboratory Sample ID: 17A0484-03

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Surr: 2-Fluorobiphenyl	03	SW8270D	30.6 %		23-87		01/20/17 09:03	01/24/17 18:26	SKS
Surr: 2-Fluorophenol	03	SW8270D	20.7 %		14-52		01/20/17 09:03	01/24/17 18:26	SKS
Surr: Nitrobenzene-d5	03	SW8270D	35.2 %	DS	40-110		01/20/17 09:03	01/24/17 18:26	SKS
Surr: Phenol-d5	03	SW8270D	11.3 %		5-33		01/20/17 09:03	01/24/17 18:26	SKS
Surr: p-Terphenyl-d14	03	SW8270D	49.6 %		27-133		01/20/17 09:03	01/24/17 18:26	SKS
Organochlorine Pesticides an	nd PCBs by (GC/ECD							
4,4'-DDD	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
4,4'-DDE	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
4,4'-DDT	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Aldrin	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
alpha-BHC	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
beta-BHC	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Chlordane	03	SW8081B	<0.225 ug/L		0.225	1	01/19/17 18:22	01/19/17 18:22	SKS
delta-BHC	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Dieldrin	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Endosulfan I	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Endosulfan II	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Endosulfan sulfate	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Endrin	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Endrin aldehyde	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
gamma-BHC (Lindane)	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Heptachlor	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Heptachlor epoxide	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Methoxychlor	03	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:22	01/19/17 18:22	SKS
Toxaphene	03	SW8081B	<1.12 ug/L		1.12	1	01/19/17 18:22	01/19/17 18:22	SKS
Surr: TCMX	03	SW8081B	55.0 %		18-112		01/19/17 18:22	01/19/17 18:22	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results
Sample I.D. MW-20
Laboratory Sample ID: 17A0484-03

Date/Time Sampled:	01/17/2017	0:30							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides	s and PCBs by	GC/ECD							
Surr: DCB Wet Chemistry Analysis	03	SW8081B	60.0 %		27-131		01/19/17 18:22	01/19/17 18:22	SKS
Cyanide	03	SW9012	<0.01 mg/L	CI	0.01	1	01/25/17 15:35	01/25/17 15:35	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-19 Laboratory Sample ID: 17A0484-04

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	ries Method	s							
Silver	04	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:52	CWO
Arsenic	04	EPA200.8 R5.4	8.09 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:29	BG
Beryllium	04	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:52	CWO
Cadmium	04	EPA200.7 Rev 4.4	0.0045 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:52	CWO
Chromium	04	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:52	CWO
Copper	04	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:52	CWO
Mercury	04	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	01/23/17 08:45	01/24/17 09:27	RCV
Nickel	04	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:52	CWO
Lead	04	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:52	CWO
Antimony	04	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:29	BG
Selenium	04	EPA200.8 R5.4	1.03 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:29	BG
Thallium	04	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:29	BG
Zinc	04	EPA200.7 Rev 4.4	0.0218 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:52	CWO
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	04RE1	SW8260B	<4.00 ug/L		4.00	10	01/20/17 12:28	01/20/17 12:28	KCS
1,1,1-Trichloroethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,1,2,2-Tetrachloroethane	04RE1	SW8260B	<4.00 ug/L		4.00	10	01/20/17 12:28	01/20/17 12:28	KCS
1,1,2-Trichloroethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,1-Dichloroethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,1-Dichloroethylene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,1-Dichloropropene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,2,3-Trichlorobenzene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,2,3-Trichloropropane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,2,4-Trichlorobenzene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,2,4-Trimethylbenzene	04RE1	SW8260B	420 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3615

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-19 Laboratory Sample ID: 17A0484-04

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	04RE1	SW8260B	<40.0 ug/L		40.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,2-Dibromoethane (EDB)	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,2-Dichlorobenzene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,2-Dichloroethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,2-Dichloropropane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,3,5-Trimethylbenzene	04RE1	SW8260B	122 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,3-Dichlorobenzene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,3-Dichloropropane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
1,4-Dichlorobenzene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
2,2-Dichloropropane	04RE1	SW8260B	<20.0 ug/L		20.0	10	01/20/17 12:28	01/20/17 12:28	KCS
2-Butanone (MEK)	04RE1	SW8260B	<100 ug/L		100	10	01/20/17 12:28	01/20/17 12:28	KCS
2-Chlorotoluene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
2-Hexanone (MBK)	04RE1	SW8260B	<50.0 ug/L		50.0	10	01/20/17 12:28	01/20/17 12:28	KCS
4-Chlorotoluene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
4-Isopropyltoluene	04RE1	SW8260B	10.8 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
4-Methyl-2-pentanone (MIBK)	04RE1	SW8260B	<50.0 ug/L		50.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Acetone	04RE1	SW8260B	103 ug/L		100	10	01/20/17 12:28	01/20/17 12:28	KCS
Benzene	04	SW8260B	11400 ug/L		100	100	01/19/17 15:12	01/19/17 15:12	KCS
Bromobenzene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Bromochloromethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Bromodichloromethane	04RE1	SW8260B	<5.00 ug/L		5.00	10	01/20/17 12:28	01/20/17 12:28	KCS
Bromoform	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Bromomethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Carbon disulfide	04RE1	SW8260B	<100 ug/L		100	10	01/20/17 12:28	01/20/17 12:28	KCS
Carbon tetrachloride	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Chlorobenzene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-19 Laboratory Sample ID: 17A0484-04

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Chloroform	04RE1	SW8260B	<5.00 ug/L		5.00	10	01/20/17 12:28	01/20/17 12:28	KCS
Chloromethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
cis-1,2-Dichloroethylene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
cis-1,3-Dichloropropene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Dibromochloromethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Dibromomethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Dichlorodifluoromethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Di-isopropyl ether (DIPE)	04RE1	SW8260B	<50.0 ug/L		50.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Ethylbenzene	04RE1	SW8260B	2320 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Hexachlorobutadiene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Iodomethane	04RE1	SW8260B	<100 ug/L		100	10	01/20/17 12:28	01/20/17 12:28	KCS
Isopropylbenzene	04RE1	SW8260B	76.1 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
m+p-Xylenes	04RE1	SW8260B	2080 ug/L		20.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Methylene chloride	04RE1	SW8260B	<40.0 ug/L		40.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Methyl-t-butyl ether (MTBE)	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Naphthalene	04	SW8260B	17100 ug/L		100	100	01/19/17 15:12	01/19/17 15:12	KCS
n-Butylbenzene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
n-Propylbenzene	04RE1	SW8260B	14.5 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
o-Xylene	04RE1	SW8260B	986 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
sec-Butylbenzene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Styrene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
tert-Butylbenzene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Tetrachloroethylene (PCE)	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Toluene	04RE1	SW8260B	2670 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
trans-1,2-Dichloroethylene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-19 Laboratory Sample ID: 17A0484-04

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Trichloroethylene	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Trichlorofluoromethane	04RE1	SW8260B	<10.0 ug/L		10.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Vinyl acetate	04RE1	SW8260B	<100 ug/L		100	10	01/20/17 12:28	01/20/17 12:28	KCS
Vinyl chloride	04RE1	SW8260B	<5.00 ug/L		5.00	10	01/20/17 12:28	01/20/17 12:28	KCS
Xylenes, Total	04RE1	SW8260B	3060 ug/L		30.0	10	01/20/17 12:28	01/20/17 12:28	KCS
Surr: 1,2-Dichloroethane-d4	04	SW8260B	109 %		70-120		01/19/17 15:12	01/19/17 15:12	KCS
Surr: 4-Bromofluorobenzene	04	SW8260B	97.4 %		75-120		01/19/17 15:12	01/19/17 15:12	KCS
Surr: Dibromofluoromethane	04	SW8260B	106 %		80-119		01/19/17 15:12	01/19/17 15:12	KCS
Surr: Toluene-d8	04	SW8260B	101 %		85-120		01/19/17 15:12	01/19/17 15:12	KCS
Surr: 1,2-Dichloroethane-d4	04RE1	SW8260B	102 %		70-120		01/20/17 12:28	01/20/17 12:28	KCS
Surr: 4-Bromofluorobenzene	04RE1	SW8260B	98.1 %		75-120		01/20/17 12:28	01/20/17 12:28	KCS
Surr: Dibromofluoromethane	04RE1	SW8260B	101 %		80-119		01/20/17 12:28	01/20/17 12:28	KCS
Surr: Toluene-d8	04RE1	SW8260B	100 %		85-120		01/20/17 12:28	01/20/17 12:28	KCS
Semivolatile Organic Compou	inds by GC	MS							
1,2,4,5-Tetrachlorobenzene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
1,2,4-Trichlorobenzene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
1,2-Dichlorobenzene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
1,2-Diphenylhydrazine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
1,3-Dichlorobenzene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
1,3-Dinitrobenzene	04	SW8270D	<55.6 ug/L		55.6	20	01/20/17 09:03	01/25/17 02:59	SKS
1,4-Dichlorobenzene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
1-Naphthylamine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
2,3,4,6-Tetrachlorophenol	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
2,4,5-Trichlorophenol	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
2,4,6-Trichlorophenol	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-19 Laboratory Sample ID: 17A0484-04

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,4-Dichlorophenol	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
2,4-Dimethylphenol	04	SW8270D	423 ug/L		11.1	20	01/20/17 09:03	01/25/17 02:59	SKS
2,4-Dinitrophenol	04	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 02:59	SKS
2,4-Dinitrotoluene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
2,6-Dichlorophenol	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
2,6-Dinitrotoluene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
2-Chloronaphthalene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
2-Chlorophenol	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
2-Methylnaphthalene	04	SW8270D	976 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
2-Naphthylamine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
2-Nitroaniline	04	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 02:59	SKS
2-Nitrophenol	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
3,3'-Dichlorobenzidine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
3-Methylcholanthrene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
3-Nitroaniline	04	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 02:59	SKS
1,6-Dinitro-2-methylphenol	04	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 02:59	SKS
I-Aminobiphenyl	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
I-Bromophenyl phenyl ether	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
I-Chloroaniline	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
I-Chlorophenyl phenyl ether	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
I-Nitroaniline	04	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 02:59	SKS
I-Nitrophenol	04	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 02:59	SKS
7,12-Dimethylbenz (a) anthracene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Acenaphthene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Acenaphthylene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Acetophenone	04	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 02:59	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Purchase Orde

Laboratory Order ID: 17A0484

Analytical Results

Client Site I.D.:

Sample I.D. MW-19 Laboratory Sample ID: 17A0484-04

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
Aniline	04	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 02:59	SKS
Anthracene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Benzidine	04	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 02:59	SKS
Benzo (a) anthracene	04	SW8270D	<1.11 ug/L		1.11	20	01/20/17 09:03	01/25/17 02:59	SKS
Benzo (a) pyrene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Benzo (b) fluoranthene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Benzo (g,h,i) perylene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Benzo (k) fluoranthene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Benzoic acid	04	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 02:59	SKS
Benzyl alcohol	04	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 02:59	SKS
bis (2-Chloroethoxy) methane	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
bis (2-Chloroethyl) ether	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
bis (2-Chloroisopropyl) ether	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
bis (2-Ethylhexyl) phthalate	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Butyl benzyl phthalate	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Chrysene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Dibenz (a,h) anthracene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Dibenz (a,j) acridine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Dibenzofuran	04	SW8270D	<111 ug/L		111	20	01/20/17 09:03	01/25/17 02:59	SKS
Diethyl phthalate	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Dimethyl phthalate	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Di-n-butyl phthalate	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Di-n-octyl phthalate	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Diphenylamine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Ethyl methanesulfonate	04	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 02:59	SKS
Fluoranthene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-19 Laboratory Sample ID: 17A0484-04

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Fluorene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Hexachlorobenzene	04	SW8270D	<22.2 ug/L		22.2	20	01/20/17 09:03	01/25/17 02:59	SKS
Hexachlorobutadiene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Hexachlorocyclopentadiene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Hexachloroethane	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Indeno (1,2,3-cd) pyrene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Isophorone	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
m+p-Cresols	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Methyl methanesulfonate	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Naphthalene	04RE2	SW8270D	7790 ug/L		5560	1000	01/20/17 09:03	01/25/17 12:54	SKS
Nitrobenzene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
n-Nitrosodimethylamine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
n-Nitrosodi-n-butylamine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
n-Nitrosodi-n-propylamine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
n-Nitrosodiphenylamine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
n-Nitrosopiperidine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
o+m+p-Cresols	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
o-Cresol	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
p-(Dimethylamino) azobenzene	04	SW8270D	<55.6 ug/L		55.6	20	01/20/17 09:03	01/25/17 02:59	SKS
p-Chloro-m-cresol	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Pentachloronitrobenzene (quintozene)	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Pentachlorophenol	04	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 02:59	SKS
Phenacetin	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Phenanthrene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Phenol	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-19 Laboratory Sample ID: 17A0484-04

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Pronamide	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Pyrene	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Pyridine	04	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 02:59	SKS
Surr: 2,4,6-Tribromophenol	04	SW8270D	98.6 %		40-125		01/20/17 09:03	01/25/17 02:59	SKS
Surr: 2-Fluorobiphenyl	04	SW8270D	70.9 %		23-87		01/20/17 09:03	01/25/17 02:59	SKS
Surr: 2-Fluorophenol	04	SW8270D	12.5 %	DS	14-52		01/20/17 09:03	01/25/17 02:59	SKS
Surr: Nitrobenzene-d5	04	SW8270D	80.2 %		40-110		01/20/17 09:03	01/25/17 02:59	SKS
Surr: Phenol-d5	04	SW8270D	19.9 %		5-33		01/20/17 09:03	01/25/17 02:59	SKS
Surr: p-Terphenyl-d14	04	SW8270D	95.6 %		27-133		01/20/17 09:03	01/25/17 02:59	SKS
Surr: 2,4,6-Tribromophenol	04RE2	SW8270D	1430 %	DS	40-125		01/20/17 09:03	01/25/17 12:54	SKS
Surr: 2-Fluorobiphenyl	04RE2	SW8270D	534 %	DS	23-87		01/20/17 09:03	01/25/17 12:54	SKS
Surr: 2-Fluorophenol	04RE2	SW8270D	%	DS	14-52		01/20/17 09:03	01/25/17 12:54	SKS
Surr: Nitrobenzene-d5	04RE2	SW8270D	330 %	DS	40-110		01/20/17 09:03	01/25/17 12:54	SKS
Surr: Phenol-d5	04RE2	SW8270D	%	DS	5-33		01/20/17 09:03	01/25/17 12:54	SKS
Surr: p-Terphenyl-d14	04RE2	SW8270D	988 %	DS	27-133		01/20/17 09:03	01/25/17 12:54	SKS
Organochlorine Pesticides ar	nd PCBs by O	GC/ECD							
4,4'-DDD	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
4,4'-DDE	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
4,4'-DDT	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
Aldrin	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
alpha-BHC	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
beta-BHC	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
Chlordane	04	SW8081B	<0.225 ug/L		0.225	1	01/19/17 18:41	01/19/17 18:41	SKS
delta-BHC	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
Dieldrin	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
Endosulfan I	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/

1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-19 Laboratory Sample ID: 17A0484-04

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides a	nd PCBs by (GC/ECD							
Endosulfan II	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
Endosulfan sulfate	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
Endrin	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
Endrin aldehyde	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
gamma-BHC (Lindane)	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
Heptachlor	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
Heptachlor epoxide	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
Methoxychlor	04	SW8081B	<0.056 ug/L		0.056	1	01/19/17 18:41	01/19/17 18:41	SKS
Toxaphene	04	SW8081B	<1.12 ug/L		1.12	1	01/19/17 18:41	01/19/17 18:41	SKS
Surr: TCMX	04	SW8081B	235 %	S	18-112		01/19/17 18:41	01/19/17 18:41	SKS
Surr: DCB	04	SW8081B	100 %		27-131		01/19/17 18:41	01/19/17 18:41	SKS
Wet Chemistry Analysis									
Cyanide	04RE1	SW9012	0.69 mg/L	CI	0.05	5	01/25/17 16:05	01/25/17 16:05	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D.

MW-31 Laboratory Sample ID: 17A0484-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Ser	ries Method	ls							
Silver	05	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:53	CWO
Arsenic	05	EPA200.8 R5.4	7.55 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:46	BG
Beryllium	05	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:53	CWO
Cadmium	05	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:54	CWO
Chromium	05	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:54	CWO
Copper	05	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:53	CWO
Mercury	05	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	01/23/17 08:45	01/24/17 09:29	RCV
Nickel	05	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:54	CWO
Lead	05	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:54	CWO
Antimony	05	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:46	BG
Selenium	05	EPA200.8 R5.4	1.21 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:46	BG
Thallium	05	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:46	BG
Zinc	05	EPA200.7 Rev 4.4	0.0163 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:54	CWO
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	05RE1	SW8260B	<8.00 ug/L		8.00	20	01/20/17 13:15	01/20/17 13:15	KCS
1,1,1-Trichloroethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,1,2,2-Tetrachloroethane	05RE1	SW8260B	<8.00 ug/L		8.00	20	01/20/17 13:15	01/20/17 13:15	KCS
1,1,2-Trichloroethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,1-Dichloroethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,1-Dichloroethylene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,1-Dichloropropene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,2,3-Trichlorobenzene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,2,3-Trichloropropane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,2,4-Trichlorobenzene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,2,4-Trimethylbenzene	05RE1	SW8260B	469 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-31 Laboratory Sample ID: 17A0484-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds I	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	05RE1	SW8260B	<80.0 ug/L		80.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,2-Dibromoethane (EDB)	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,2-Dichlorobenzene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,2-Dichloroethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,2-Dichloropropane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,3,5-Trimethylbenzene	05RE1	SW8260B	137 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,3-Dichlorobenzene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,3-Dichloropropane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
1,4-Dichlorobenzene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
2,2-Dichloropropane	05RE1	SW8260B	<40.0 ug/L		40.0	20	01/20/17 13:15	01/20/17 13:15	KCS
2-Butanone (MEK)	05RE1	SW8260B	<200 ug/L		200	20	01/20/17 13:15	01/20/17 13:15	KCS
2-Chlorotoluene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
2-Hexanone (MBK)	05RE1	SW8260B	<100 ug/L		100	20	01/20/17 13:15	01/20/17 13:15	KCS
4-Chlorotoluene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
4-Isopropyltoluene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
4-Methyl-2-pentanone (MIBK)	05RE1	SW8260B	<100 ug/L		100	20	01/20/17 13:15	01/20/17 13:15	KCS
Acetone	05RE1	SW8260B	<200 ug/L		200	20	01/20/17 13:15	01/20/17 13:15	KCS
Benzene	05	SW8260B	11400 ug/L		100	100	01/19/17 16:00	01/19/17 16:00	KCS
Bromobenzene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Bromochloromethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Bromodichloromethane	05RE1	SW8260B	<10.0 ug/L		10.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Bromoform	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Bromomethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Carbon disulfide	05RE1	SW8260B	<200 ug/L		200	20	01/20/17 13:15	01/20/17 13:15	KCS
Carbon tetrachloride	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Chlorobenzene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-31 Laboratory Sample ID: 17A0484-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Chloroform	05RE1	SW8260B	<10.0 ug/L		10.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Chloromethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
cis-1,2-Dichloroethylene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
cis-1,3-Dichloropropene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Dibromochloromethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Dibromomethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Dichlorodifluoromethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Di-isopropyl ether (DIPE)	05RE1	SW8260B	<100 ug/L		100	20	01/20/17 13:15	01/20/17 13:15	KCS
Ethylbenzene	05RE1	SW8260B	2550 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Hexachlorobutadiene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
lodomethane	05RE1	SW8260B	<200 ug/L		200	20	01/20/17 13:15	01/20/17 13:15	KCS
Isopropylbenzene	05RE1	SW8260B	87.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
m+p-Xylenes	05RE1	SW8260B	2280 ug/L		40.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Methylene chloride	05RE1	SW8260B	<80.0 ug/L		80.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Methyl-t-butyl ether (MTBE)	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Naphthalene	05	SW8260B	15000 ug/L		100	100	01/19/17 16:00	01/19/17 16:00	KCS
n-Butylbenzene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
n-Propylbenzene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
o-Xylene	05RE1	SW8260B	1070 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
sec-Butylbenzene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Styrene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
tert-Butylbenzene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Tetrachloroethylene (PCE)	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Toluene	05RE1	SW8260B	2830 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
trans-1,2-Dichloroethylene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

17A0484-05

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-31 Laboratory Sample ID:

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Trichloroethylene	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Trichlorofluoromethane	05RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Vinyl acetate	05RE1	SW8260B	<200 ug/L		200	20	01/20/17 13:15	01/20/17 13:15	KCS
Vinyl chloride	05RE1	SW8260B	<10.0 ug/L		10.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Xylenes, Total	05RE1	SW8260B	3350 ug/L		60.0	20	01/20/17 13:15	01/20/17 13:15	KCS
Surr: 1,2-Dichloroethane-d4	05	SW8260B	100 %		70-120		01/19/17 16:00	01/19/17 16:00	KCS
Surr: 4-Bromofluorobenzene	05	SW8260B	96.8 %		75-120		01/19/17 16:00	01/19/17 16:00	KCS
Surr: Dibromofluoromethane	05	SW8260B	102 %		80-119		01/19/17 16:00	01/19/17 16:00	KCS
Surr: Toluene-d8	05	SW8260B	101 %		85-120		01/19/17 16:00	01/19/17 16:00	KCS
Surr: 1,2-Dichloroethane-d4	05RE1	SW8260B	98.0 %		70-120		01/20/17 13:15	01/20/17 13:15	KCS
Surr: 4-Bromofluorobenzene	05RE1	SW8260B	96.7 %		75-120		01/20/17 13:15	01/20/17 13:15	KCS
Surr: Dibromofluoromethane	05RE1	SW8260B	99.8 %		80-119		01/20/17 13:15	01/20/17 13:15	KCS
Surr: Toluene-d8	05RE1	SW8260B	100 %		85-120		01/20/17 13:15	01/20/17 13:15	KCS
Semivolatile Organic Compou	nds by GC	MS							
1,2,4,5-Tetrachlorobenzene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
1,2,4-Trichlorobenzene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
1,2-Dichlorobenzene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
1,2-Diphenylhydrazine	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
1,3-Dichlorobenzene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
1,3-Dinitrobenzene	05	SW8270D	<54.9 ug/L		54.9	20	01/20/17 09:03	01/25/17 03:33	SKS
1,4-Dichlorobenzene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
1-Naphthylamine	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
2,3,4,6-Tetrachlorophenol	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
2,4,5-Trichlorophenol	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
2,4,6-Trichlorophenol	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-31 Laboratory Sample ID: 17A0484-05

Parameter	Samp ID	Method	Result	•	oorting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,4-Dichlorophenol	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
2,4-Dimethylphenol	05	SW8270D	395 ug/L	1	11.0	20	01/20/17 09:03	01/25/17 03:33	SKS
2,4-Dinitrophenol	05	SW8270D	<1100 ug/L	1	1100	20	01/20/17 09:03	01/25/17 03:33	SKS
2,4-Dinitrotoluene	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
2,6-Dichlorophenol	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
2,6-Dinitrotoluene	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
2-Chloronaphthalene	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
2-Chlorophenol	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
2-Methylnaphthalene	05	SW8270D	899 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
2-Naphthylamine	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
2-Nitroaniline	05	SW8270D	<440 ug/L	4	440	20	01/20/17 09:03	01/25/17 03:33	SKS
2-Nitrophenol	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
3,3'-Dichlorobenzidine	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
3-Methylcholanthrene	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
3-Nitroaniline	05	SW8270D	<440 ug/L	4	440	20	01/20/17 09:03	01/25/17 03:33	SKS
4,6-Dinitro-2-methylphenol	05	SW8270D	<1100 ug/L	1	1100	20	01/20/17 09:03	01/25/17 03:33	SKS
4-Aminobiphenyl	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
4-Bromophenyl phenyl ether	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
4-Chloroaniline	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
4-Chlorophenyl phenyl ether	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
4-Nitroaniline	05	SW8270D	<440 ug/L	4	440	20	01/20/17 09:03	01/25/17 03:33	SKS
4-Nitrophenol	05	SW8270D	<1100 ug/L	1	1100	20	01/20/17 09:03	01/25/17 03:33	SKS
7,12-Dimethylbenz (a) anthracene	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
Acenaphthene	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
Acenaphthylene	05	SW8270D	<220 ug/L	2	220	20	01/20/17 09:03	01/25/17 03:33	SKS
Acetophenone	05	SW8270D	<440 ug/L	4	440	20	01/20/17 09:03	01/25/17 03:33	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-31 Laboratory Sample ID: 17A0484-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	nds by GC	MS							
Aniline	05	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 03:33	SKS
Anthracene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Benzidine	05	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 03:33	SKS
Benzo (a) anthracene	05	SW8270D	<1.10 ug/L		1.10	20	01/20/17 09:03	01/25/17 03:33	SKS
Benzo (a) pyrene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Benzo (b) fluoranthene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Benzo (g,h,i) perylene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Benzo (k) fluoranthene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Benzoic acid	05	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 03:33	SKS
Benzyl alcohol	05	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 03:33	SKS
bis (2-Chloroethoxy) methane	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
bis (2-Chloroethyl) ether	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
bis (2-Chloroisopropyl) ether	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
bis (2-Ethylhexyl) phthalate	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Butyl benzyl phthalate	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Chrysene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Dibenz (a,h) anthracene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Dibenz (a,j) acridine	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Dibenzofuran	05	SW8270D	<110 ug/L		110	20	01/20/17 09:03	01/25/17 03:33	SKS
Diethyl phthalate	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Dimethyl phthalate	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Di-n-butyl phthalate	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Di-n-octyl phthalate	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Diphenylamine	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Ethyl methanesulfonate	05	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 03:33	SKS
Fluoranthene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-31 Laboratory Sample ID: 17A0484-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Fluorene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Hexachlorobenzene	05	SW8270D	<22.0 ug/L		22.0	20	01/20/17 09:03	01/25/17 03:33	SKS
Hexachlorobutadiene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Hexachlorocyclopentadiene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Hexachloroethane	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Indeno (1,2,3-cd) pyrene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Isophorone	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
m+p-Cresols	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Methyl methanesulfonate	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Naphthalene	05RE2	SW8270D	8190 ug/L		5490	1000	01/20/17 09:03	01/25/17 13:29	SKS
Nitrobenzene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
n-Nitrosodimethylamine	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
n-Nitrosodi-n-butylamine	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
n-Nitrosodi-n-propylamine	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
n-Nitrosodiphenylamine	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
n-Nitrosopiperidine	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
o+m+p-Cresols	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
o-Cresol	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
p-(Dimethylamino) azobenzene	05	SW8270D	<54.9 ug/L		54.9	20	01/20/17 09:03	01/25/17 03:33	SKS
p-Chloro-m-cresol	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Pentachloronitrobenzene (quintozene)	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Pentachlorophenol	05	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 03:33	SKS
Phenacetin	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Phenanthrene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Phenol	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

17A0484-05

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-31 Laboratory Sample ID:

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Pronamide	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Pyrene	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Pyridine	05	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 03:33	SKS
Surr: 2,4,6-Tribromophenol	05	SW8270D	90.2 %		40-125		01/20/17 09:03	01/25/17 03:33	SKS
Surr: 2-Fluorobiphenyl	05	SW8270D	65.5 %		23-87		01/20/17 09:03	01/25/17 03:33	SKS
Surr: 2-Fluorophenol	05	SW8270D	20.1 %		14-52		01/20/17 09:03	01/25/17 03:33	SKS
Surr: Nitrobenzene-d5	05	SW8270D	72.0 %		40-110		01/20/17 09:03	01/25/17 03:33	SKS
Surr: Phenol-d5	05	SW8270D	18.6 %		5-33		01/20/17 09:03	01/25/17 03:33	SKS
Surr: p-Terphenyl-d14	05	SW8270D	76.2 %		27-133		01/20/17 09:03	01/25/17 03:33	SKS
Surr: 2,4,6-Tribromophenol	05RE2	SW8270D	1430 %	DS	40-125		01/20/17 09:03	01/25/17 13:29	SKS
Surr: 2-Fluorobiphenyl	05RE2	SW8270D	586 %	DS	23-87		01/20/17 09:03	01/25/17 13:29	SKS
Surr: 2-Fluorophenol	05RE2	SW8270D	%	DS	14-52		01/20/17 09:03	01/25/17 13:29	SKS
Surr: Nitrobenzene-d5	05RE2	SW8270D	316 %	DS	40-110		01/20/17 09:03	01/25/17 13:29	SKS
Surr: Phenol-d5	05RE2	SW8270D	%	DS	5-33		01/20/17 09:03	01/25/17 13:29	SKS
Surr: p-Terphenyl-d14	05RE2	SW8270D	1040 %	DS	27-133		01/20/17 09:03	01/25/17 13:29	SKS
Organochlorine Pesticides ar	nd PCBs by (GC/ECD							
4,4'-DDD	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
4,4'-DDE	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
4,4'-DDT	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
Aldrin	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
alpha-BHC	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
beta-BHC	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
Chlordane	05	SW8081B	<0.222 ug/L		0.222	1	01/19/17 19:00	01/19/17 19:00	SKS
delta-BHC	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
Dieldrin	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
Endosulfan I	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

MW-31

Sample I.D.

Laboratory Sample ID: 17A0484-05

				R	eporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result Qu	ıal	Limit	D.F.	Date/Time	Date/Time	Analyst
Organochlorine Pesticides an	d PCBs by (GC/ECD							
Endosulfan II	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
Endosulfan sulfate	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
Endrin	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
Endrin aldehyde	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
gamma-BHC (Lindane)	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
Heptachlor	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
Heptachlor epoxide	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
Methoxychlor	05	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:00	01/19/17 19:00	SKS
Toxaphene	05	SW8081B	<1.11 ug/L		1.11	1	01/19/17 19:00	01/19/17 19:00	SKS
Surr: TCMX	05	SW8081B	140 %	S	18-112		01/19/17 19:00	01/19/17 19:00	SKS
Surr: DCB	05	SW8081B	50.0 %		27-131		01/19/17 19:00	01/19/17 19:00	SKS
Wet Chemistry Analysis									
Cyanide	05RE1	SW9012	0.66 mg/L	Cl	0.05	5	01/25/17 16:08	01/25/17 16:08	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Client Site I.D.: Fulton Gas

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-17 Laboratory Sample ID: 17A0484-06

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Ser	ries Method	s							
Silver	06	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:55	CWO
Arsenic	06	EPA200.8 R5.4	7.23 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:52	BG
Beryllium	06	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:55	CWO
Cadmium	06	EPA200.7 Rev 4.4	0.0047 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:55	CWO
Chromium	06	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:55	CWO
Copper	06	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:55	CWO
Mercury	06	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	01/23/17 08:45	01/24/17 09:32	RCV
Nickel	06	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:55	CWO
Lead	06	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:55	CWO
Antimony	06	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:52	BG
Selenium	06	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:52	BG
Thallium	06	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:52	BG
Zinc	06	EPA200.7 Rev 4.4	0.0103 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:55	CWO
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	06RE1	SW8260B	<4.00 ug/L		4.00	10	01/19/17 18:07	01/19/17 18:07	KCS
1,1,1-Trichloroethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,1,2,2-Tetrachloroethane	06RE1	SW8260B	<4.00 ug/L		4.00	10	01/19/17 18:07	01/19/17 18:07	KCS
1,1,2-Trichloroethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,1-Dichloroethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,1-Dichloroethylene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,1-Dichloropropene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,2,3-Trichlorobenzene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,2,3-Trichloropropane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,2,4-Trichlorobenzene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,2,4-Trimethylbenzene	06RE1	SW8260B	233 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Laboratory Sample ID: 17A0484-06 Sample I.D. MW-17

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	06RE1	SW8260B	<40.0 ug/L		40.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,2-Dibromoethane (EDB)	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,2-Dichlorobenzene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,2-Dichloroethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,2-Dichloropropane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,3,5-Trimethylbenzene	06RE1	SW8260B	73.4 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,3-Dichlorobenzene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,3-Dichloropropane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
1,4-Dichlorobenzene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
2,2-Dichloropropane	06RE1	SW8260B	<20.0 ug/L		20.0	10	01/19/17 18:07	01/19/17 18:07	KCS
2-Butanone (MEK)	06RE1	SW8260B	<100 ug/L		100	10	01/19/17 18:07	01/19/17 18:07	KCS
2-Chlorotoluene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
2-Hexanone (MBK)	06RE1	SW8260B	<50.0 ug/L		50.0	10	01/19/17 18:07	01/19/17 18:07	KCS
4-Chlorotoluene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
4-Isopropyltoluene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
4-Methyl-2-pentanone (MIBK)	06RE1	SW8260B	<50.0 ug/L		50.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Acetone	06RE1	SW8260B	<100 ug/L		100	10	01/19/17 18:07	01/19/17 18:07	KCS
Benzene	06RE1	SW8260B	1540 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Bromobenzene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Bromochloromethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Bromodichloromethane	06RE1	SW8260B	<5.00 ug/L		5.00	10	01/19/17 18:07	01/19/17 18:07	KCS
Bromoform	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Bromomethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Carbon disulfide	06RE1	SW8260B	<100 ug/L		100	10	01/19/17 18:07	01/19/17 18:07	KCS
Carbon tetrachloride	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Chlorobenzene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-17 Laboratory Sample ID: 17A0484-06

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Chloroform	06RE1	SW8260B	<5.00 ug/L		5.00	10	01/19/17 18:07	01/19/17 18:07	KCS
Chloromethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
cis-1,2-Dichloroethylene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
cis-1,3-Dichloropropene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Dibromochloromethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Dibromomethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Dichlorodifluoromethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Di-isopropyl ether (DIPE)	06RE1	SW8260B	<50.0 ug/L		50.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Ethylbenzene	06RE1	SW8260B	1070 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Hexachlorobutadiene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
lodomethane	06RE1	SW8260B	<100 ug/L		100	10	01/19/17 18:07	01/19/17 18:07	KCS
Isopropylbenzene	06RE1	SW8260B	49.3 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
m+p-Xylenes	06RE1	SW8260B	559 ug/L		20.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Methylene chloride	06RE1	SW8260B	<40.0 ug/L		40.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Methyl-t-butyl ether (MTBE)	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Naphthalene	06	SW8260B	9330 ug/L		100	100	01/19/17 14:25	01/19/17 14:25	KCS
n-Butylbenzene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
n-Propylbenzene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
o-Xylene	06RE1	SW8260B	305 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
sec-Butylbenzene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Styrene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
tert-Butylbenzene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Tetrachloroethylene (PCE)	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Toluene	06RE1	SW8260B	225 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
trans-1,2-Dichloroethylene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Laboratory Order ID: 17A0484

 Analytical Results MW-17

Sample I.D.

Laboratory Sample ID: 17A0484-06

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Trichloroethylene	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Trichlorofluoromethane	06RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Vinyl acetate	06RE1	SW8260B	<100 ug/L		100	10	01/19/17 18:07	01/19/17 18:07	KCS
Vinyl chloride	06RE1	SW8260B	<5.00 ug/L		5.00	10	01/19/17 18:07	01/19/17 18:07	KCS
Xylenes, Total	06RE1	SW8260B	864 ug/L		30.0	10	01/19/17 18:07	01/19/17 18:07	KCS
Surr: 1,2-Dichloroethane-d4	06	SW8260B	99.8 %		70-120		01/19/17 14:25	01/19/17 14:25	KCS
Surr: 4-Bromofluorobenzene	06	SW8260B	95.8 %		75-120		01/19/17 14:25	01/19/17 14:25	KCS
Surr: Dibromofluoromethane	06	SW8260B	103 %		80-119		01/19/17 14:25	01/19/17 14:25	KCS
Surr: Toluene-d8	06	SW8260B	99.9 %		85-120		01/19/17 14:25	01/19/17 14:25	KCS
Surr: 1,2-Dichloroethane-d4	06RE1	SW8260B	97.1 %		70-120		01/19/17 18:07	01/19/17 18:07	KCS
Surr: 4-Bromofluorobenzene	06RE1	SW8260B	94.1 %		75-120		01/19/17 18:07	01/19/17 18:07	KCS
Surr: Dibromofluoromethane	06RE1	SW8260B	100 %		80-119		01/19/17 18:07	01/19/17 18:07	KCS
Surr: Toluene-d8	06RE1	SW8260B	99.2 %		85-120		01/19/17 18:07	01/19/17 18:07	KCS
Semivolatile Organic Compou	inds by GC	MS							
2,3,7,8-TCDD (SIM)	06	EPA625	Not Detected			1	01/20/17 09:03	01/25/17 12:02	SKS
1,2,4,5-Tetrachlorobenzene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
1,2,4-Trichlorobenzene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
1,2-Dichlorobenzene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
1,2-Diphenylhydrazine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
1,3-Dichlorobenzene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
1,3-Dinitrobenzene	06	SW8270D	<54.9 ug/L		54.9	20	01/20/17 09:03	01/25/17 04:08	SKS
1,4-Dichlorobenzene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
1-Naphthylamine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
2,3,4,6-Tetrachlorophenol	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
2,4,5-Trichlorophenol	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

36156.015

Project Number:

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-17 Laboratory Sample ID: 17A0484-06

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,4,6-Trichlorophenol	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
2,4-Dichlorophenol	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
2,4-Dimethylphenol	06	SW8270D	47.1 ug/L		11.0	20	01/20/17 09:03	01/25/17 04:08	SKS
2,4-Dinitrophenol	06	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 04:08	SKS
2,4-Dinitrotoluene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
2,6-Dichlorophenol	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
2,6-Dinitrotoluene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
2-Chloronaphthalene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
2-Chlorophenol	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
2-Methylnaphthalene	06	SW8270D	895 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
2-Naphthylamine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
2-Nitroaniline	06	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 04:08	SKS
2-Nitrophenol	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
3,3'-Dichlorobenzidine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
3-Methylcholanthrene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
3-Nitroaniline	06	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 04:08	SKS
4,6-Dinitro-2-methylphenol	06	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 04:08	SKS
4-Aminobiphenyl	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
4-Bromophenyl phenyl ether	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
4-Chloroaniline	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
4-Chlorophenyl phenyl ether	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
4-Nitroaniline	06	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 04:08	SKS
4-Nitrophenol	06	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 04:08	SKS
7,12-Dimethylbenz (a) anthracene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Acenaphthene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Acenaphthylene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-17 Laboratory Sample ID: 17A0484-06

	0 ID				Reporting		Sample Prep	Analysis	A I 4
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compou	inds by GC	MS							
Acetophenone	06	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 04:08	SKS
Aniline	06	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 04:08	SKS
Anthracene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Benzidine	06	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 04:08	SKS
Benzo (a) anthracene	06	SW8270D	<1.10 ug/L		1.10	20	01/20/17 09:03	01/25/17 04:08	SKS
Benzo (a) pyrene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Benzo (b) fluoranthene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Benzo (g,h,i) perylene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Benzo (k) fluoranthene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Benzoic acid	06	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 04:08	SKS
Benzyl alcohol	06	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 04:08	SKS
bis (2-Chloroethoxy) methane	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
bis (2-Chloroethyl) ether	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
bis (2-Chloroisopropyl) ether	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
bis (2-Ethylhexyl) phthalate	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Butyl benzyl phthalate	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Chrysene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Dibenz (a,h) anthracene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Dibenz (a,j) acridine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Dibenzofuran	06	SW8270D	<110 ug/L		110	20	01/20/17 09:03	01/25/17 04:08	SKS
Diethyl phthalate	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Dimethyl phthalate	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Di-n-butyl phthalate	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Di-n-octyl phthalate	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Diphenylamine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Ethyl methanesulfonate	06	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 04:08	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Client Site I.D.:

Sample I.D. MW-17 Laboratory Sample ID: 17A0484-06

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Fluoranthene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Fluorene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Hexachlorobenzene	06	SW8270D	<22.0 ug/L		22.0	20	01/20/17 09:03	01/25/17 04:08	SKS
Hexachlorobutadiene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Hexachlorocyclopentadiene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Hexachloroethane	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Indeno (1,2,3-cd) pyrene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Isophorone	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
m+p-Cresols	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Methyl methanesulfonate	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Naphthalene	06RE1	SW8270D	13500 ug/L		1100	200	01/20/17 09:03	01/24/17 20:08	SKS
Nitrobenzene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
n-Nitrosodimethylamine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
n-Nitrosodi-n-butylamine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
n-Nitrosodi-n-propylamine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
n-Nitrosodiphenylamine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
n-Nitrosopiperidine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
o+m+p-Cresols	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
o-Cresol	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
p-(Dimethylamino) azobenzene	06	SW8270D	<54.9 ug/L		54.9	20	01/20/17 09:03	01/25/17 04:08	SKS
p-Chloro-m-cresol	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Pentachloronitrobenzene (quintozene)	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Pentachlorophenol	06	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 04:08	SKS
Phenacetin	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Phenanthrene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-17 Laboratory Sample ID: 17A0484-06

_	Caman ID				Reporting		Sample Prep	Analysis	A l 4
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Phenol	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Pronamide	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Pyrene	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Pyridine	06	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:08	SKS
Surr: 2,4,6-Tribromophenol	06	SW8270D	84.0 %		40-125		01/20/17 09:03	01/25/17 04:08	SKS
Surr: 2-Fluorobiphenyl	06	SW8270D	62.9 %		23-87		01/20/17 09:03	01/25/17 04:08	SKS
Surr: 2-Fluorophenol	06	SW8270D	26.1 %		14-52		01/20/17 09:03	01/25/17 04:08	SKS
Surr: Nitrobenzene-d5	06	SW8270D	66.3 %		40-110		01/20/17 09:03	01/25/17 04:08	SKS
Surr: Phenol-d5	06	SW8270D	14.3 %		5-33		01/20/17 09:03	01/25/17 04:08	SKS
Surr: p-Terphenyl-d14	06	SW8270D	79.1 %		27-133		01/20/17 09:03	01/25/17 04:08	SKS
Surr: 2,4,6-Tribromophenol	06RE1	SW8270D	354 %	DS	40-125		01/20/17 09:03	01/24/17 20:08	SKS
Surr: 2-Fluorobiphenyl	06RE1	SW8270D	209 %	DS	23-87		01/20/17 09:03	01/24/17 20:08	SKS
Surr: 2-Fluorophenol	06RE1	SW8270D	%	DS	14-52		01/20/17 09:03	01/24/17 20:08	SKS
Surr: Nitrobenzene-d5	06RE1	SW8270D	170 %	DS	40-110		01/20/17 09:03	01/24/17 20:08	SKS
Surr: Phenol-d5	06RE1	SW8270D	%	DS	5-33		01/20/17 09:03	01/24/17 20:08	SKS
Surr: p-Terphenyl-d14	06RE1	SW8270D	306 %	DS	27-133		01/20/17 09:03	01/24/17 20:08	SKS
Organochlorine Pesticides ar	nd PCBs by (GC/ECD							
4,4'-DDD	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
4,4'-DDE	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
4,4'-DDT	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
Aldrin	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
alpha-BHC	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
beta-BHC	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
Chlordane	06	SW8081B	<0.222 ug/L		0.222	1	01/19/17 19:19	01/19/17 19:19	SKS
delta-BHC	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
Dieldrin	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-17 Laboratory Sample ID: 17A0484-06

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Organochlorine Pesticides a	and PCBs by	GC/ECD							
Endosulfan I	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
Endosulfan II	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
Endosulfan sulfate	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
Endrin	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
Endrin aldehyde	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
gamma-BHC (Lindane)	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
Heptachlor	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
Heptachlor epoxide	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
Methoxychlor	06	SW8081B	<0.056 ug/L		0.056	1	01/19/17 19:19	01/19/17 19:19	SKS
Toxaphene	06	SW8081B	<1.11 ug/L		1.11	1	01/19/17 19:19	01/19/17 19:19	SKS
Surr: TCMX	06	SW8081B	125 %	S	18-112		01/19/17 19:19	01/19/17 19:19	SKS
Surr: DCB	06	SW8081B	30.0 %		27-131		01/19/17 19:19	01/19/17 19:19	SKS
Wet Chemistry Analysis									
Cyanide	06RE1	SW9012	0.28 mg/L	CI	0.05	5	01/25/17 16:11	01/25/17 16:11	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-18 Laboratory Sample ID: 17A0484-07

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Ser	ries Method	ls							
Silver	07	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:57	CWO
Arsenic	07	EPA200.8 R5.4	14.8 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:55	BG
Beryllium	07	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:57	CWO
Cadmium	07	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:57	CWO
Chromium	07	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:57	CWO
Copper	07	EPA200.7 Rev 4.4	0.0537 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:57	CWO
Mercury	07	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	01/23/17 08:45	01/24/17 09:45	RCV
Nickel	07	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:57	CWO
Lead	07	EPA200.7 Rev 4.4	0.0459 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:57	CWO
Antimony	07	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:55	BG
Selenium	07	EPA200.8 R5.4	1.24 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:55	BG
Thallium	07	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:55	BG
Zinc	07	EPA200.7 Rev 4.4	0.180 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:57	CWO
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	07RE1	SW8260B	<4.00 ug/L		4.00	10	01/19/17 16:24	01/19/17 16:24	KCS
1,1,1-Trichloroethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,1,2,2-Tetrachloroethane	07RE1	SW8260B	<4.00 ug/L		4.00	10	01/19/17 16:24	01/19/17 16:24	KCS
1,1,2-Trichloroethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,1-Dichloroethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,1-Dichloroethylene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,1-Dichloropropene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,2,3-Trichlorobenzene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,2,3-Trichloropropane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,2,4-Trichlorobenzene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,2,4-Trimethylbenzene	07RE1	SW8260B	79.5 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2

1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-18 Laboratory Sample ID: 17A0484-07

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	07RE1	SW8260B	<40.0 ug/L		40.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,2-Dibromoethane (EDB)	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,2-Dichlorobenzene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,2-Dichloroethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,2-Dichloropropane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,3,5-Trimethylbenzene	07RE1	SW8260B	39.4 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,3-Dichlorobenzene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,3-Dichloropropane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
1,4-Dichlorobenzene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
2,2-Dichloropropane	07RE1	SW8260B	<20.0 ug/L		20.0	10	01/19/17 16:24	01/19/17 16:24	KCS
2-Butanone (MEK)	07RE1	SW8260B	<100 ug/L		100	10	01/19/17 16:24	01/19/17 16:24	KCS
2-Chlorotoluene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
2-Hexanone (MBK)	07RE1	SW8260B	<50.0 ug/L		50.0	10	01/19/17 16:24	01/19/17 16:24	KCS
4-Chlorotoluene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
4-Isopropyltoluene	07RE1	SW8260B	10.1 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
4-Methyl-2-pentanone (MIBK)	07RE1	SW8260B	<50.0 ug/L		50.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Acetone	07RE1	SW8260B	<100 ug/L		100	10	01/19/17 16:24	01/19/17 16:24	KCS
Benzene	07RE1	SW8260B	1630 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Bromobenzene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Bromochloromethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Bromodichloromethane	07RE1	SW8260B	<5.00 ug/L		5.00	10	01/19/17 16:24	01/19/17 16:24	KCS
Bromoform	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Bromomethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Carbon disulfide	07RE1	SW8260B	<100 ug/L		100	10	01/19/17 16:24	01/19/17 16:24	KCS
Carbon tetrachloride	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Chlorobenzene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Client Site I.D.:

Sample I.D. MW-18 Laboratory Sample ID: 17A0484-07

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Chloroform	07RE1	SW8260B	<5.00 ug/L		5.00	10	01/19/17 16:24	01/19/17 16:24	KCS
Chloromethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
cis-1,2-Dichloroethylene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
cis-1,3-Dichloropropene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Dibromochloromethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Dibromomethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Dichlorodifluoromethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Di-isopropyl ether (DIPE)	07RE1	SW8260B	<50.0 ug/L		50.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Ethylbenzene	07RE1	SW8260B	562 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Hexachlorobutadiene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Iodomethane	07RE1	SW8260B	<100 ug/L		100	10	01/19/17 16:24	01/19/17 16:24	KCS
Isopropylbenzene	07RE1	SW8260B	163 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
m+p-Xylenes	07RE1	SW8260B	129 ug/L		20.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Methylene chloride	07RE1	SW8260B	<40.0 ug/L		40.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Methyl-t-butyl ether (MTBE)	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Naphthalene	07	SW8260B	11300 ug/L		200	200	01/19/17 14:01	01/19/17 14:01	KCS
n-Butylbenzene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
n-Propylbenzene	07RE1	SW8260B	73.8 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
o-Xylene	07RE1	SW8260B	79.7 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
sec-Butylbenzene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Styrene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
tert-Butylbenzene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Tetrachloroethylene (PCE)	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Toluene	07RE1	SW8260B	31.4 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
trans-1,2-Dichloroethylene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-18

Laboratory Sample ID: 17A0484-07

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Trichloroethylene	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Trichlorofluoromethane	07RE1	SW8260B	<10.0 ug/L		10.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Vinyl acetate	07RE1	SW8260B	<100 ug/L		100	10	01/19/17 16:24	01/19/17 16:24	KCS
Vinyl chloride	07RE1	SW8260B	<5.00 ug/L		5.00	10	01/19/17 16:24	01/19/17 16:24	KCS
Xylenes, Total	07RE1	SW8260B	209 ug/L		30.0	10	01/19/17 16:24	01/19/17 16:24	KCS
Surr: 1,2-Dichloroethane-d4	07	SW8260B	99.2 %		70-120		01/19/17 14:01	01/19/17 14:01	KCS
Surr: 4-Bromofluorobenzene	07	SW8260B	95.2 %		75-120		01/19/17 14:01	01/19/17 14:01	KCS
Surr: Dibromofluoromethane	07	SW8260B	104 %		80-119		01/19/17 14:01	01/19/17 14:01	KCS
Surr: Toluene-d8	07	SW8260B	100 %		85-120		01/19/17 14:01	01/19/17 14:01	KCS
Surr: 1,2-Dichloroethane-d4	07RE1	SW8260B	103 %		70-120		01/19/17 16:24	01/19/17 16:24	KCS
Surr: 4-Bromofluorobenzene	07RE1	SW8260B	98.0 %		75-120		01/19/17 16:24	01/19/17 16:24	KCS
Surr: Dibromofluoromethane	07RE1	SW8260B	102 %		80-119		01/19/17 16:24	01/19/17 16:24	KCS
Surr: Toluene-d8	07RE1	SW8260B	100 %		85-120		01/19/17 16:24	01/19/17 16:24	KCS
Semivolatile Organic Compou	inds by GC	MS							
2,3,7,8-TCDD (SIM)	07	EPA625	Not Detected			1	01/20/17 09:03	01/25/17 12:02	SKS
1,2,4,5-Tetrachlorobenzene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
1,2,4-Trichlorobenzene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
1,2-Dichlorobenzene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
1,2-Diphenylhydrazine	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
1,3-Dichlorobenzene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
1,3-Dinitrobenzene	07	SW8270D	<54.9 ug/L		54.9	20	01/20/17 09:03	01/25/17 04:42	SKS
1,4-Dichlorobenzene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
1-Naphthylamine	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
2,3,4,6-Tetrachlorophenol	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
2,4,5-Trichlorophenol	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-18 Laboratory Sample ID: 17A0484-07

Parameter	Samp ID	Method	Result	•	orting mit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,4,6-Trichlorophenol	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
2,4-Dichlorophenol	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
2,4-Dimethylphenol	07	SW8270D	<11.0 ug/L	1	1.0	20	01/20/17 09:03	01/25/17 04:42	SKS
2,4-Dinitrophenol	07	SW8270D	<1100 ug/L	11	100	20	01/20/17 09:03	01/25/17 04:42	SKS
2,4-Dinitrotoluene	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
2,6-Dichlorophenol	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
2,6-Dinitrotoluene	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
2-Chloronaphthalene	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
2-Chlorophenol	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
2-Methylnaphthalene	07	SW8270D	349 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
2-Naphthylamine	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
2-Nitroaniline	07	SW8270D	<440 ug/L	4	40	20	01/20/17 09:03	01/25/17 04:42	SKS
2-Nitrophenol	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
3,3'-Dichlorobenzidine	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
3-Methylcholanthrene	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
3-Nitroaniline	07	SW8270D	<440 ug/L	4	40	20	01/20/17 09:03	01/25/17 04:42	SKS
4,6-Dinitro-2-methylphenol	07	SW8270D	<1100 ug/L	11	100	20	01/20/17 09:03	01/25/17 04:42	SKS
4-Aminobiphenyl	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
4-Bromophenyl phenyl ether	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
4-Chloroaniline	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
4-Chlorophenyl phenyl ether	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
4-Nitroaniline	07	SW8270D	<440 ug/L	4	40	20	01/20/17 09:03	01/25/17 04:42	SKS
4-Nitrophenol	07	SW8270D	<1100 ug/L	11	100	20	01/20/17 09:03	01/25/17 04:42	SKS
7,12-Dimethylbenz (a) anthracene	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
Acenaphthene	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS
Acenaphthylene	07	SW8270D	<220 ug/L	2	20	20	01/20/17 09:03	01/25/17 04:42	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-18 Laboratory Sample ID: 17A0484-07

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
Acetophenone	07	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 04:42	SKS
Aniline	07	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 04:42	SKS
Anthracene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Benzidine	07	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 04:42	SKS
Benzo (a) anthracene	07	SW8270D	<1.10 ug/L		1.10	20	01/20/17 09:03	01/25/17 04:42	SKS
Benzo (a) pyrene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Benzo (b) fluoranthene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Benzo (g,h,i) perylene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Benzo (k) fluoranthene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Benzoic acid	07	SW8270D	<1100 ug/L		1100	20	01/20/17 09:03	01/25/17 04:42	SKS
Benzyl alcohol	07	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 04:42	SKS
bis (2-Chloroethoxy) methane	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
bis (2-Chloroethyl) ether	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
bis (2-Chloroisopropyl) ether	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
bis (2-Ethylhexyl) phthalate	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Butyl benzyl phthalate	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Chrysene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Dibenz (a,h) anthracene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Dibenz (a,j) acridine	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Dibenzofuran	07	SW8270D	<110 ug/L		110	20	01/20/17 09:03	01/25/17 04:42	SKS
Diethyl phthalate	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Dimethyl phthalate	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Di-n-butyl phthalate	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Di-n-octyl phthalate	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Diphenylamine	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Ethyl methanesulfonate	07	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 04:42	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-18 Laboratory Sample ID: 17A0484-07

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Fluoranthene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Fluorene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Hexachlorobenzene	07	SW8270D	<22.0 ug/L		22.0	20	01/20/17 09:03	01/25/17 04:42	SKS
Hexachlorobutadiene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Hexachlorocyclopentadiene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Hexachloroethane	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Indeno (1,2,3-cd) pyrene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Isophorone	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
m+p-Cresols	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Methyl methanesulfonate	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Naphthalene	07RE1	SW8270D	18300 ug/L		1100	200	01/20/17 09:03	01/24/17 23:34	SKS
Nitrobenzene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
n-Nitrosodimethylamine	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
n-Nitrosodi-n-butylamine	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
n-Nitrosodi-n-propylamine	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
n-Nitrosodiphenylamine	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
n-Nitrosopiperidine	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
o+m+p-Cresols	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
o-Cresol	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
p-(Dimethylamino) azobenzene	07	SW8270D	<54.9 ug/L		54.9	20	01/20/17 09:03	01/25/17 04:42	SKS
p-Chloro-m-cresol	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Pentachloronitrobenzene (quintozene)	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Pentachlorophenol	07	SW8270D	<440 ug/L		440	20	01/20/17 09:03	01/25/17 04:42	SKS
Phenacetin	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Phenanthrene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-18 Laboratory Sample ID: 17A0484-07

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Phenol	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Pronamide	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Pyrene	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Pyridine	07	SW8270D	<220 ug/L		220	20	01/20/17 09:03	01/25/17 04:42	SKS
Surr: 2,4,6-Tribromophenol	07	SW8270D	84.3 %		40-125		01/20/17 09:03	01/25/17 04:42	SKS
Surr: 2-Fluorobiphenyl	07	SW8270D	59.6 %		23-87		01/20/17 09:03	01/25/17 04:42	SKS
Surr: 2-Fluorophenol	07	SW8270D	37.1 %		14-52		01/20/17 09:03	01/25/17 04:42	SKS
Surr: Nitrobenzene-d5	07	SW8270D	68.4 %		40-110		01/20/17 09:03	01/25/17 04:42	SKS
Surr: Phenol-d5	07	SW8270D	16.2 %		5-33		01/20/17 09:03	01/25/17 04:42	SKS
Surr: p-Terphenyl-d14	07	SW8270D	76.2 %		27-133		01/20/17 09:03	01/25/17 04:42	SKS
Surr: 2,4,6-Tribromophenol	07RE1	SW8270D	330 %	DS	40-125		01/20/17 09:03	01/24/17 23:34	SKS
Surr: 2-Fluorobiphenyl	07RE1	SW8270D	196 %	DS	23-87		01/20/17 09:03	01/24/17 23:34	SKS
Surr: 2-Fluorophenol	07RE1	SW8270D	1.20 %	DS	14-52		01/20/17 09:03	01/24/17 23:34	SKS
Surr: Nitrobenzene-d5	07RE1	SW8270D	66.0 %		40-110		01/20/17 09:03	01/24/17 23:34	SKS
Surr: Phenol-d5	07RE1	SW8270D	%	DS	5-33		01/20/17 09:03	01/24/17 23:34	SKS
Surr: p-Terphenyl-d14	07RE1	SW8270D	308 %	DS	27-133		01/20/17 09:03	01/24/17 23:34	SKS
Organochlorine Pesticides an	d PCBs by (GC/ECD							
4,4'-DDD	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
4,4'-DDE	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
4,4'-DDT	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
Aldrin	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
alpha-BHC	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
beta-BHC	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
Chlordane	07	SW8081B	<0.211 ug/L		0.211	1	01/19/17 19:37	01/19/17 19:37	SKS
delta-BHC	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
Dieldrin	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3615

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-18 Laboratory Sample ID: 17A0484-07

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides a	nd PCBs by (GC/ECD							
Endosulfan I	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
Endosulfan II	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
Endosulfan sulfate	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
Endrin	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
Endrin aldehyde	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
gamma-BHC (Lindane)	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
Heptachlor	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
Heptachlor epoxide	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
Methoxychlor	07	SW8081B	<0.053 ug/L		0.053	1	01/19/17 19:37	01/19/17 19:37	SKS
Toxaphene	07	SW8081B	<1.05 ug/L		1.05	1	01/19/17 19:37	01/19/17 19:37	SKS
Surr: TCMX	07	SW8081B	10.0 %	S	18-112		01/19/17 19:37	01/19/17 19:37	SKS
Surr: DCB	07	SW8081B	10.0 %	S	27-131		01/19/17 19:37	01/19/17 19:37	SKS
Wet Chemistry Analysis									
Cyanide	07RE1	SW9012	1.15 mg/L	CI	0.05	5	01/25/17 16:14	01/25/17 16:14	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-15 Laboratory Sample ID: 17A0484-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	eries Method	s							
Silver	08	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:59	CWO
Arsenic	08	EPA200.8 R5.4	4.20 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:59	BG
Beryllium	80	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:59	CWO
Cadmium	08	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 12:59	CWO
Chromium	80	EPA200.7 Rev 4.4	0.0316 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:59	CWO
Copper	80	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:59	CWO
Mercury	08	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	01/23/17 08:45	01/24/17 09:47	RCV
Nickel	80	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:59	CWO
Lead	80	EPA200.7 Rev 4.4	0.0136 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:59	CWO
Antimony	08	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:59	BG
Selenium	08	EPA200.8 R5.4	1.10 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:59	BG
Thallium	08	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 15:59	BG
Zinc	80	EPA200.7 Rev 4.4	0.496 mg/L		0.0100	1	01/19/17 13:30	01/20/17 12:59	CWO
Volatile Organic Compounds	s by GCMS								
1,1,1,2-Tetrachloroethane	08	SW8260B	<4.00 ug/L		4.00	10	01/19/17 14:49	01/19/17 14:49	KCS
1,1,1-Trichloroethane	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,1,2,2-Tetrachloroethane	80	SW8260B	<4.00 ug/L		4.00	10	01/19/17 14:49	01/19/17 14:49	KCS
1,1,2-Trichloroethane	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,1-Dichloroethane	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,1-Dichloroethylene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,1-Dichloropropene	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,2,3-Trichlorobenzene	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,2,3-Trichloropropane	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,2,4-Trichlorobenzene	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,2,4-Trimethylbenzene	08	SW8260B	134 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gas** Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

17A0484-08 Sample I.D. MW-15 **Laboratory Sample ID:**

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds b	y GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	80	SW8260B	<40.0 ug/L		40.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,2-Dibromoethane (EDB)	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,2-Dichlorobenzene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,2-Dichloroethane	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,2-Dichloropropane	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,3,5-Trimethylbenzene	80	SW8260B	51.8 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,3-Dichlorobenzene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,3-Dichloropropane	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
1,4-Dichlorobenzene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
2,2-Dichloropropane	80	SW8260B	<20.0 ug/L		20.0	10	01/19/17 14:49	01/19/17 14:49	KCS
2-Butanone (MEK)	80	SW8260B	<100 ug/L		100	10	01/19/17 14:49	01/19/17 14:49	KCS
2-Chlorotoluene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
2-Hexanone (MBK)	80	SW8260B	<50.0 ug/L		50.0	10	01/19/17 14:49	01/19/17 14:49	KCS
4-Chlorotoluene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
4-Isopropyltoluene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
4-Methyl-2-pentanone (MIBK)	80	SW8260B	<50.0 ug/L		50.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Acetone	80	SW8260B	<100 ug/L		100	10	01/19/17 14:49	01/19/17 14:49	KCS
Benzene	80	SW8260B	333 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Bromobenzene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Bromochloromethane	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Bromodichloromethane	80	SW8260B	<5.00 ug/L		5.00	10	01/19/17 14:49	01/19/17 14:49	KCS
Bromoform	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Bromomethane	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Carbon disulfide	08	SW8260B	<100 ug/L		100	10	01/19/17 14:49	01/19/17 14:49	KCS
Carbon tetrachloride	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Chlorobenzene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-15 Laboratory Sample ID: 17A0484-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Chloroform	08	SW8260B	<5.00 ug/L		5.00	10	01/19/17 14:49	01/19/17 14:49	KCS
Chloromethane	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
cis-1,2-Dichloroethylene	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
cis-1,3-Dichloropropene	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Dibromochloromethane	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Dibromomethane	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Dichlorodifluoromethane	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Di-isopropyl ether (DIPE)	80	SW8260B	<50.0 ug/L		50.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Ethylbenzene	08	SW8260B	172 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Hexachlorobutadiene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
lodomethane	80	SW8260B	<100 ug/L		100	10	01/19/17 14:49	01/19/17 14:49	KCS
Isopropylbenzene	80	SW8260B	18.7 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
m+p-Xylenes	80	SW8260B	202 ug/L		20.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Methylene chloride	80	SW8260B	<40.0 ug/L		40.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Methyl-t-butyl ether (MTBE)	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Naphthalene	80	SW8260B	2190 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
n-Butylbenzene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
n-Propylbenzene	80	SW8260B	10.3 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
o-Xylene	80	SW8260B	88.6 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
sec-Butylbenzene	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Styrene	80	SW8260B	15.2 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
tert-Butylbenzene	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Tetrachloroethylene (PCE)	80	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Toluene	08	SW8260B	160 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
trans-1,2-Dichloroethylene	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Laboratory Order ID: 17A0484

 Analytical Results MW-15

Sample I.D.

17A0484-08 **Laboratory Sample ID:**

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Trichloroethylene	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Trichlorofluoromethane	08	SW8260B	<10.0 ug/L		10.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Vinyl acetate	08	SW8260B	<100 ug/L		100	10	01/19/17 14:49	01/19/17 14:49	KCS
Vinyl chloride	80	SW8260B	<5.00 ug/L		5.00	10	01/19/17 14:49	01/19/17 14:49	KCS
Xylenes, Total	08	SW8260B	290 ug/L		30.0	10	01/19/17 14:49	01/19/17 14:49	KCS
Surr: 1,2-Dichloroethane-d4	08	SW8260B	99.7 %		70-120		01/19/17 14:49	01/19/17 14:49	KCS
Surr: 4-Bromofluorobenzene	08	SW8260B	96.4 %		75-120		01/19/17 14:49	01/19/17 14:49	KCS
Surr: Dibromofluoromethane	08	SW8260B	102 %		80-119		01/19/17 14:49	01/19/17 14:49	KCS
Surr: Toluene-d8	08	SW8260B	101 %		85-120		01/19/17 14:49	01/19/17 14:49	KCS
Semivolatile Organic Compou	ınds by GC	MS							
1,2,4,5-Tetrachlorobenzene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
1,2,4-Trichlorobenzene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
1,2-Dichlorobenzene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
1,2-Diphenylhydrazine	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
1,3-Dichlorobenzene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
1,3-Dinitrobenzene	08	SW8270D	<26.9 ug/L		26.9	10	01/20/17 09:03	01/25/17 02:25	SKS
1,4-Dichlorobenzene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
1-Naphthylamine	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
2,3,4,6-Tetrachlorophenol	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
2,4,5-Trichlorophenol	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
2,4,6-Trichlorophenol	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
2,4-Dichlorophenol	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
2,4-Dimethylphenol	80	SW8270D	<5.38 ug/L		5.38	10	01/20/17 09:03	01/25/17 02:25	SKS
2,4-Dinitrophenol	80	SW8270D	<538 ug/L		538	10	01/20/17 09:03	01/25/17 02:25	SKS
2,4-Dinitrotoluene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-15 Laboratory Sample ID: 17A0484-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,6-Dichlorophenol	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
2,6-Dinitrotoluene	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
2-Chloronaphthalene	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
2-Chlorophenol	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
2-Methylnaphthalene	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
2-Naphthylamine	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
2-Nitroaniline	80	SW8270D	<215 ug/L		215	10	01/20/17 09:03	01/25/17 02:25	SKS
2-Nitrophenol	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
3,3'-Dichlorobenzidine	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
3-Methylcholanthrene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
3-Nitroaniline	08	SW8270D	<215 ug/L		215	10	01/20/17 09:03	01/25/17 02:25	SKS
4,6-Dinitro-2-methylphenol	80	SW8270D	<538 ug/L		538	10	01/20/17 09:03	01/25/17 02:25	SKS
4-Aminobiphenyl	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
4-Bromophenyl phenyl ether	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
4-Chloroaniline	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
4-Chlorophenyl phenyl ether	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
4-Nitroaniline	08	SW8270D	<215 ug/L		215	10	01/20/17 09:03	01/25/17 02:25	SKS
4-Nitrophenol	80	SW8270D	<538 ug/L		538	10	01/20/17 09:03	01/25/17 02:25	SKS
7,12-Dimethylbenz (a) anthracene	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Acenaphthene	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Acenaphthylene	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Acetophenone	80	SW8270D	<215 ug/L		215	10	01/20/17 09:03	01/25/17 02:25	SKS
Aniline	80	SW8270D	<538 ug/L		538	10	01/20/17 09:03	01/25/17 02:25	SKS
Anthracene	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Benzidine	80	SW8270D	<538 ug/L		538	10	01/20/17 09:03	01/25/17 02:25	SKS
Benzo (a) anthracene	08	SW8270D	<0.54 ug/L		0.54	10	01/20/17 09:03	01/25/17 02:25	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-15 Laboratory Sample ID: 17A0484-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	inds by GC	MS							
Benzo (a) pyrene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Benzo (b) fluoranthene	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Benzo (g,h,i) perylene	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Benzo (k) fluoranthene	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Benzoic acid	80	SW8270D	<538 ug/L		538	10	01/20/17 09:03	01/25/17 02:25	SKS
Benzyl alcohol	80	SW8270D	<215 ug/L		215	10	01/20/17 09:03	01/25/17 02:25	SKS
bis (2-Chloroethoxy) methane	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
bis (2-Chloroethyl) ether	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
bis (2-Chloroisopropyl) ether	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
bis (2-Ethylhexyl) phthalate	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Butyl benzyl phthalate	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Chrysene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Dibenz (a,h) anthracene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Dibenz (a,j) acridine	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Dibenzofuran	08	SW8270D	<53.8 ug/L		53.8	10	01/20/17 09:03	01/25/17 02:25	SKS
Diethyl phthalate	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Dimethyl phthalate	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Di-n-butyl phthalate	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Di-n-octyl phthalate	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Diphenylamine	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Ethyl methanesulfonate	08	SW8270D	<215 ug/L		215	10	01/20/17 09:03	01/25/17 02:25	SKS
Fluoranthene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Fluorene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Hexachlorobenzene	08	SW8270D	<10.8 ug/L		10.8	10	01/20/17 09:03	01/25/17 02:25	SKS
Hexachlorobutadiene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Hexachlorocyclopentadiene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-15 Laboratory Sample ID: 17A0484-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Hexachloroethane	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Indeno (1,2,3-cd) pyrene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Isophorone	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
m+p-Cresols	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Methyl methanesulfonate	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Naphthalene	08RE2	SW8270D	1000 ug/L		538	200	01/20/17 09:03	01/25/17 14:04	SKS
Nitrobenzene	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
n-Nitrosodimethylamine	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
n-Nitrosodi-n-butylamine	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
n-Nitrosodi-n-propylamine	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
n-Nitrosodiphenylamine	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
n-Nitrosopiperidine	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
o+m+p-Cresols	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
o-Cresol	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
p-(Dimethylamino) azobenzene	08	SW8270D	<26.9 ug/L		26.9	10	01/20/17 09:03	01/25/17 02:25	SKS
p-Chloro-m-cresol	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Pentachloronitrobenzene (quintozene)	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Pentachlorophenol	80	SW8270D	<215 ug/L		215	10	01/20/17 09:03	01/25/17 02:25	SKS
Phenacetin	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Phenanthrene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Phenol	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Pronamide	80	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Pyrene	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Pyridine	08	SW8270D	<108 ug/L		108	10	01/20/17 09:03	01/25/17 02:25	SKS
Surr: 2,4,6-Tribromophenol	08	SW8270D	21.7 %	DS	40-125		01/20/17 09:03	01/25/17 02:25	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-15 Laboratory Sample ID: 17A0484-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Surr: 2-Fluorobiphenyl	08	SW8270D	16.1 %	DS	23-87		01/20/17 09:03	01/25/17 02:25	SKS
Surr: 2-Fluorophenol	08	SW8270D	%	DS	14-52		01/20/17 09:03	01/25/17 02:25	SKS
Surr: Nitrobenzene-d5	08	SW8270D	12.5 %	DS	40-110		01/20/17 09:03	01/25/17 02:25	SKS
Surr: Phenol-d5	08	SW8270D	%	DS	5-33		01/20/17 09:03	01/25/17 02:25	SKS
Surr: p-Terphenyl-d14	08	SW8270D	21.3 %	DS	27-133		01/20/17 09:03	01/25/17 02:25	SKS
Surr: 2,4,6-Tribromophenol	08RE2	SW8270D	290 %	DS	40-125		01/20/17 09:03	01/25/17 14:04	SKS
Surr: 2-Fluorobiphenyl	08RE2	SW8270D	109 %	DS	23-87		01/20/17 09:03	01/25/17 14:04	SKS
Surr: 2-Fluorophenol	08RE2	SW8270D	%	DS	14-52		01/20/17 09:03	01/25/17 14:04	SKS
Surr: Nitrobenzene-d5	08RE2	SW8270D	77.2 %		40-110		01/20/17 09:03	01/25/17 14:04	SKS
Surr: Phenol-d5	08RE2	SW8270D	%	DS	5-33		01/20/17 09:03	01/25/17 14:04	SKS
Surr: p-Terphenyl-d14	08RE2	SW8270D	239 %	DS	27-133		01/20/17 09:03	01/25/17 14:04	SKS
Organochlorine Pesticides an	d PCBs by (GC/ECD							
4,4'-DDD	08	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
4,4'-DDE	80	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
4,4'-DDT	80	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Aldrin	08	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
alpha-BHC	08	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
beta-BHC	08	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Chlordane	08	SW8081B	<0.220 ug/L		0.220	1	01/19/17 19:56	01/19/17 19:56	SKS
delta-BHC	08	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Dieldrin	08	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Endosulfan I	08	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Endosulfan II	08	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Endosulfan sulfate	80	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Endrin	08	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Endrin aldehyde	08	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS



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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-15 Laboratory Sample ID: 17A0484-08

<u> </u>									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides a	and PCBs by O	GC/ECD							
gamma-BHC (Lindane)	08	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Heptachlor	80	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Heptachlor epoxide	80	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Methoxychlor	80	SW8081B	<0.055 ug/L		0.055	1	01/19/17 19:56	01/19/17 19:56	SKS
Toxaphene	08	SW8081B	<1.10 ug/L		1.10	1	01/19/17 19:56	01/19/17 19:56	SKS
Surr: TCMX	08	SW8081B	100 %		18-112		01/19/17 19:56	01/19/17 19:56	SKS
Surr: DCB	08	SW8081B	110 %		27-131		01/19/17 19:56	01/19/17 19:56	SKS
Wet Chemistry Analysis									
Cyanide	08RE1	SW9012	4.47 mg/L	CI	0.25	25	01/25/17 16:17	01/25/17 16:17	BBP



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Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-16 Laboratory Sample ID: 17A0484-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	eries Method	ls							
Silver	09	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:01	CWO
Arsenic	09	EPA200.8 R5.4	4.78 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:02	BG
Beryllium	09	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 13:01	CWO
Cadmium	09	EPA200.7 Rev 4.4	0.0044 mg/L		0.0040	1	01/19/17 13:30	01/20/17 13:01	CWO
Chromium	09	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:01	CWO
Copper	09	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:01	CWO
Mercury	09	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	01/23/17 08:45	01/24/17 09:49	RCV
Nickel	09	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:01	CWO
Lead	09	EPA200.7 Rev 4.4	0.0101 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:01	CWO
Antimony	09	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:02	BG
Selenium	09	EPA200.8 R5.4	1.09 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:02	BG
Thallium	09	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:02	BG
Zinc	09	EPA200.7 Rev 4.4	0.0160 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:01	CWO
Volatile Organic Compounds	s by GCMS								
1,1,1,2-Tetrachloroethane	09	SW8260B	<8.00 ug/L		8.00	20	01/19/17 13:14	01/19/17 13:14	KCS
1,1,1-Trichloroethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,1,2,2-Tetrachloroethane	09	SW8260B	<8.00 ug/L		8.00	20	01/19/17 13:14	01/19/17 13:14	KCS
1,1,2-Trichloroethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,1-Dichloroethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,1-Dichloroethylene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,1-Dichloropropene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,2,3-Trichlorobenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,2,3-Trichloropropane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,2,4-Trichlorobenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,2,4-Trimethylbenzene	09	SW8260B	56.6 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-16 Laboratory Sample ID: 17A0484-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	09	SW8260B	<80.0 ug/L		80.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,2-Dibromoethane (EDB)	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,2-Dichlorobenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,2-Dichloroethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,2-Dichloropropane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,3,5-Trimethylbenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,3-Dichlorobenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,3-Dichloropropane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
1,4-Dichlorobenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
2,2-Dichloropropane	09	SW8260B	<40.0 ug/L		40.0	20	01/19/17 13:14	01/19/17 13:14	KCS
2-Butanone (MEK)	09	SW8260B	<200 ug/L		200	20	01/19/17 13:14	01/19/17 13:14	KCS
2-Chlorotoluene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
2-Hexanone (MBK)	09	SW8260B	<100 ug/L		100	20	01/19/17 13:14	01/19/17 13:14	KCS
4-Chlorotoluene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
4-Isopropyltoluene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
4-Methyl-2-pentanone (MIBK)	09	SW8260B	<100 ug/L		100	20	01/19/17 13:14	01/19/17 13:14	KCS
Acetone	09	SW8260B	<200 ug/L		200	20	01/19/17 13:14	01/19/17 13:14	KCS
Benzene	09	SW8260B	1030 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Bromobenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Bromochloromethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Bromodichloromethane	09	SW8260B	<10.0 ug/L		10.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Bromoform	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Bromomethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Carbon disulfide	09	SW8260B	<200 ug/L		200	20	01/19/17 13:14	01/19/17 13:14	KCS
Carbon tetrachloride	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Chlorobenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-16 Laboratory Sample ID: 17A0484-09

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Chloroform	09	SW8260B	<10.0 ug/L		10.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Chloromethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
cis-1,2-Dichloroethylene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
cis-1,3-Dichloropropene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Dibromochloromethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Dibromomethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Dichlorodifluoromethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Di-isopropyl ether (DIPE)	09	SW8260B	<100 ug/L		100	20	01/19/17 13:14	01/19/17 13:14	KCS
Ethylbenzene	09	SW8260B	225 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Hexachlorobutadiene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
lodomethane	09	SW8260B	<200 ug/L		200	20	01/19/17 13:14	01/19/17 13:14	KCS
Isopropylbenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
m+p-Xylenes	09	SW8260B	245 ug/L		40.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Methylene chloride	09	SW8260B	<80.0 ug/L		80.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Methyl-t-butyl ether (MTBE)	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Naphthalene	09	SW8260B	1530 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
n-Butylbenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
n-Propylbenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
o-Xylene	09	SW8260B	122 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
sec-Butylbenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Styrene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
tert-Butylbenzene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Tetrachloroethylene (PCE)	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Toluene	09	SW8260B	275 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
trans-1,2-Dichloroethylene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS



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Final Report

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Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-16 Laboratory Sample ID: 17A0484-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Trichloroethylene	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Trichlorofluoromethane	09	SW8260B	<20.0 ug/L		20.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Vinyl acetate	09	SW8260B	<200 ug/L		200	20	01/19/17 13:14	01/19/17 13:14	KCS
Vinyl chloride	09	SW8260B	<10.0 ug/L		10.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Xylenes, Total	09	SW8260B	367 ug/L		60.0	20	01/19/17 13:14	01/19/17 13:14	KCS
Surr: 1,2-Dichloroethane-d4	09	SW8260B	102 %		70-120		01/19/17 13:14	01/19/17 13:14	KCS
Surr: 4-Bromofluorobenzene	09	SW8260B	97.4 %		75-120		01/19/17 13:14	01/19/17 13:14	KCS
Surr: Dibromofluoromethane	09	SW8260B	102 %		80-119		01/19/17 13:14	01/19/17 13:14	KCS
Surr: Toluene-d8	09	SW8260B	100 %		85-120		01/19/17 13:14	01/19/17 13:14	KCS
Semivolatile Organic Compou	inds by GC	MS							
1,2,4,5-Tetrachlorobenzene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
1,2,4-Trichlorobenzene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
1,2-Dichlorobenzene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
1,2-Diphenylhydrazine	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
1,3-Dichlorobenzene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
1,3-Dinitrobenzene	09	SW8270D	<27.8 ug/L		27.8	10	01/20/17 09:03	01/25/17 00:42	SKS
1,4-Dichlorobenzene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
1-Naphthylamine	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
2,3,4,6-Tetrachlorophenol	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
2,4,5-Trichlorophenol	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
2,4,6-Trichlorophenol	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
2,4-Dichlorophenol	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
2,4-Dimethylphenol	09	SW8270D	<5.56 ug/L		5.56	10	01/20/17 09:03	01/25/17 00:42	SKS
2,4-Dinitrophenol	09	SW8270D	<556 ug/L		556	10	01/20/17 09:03	01/25/17 00:42	SKS
2,4-Dinitrotoluene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-16 Laboratory Sample ID: 17A0484-09

Parameter	Samp ID	Method	Result	Report Qual Lim	Ū	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS						
2,6-Dichlorophenol	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
2,6-Dinitrotoluene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
2-Chloronaphthalene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
2-Chlorophenol	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
2-Methylnaphthalene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
2-Naphthylamine	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
2-Nitroaniline	09	SW8270D	<222 ug/L	222	10	01/20/17 09:03	01/25/17 00:42	SKS
2-Nitrophenol	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
3,3'-Dichlorobenzidine	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
3-Methylcholanthrene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
3-Nitroaniline	09	SW8270D	<222 ug/L	222	2 10	01/20/17 09:03	01/25/17 00:42	SKS
4,6-Dinitro-2-methylphenol	09	SW8270D	<556 ug/L	556	10	01/20/17 09:03	01/25/17 00:42	SKS
4-Aminobiphenyl	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
4-Bromophenyl phenyl ether	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
4-Chloroaniline	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
4-Chlorophenyl phenyl ether	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
4-Nitroaniline	09	SW8270D	<222 ug/L	222	2 10	01/20/17 09:03	01/25/17 00:42	SKS
4-Nitrophenol	09	SW8270D	<556 ug/L	556	10	01/20/17 09:03	01/25/17 00:42	SKS
7,12-Dimethylbenz (a) anthracene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Acenaphthene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Acenaphthylene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Acetophenone	09	SW8270D	<222 ug/L	222	10	01/20/17 09:03	01/25/17 00:42	SKS
Aniline	09	SW8270D	<556 ug/L	556	10	01/20/17 09:03	01/25/17 00:42	SKS
Anthracene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Benzidine	09	SW8270D	<556 ug/L	556	10	01/20/17 09:03	01/25/17 00:42	SKS
Benzo (a) anthracene	09	SW8270D	<0.56 ug/L	0.5	3 10	01/20/17 09:03	01/25/17 00:42	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-16 Laboratory Sample ID: 17A0484-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
Benzo (a) pyrene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Benzo (b) fluoranthene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Benzo (g,h,i) perylene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Benzo (k) fluoranthene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Benzoic acid	09	SW8270D	<556 ug/L		556	10	01/20/17 09:03	01/25/17 00:42	SKS
Benzyl alcohol	09	SW8270D	<222 ug/L		222	10	01/20/17 09:03	01/25/17 00:42	SKS
bis (2-Chloroethoxy) methane	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
bis (2-Chloroethyl) ether	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
bis (2-Chloroisopropyl) ether	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
bis (2-Ethylhexyl) phthalate	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Butyl benzyl phthalate	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Chrysene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Dibenz (a,h) anthracene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Dibenz (a,j) acridine	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Dibenzofuran	09	SW8270D	<55.6 ug/L		55.6	10	01/20/17 09:03	01/25/17 00:42	SKS
Diethyl phthalate	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Dimethyl phthalate	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Di-n-butyl phthalate	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Di-n-octyl phthalate	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Diphenylamine	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Ethyl methanesulfonate	09	SW8270D	<222 ug/L		222	10	01/20/17 09:03	01/25/17 00:42	SKS
Fluoranthene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Fluorene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Hexachlorobenzene	09	SW8270D	<11.1 ug/L		11.1	10	01/20/17 09:03	01/25/17 00:42	SKS
Hexachlorobutadiene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS
Hexachlorocyclopentadiene	09	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 00:42	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-16 Laboratory Sample ID: 17A0484-09

Parameter	Samp ID	Method	Result	Reportin Qual Limit	g D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS						
Hexachloroethane	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Indeno (1,2,3-cd) pyrene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Isophorone	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
m+p-Cresols	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Methyl methanesulfonate	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Naphthalene	09RE1	SW8270D	615 ug/L	556	100	01/20/17 09:03	01/25/17 14:38	SKS
Nitrobenzene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
n-Nitrosodimethylamine	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
n-Nitrosodi-n-butylamine	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
n-Nitrosodi-n-propylamine	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
n-Nitrosodiphenylamine	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
n-Nitrosopiperidine	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
o+m+p-Cresols	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
o-Cresol	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
p-(Dimethylamino) azobenzene	09	SW8270D	<27.8 ug/L	27.8	10	01/20/17 09:03	01/25/17 00:42	SKS
p-Chloro-m-cresol	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Pentachloronitrobenzene (quintozene)	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Pentachlorophenol	09	SW8270D	<222 ug/L	222	10	01/20/17 09:03	01/25/17 00:42	SKS
Phenacetin	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Phenanthrene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Phenol	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Pronamide	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Pyrene	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Pyridine	09	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 00:42	SKS
Surr: 2,4,6-Tribromophenol	09	SW8270D	77.4 %	40-12	25	01/20/17 09:03	01/25/17 00:42	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-16 Laboratory Sample ID: 17A0484-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Surr: 2-Fluorobiphenyl	09	SW8270D	51.2 %		23-87		01/20/17 09:03	01/25/17 00:42	SKS
Surr: 2-Fluorophenol	09	SW8270D	35.2 %		14-52		01/20/17 09:03	01/25/17 00:42	SKS
Surr: Nitrobenzene-d5	09	SW8270D	57.6 %		40-110		01/20/17 09:03	01/25/17 00:42	SKS
Surr: Phenol-d5	09	SW8270D	18.9 %		5-33		01/20/17 09:03	01/25/17 00:42	SKS
Surr: p-Terphenyl-d14	09	SW8270D	83.1 %		27-133		01/20/17 09:03	01/25/17 00:42	SKS
Surr: 2,4,6-Tribromophenol	09RE1	SW8270D	146 %	DS	40-125		01/20/17 09:03	01/25/17 14:38	SKS
Surr: 2-Fluorobiphenyl	09RE1	SW8270D	98.6 %	DS	23-87		01/20/17 09:03	01/25/17 14:38	SKS
Surr: 2-Fluorophenol	09RE1	SW8270D	%	DS	14-52		01/20/17 09:03	01/25/17 14:38	SKS
Surr: Nitrobenzene-d5	09RE1	SW8270D	33.4 %	DS	40-110		01/20/17 09:03	01/25/17 14:38	SKS
Surr: Phenol-d5	09RE1	SW8270D	%	DS	5-33		01/20/17 09:03	01/25/17 14:38	SKS
Surr: p-Terphenyl-d14	09RE1	SW8270D	147 %	DS	27-133		01/20/17 09:03	01/25/17 14:38	SKS
Organochlorine Pesticides an	d PCBs by (GC/ECD							
4,4'-DDD	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
4,4'-DDE	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
4,4'-DDT	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Aldrin	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
alpha-BHC	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
beta-BHC	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Chlordane	09	SW8081B	<0.222 ug/L		0.222	1	01/19/17 20:53	01/19/17 20:53	SKS
delta-BHC	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Dieldrin	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Endosulfan I	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Endosulfan II	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Endosulfan sulfate	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Endrin	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Endrin aldehyde	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-16

Laboratory Sample ID: 17/

17A0484-09

- Later i i i i campicar	.,,								
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides a	nd PCBs by (GC/ECD							
gamma-BHC (Lindane)	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Heptachlor	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Heptachlor epoxide	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Methoxychlor	09	SW8081B	<0.056 ug/L		0.056	1	01/19/17 20:53	01/19/17 20:53	SKS
Toxaphene	09	SW8081B	<1.11 ug/L		1.11	1	01/19/17 20:53	01/19/17 20:53	SKS
Surr: TCMX	09	SW8081B	70.0 %		18-112		01/19/17 20:53	01/19/17 20:53	SKS
Surr: DCB	09	SW8081B	85.0 %		27-131		01/19/17 20:53	01/19/17 20:53	SKS
Wet Chemistry Analysis									
Cyanide	09RE1	SW9012	1.08 mg/L	CI	0.05	5	01/25/17 16:20	01/25/17 16:20	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-13 Laboratory Sample ID: 17A0484-10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 S	eries Method	ls							
Silver	10	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:03	CWO
Arsenic	10	EPA200.8 R5.4	2.77 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:05	BG
Beryllium	10	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 13:03	CWO
Cadmium	10	EPA200.7 Rev 4.4	0.0088 mg/L		0.0040	1	01/19/17 13:30	01/20/17 13:03	CWO
Chromium	10	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:03	CWO
Copper	10	EPA200.7 Rev 4.4	0.0815 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:03	CWO
Mercury	10	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	01/23/17 08:45	01/24/17 09:51	RCV
Nickel	10	EPA200.7 Rev 4.4	0.0641 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:03	CWO
Lead	10	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:03	CWO
Antimony	10	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:05	BG
Selenium	10	EPA200.8 R5.4	3.71 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:05	BG
Thallium	10	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:05	BG
Zinc	10	EPA200.7 Rev 4.4	1.19 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:03	CWO
Volatile Organic Compound	s by GCMS								
1,1,1,2-Tetrachloroethane	10	SW8260B	<4.00 ug/L		4.00	10	01/19/17 13:37	01/19/17 13:37	KCS
1,1,1-Trichloroethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,1,2,2-Tetrachloroethane	10	SW8260B	<4.00 ug/L		4.00	10	01/19/17 13:37	01/19/17 13:37	KCS
1,1,2-Trichloroethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,1-Dichloroethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,1-Dichloroethylene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,1-Dichloropropene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,2,3-Trichlorobenzene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,2,3-Trichloropropane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,2,4-Trichlorobenzene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,2,4-Trimethylbenzene	10	SW8260B	130 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-13 Laboratory Sample ID: 17A0484-10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	10	SW8260B	<40.0 ug/L		40.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,2-Dibromoethane (EDB)	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,2-Dichlorobenzene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,2-Dichloroethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,2-Dichloropropane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,3,5-Trimethylbenzene	10	SW8260B	44.3 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,3-Dichlorobenzene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,3-Dichloropropane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
1,4-Dichlorobenzene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
2,2-Dichloropropane	10	SW8260B	<20.0 ug/L		20.0	10	01/19/17 13:37	01/19/17 13:37	KCS
2-Butanone (MEK)	10	SW8260B	<100 ug/L		100	10	01/19/17 13:37	01/19/17 13:37	KCS
2-Chlorotoluene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
2-Hexanone (MBK)	10	SW8260B	<50.0 ug/L		50.0	10	01/19/17 13:37	01/19/17 13:37	KCS
4-Chlorotoluene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
4-Isopropyltoluene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
4-Methyl-2-pentanone (MIBK)	10	SW8260B	<50.0 ug/L		50.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Acetone	10	SW8260B	<100 ug/L		100	10	01/19/17 13:37	01/19/17 13:37	KCS
Benzene	10	SW8260B	421 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Bromobenzene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Bromochloromethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Bromodichloromethane	10	SW8260B	<5.00 ug/L		5.00	10	01/19/17 13:37	01/19/17 13:37	KCS
Bromoform	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Bromomethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Carbon disulfide	10	SW8260B	<100 ug/L		100	10	01/19/17 13:37	01/19/17 13:37	KCS
Carbon tetrachloride	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Chlorobenzene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number:

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-13 Laboratory Sample ID: 17A0484-10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Chloroform	10	SW8260B	<5.00 ug/L		5.00	10	01/19/17 13:37	01/19/17 13:37	KCS
Chloromethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
cis-1,2-Dichloroethylene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
cis-1,3-Dichloropropene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Dibromochloromethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Dibromomethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Dichlorodifluoromethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Di-isopropyl ether (DIPE)	10	SW8260B	<50.0 ug/L		50.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Ethylbenzene	10	SW8260B	844 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Hexachlorobutadiene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
lodomethane	10	SW8260B	<100 ug/L		100	10	01/19/17 13:37	01/19/17 13:37	KCS
Isopropylbenzene	10	SW8260B	11.1 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
m+p-Xylenes	10	SW8260B	63.6 ug/L		20.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Methylene chloride	10	SW8260B	<40.0 ug/L		40.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Methyl-t-butyl ether (MTBE)	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Naphthalene	10	SW8260B	1530 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
n-Butylbenzene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
n-Propylbenzene	10	SW8260B	10.7 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
o-Xylene	10	SW8260B	132 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
sec-Butylbenzene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Styrene	10	SW8260B	12.4 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
tert-Butylbenzene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Tetrachloroethylene (PCE)	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Toluene	10	SW8260B	40.3 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
trans-1,2-Dichloroethylene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS



Certificate of Analysis

Final Report

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

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Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-13 Laboratory Sample ID: 17A0484-10

Trichloroethylene 10 SW8260B <10.0 ug/L	Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Trichloroethylene 10 SW8260B <10.0 ug/L	Volatile Organic Compounds	by GCMS								
Trichlorofiluoromethane 10 SW8260B <10.0 ug/L 10.0 10 01/19/17 13:37 01/19/17 13:37 KCS Vinyl acetate 10 SW8260B <100 ug/L	trans-1,3-Dichloropropene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Vinyl acetate 10 SW8260B <100 ug/L 100 10 01/19/17 13:37 01/19/17 13:37 KCS Vinyl chloride 10 SW8260B <5.00 ug/L 5.00 10 01/19/17 13:37 01/19/17 13:37 KCS Xylones, Total 10 SW8260B 196 ug/L 30.0 10 01/19/17 13:37 01/19/17 13:37 KCS Surr: 1,2-Dichloroethane-d4 10 SW8260B 96.8 % 70-120 01/19/17 13:37 01/19/17 13:37 01/19/17 13:37 KCS Surr: Dibromofluorobenzene 10 SW8260B 96.8 % 75-120 01/19/17 13:37 01/19/17 13:37 01/19/17 13:37 KCS Surr: Dibromofluorobenzene 10 SW8260B 96.8 % 80-119 01/19/17 13:37 01/19/17 13:37 01/19/17 13:37 KCS Surr: Dibromofluorobenzene 10 SW8260B 99.8 % 80-119 01/19/17 13:37 01/19/17 13:37 01/19/17 13:37 CCS Surr: Dibromofluorobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03	Trichloroethylene	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Vinyl chloride 10 SW8260B <5.00 ug/L 5.00 10 01/19/17 13:37 01/19/17 13:37 KCS Xylenes, Total 10 SW8260B 196 ug/L 30.0 10 01/19/17 13:37 01/19/17 13:37 KCS Surr: 1,2-Dichloroethane-d4 10 SW8260B 96.8 % 75-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: 5 Dibromofluoromethane 10 SW8260B 96.8 % 75-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: Toluene-d8 10 SW8260B 99.8 % 85-120 01/19/17 13:37 01/19/17 13:37 KCS Semivolatile Organic Compounts by GC-MS SURST Toluene-d8 10 SW8260B 99.8 % 85-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: Toluene-d8 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,2-4,5-Tertachlorobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,2-Dip	Trichlorofluoromethane	10	SW8260B	<10.0 ug/L		10.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Xylenes, Total 10 SW8260B 196 ug/L 30.0 10 01/19/17 13:37 01/19/17 13:37 KCS Surr: 1,2-Dichloroethane-d4 10 SW8260B 102 % 70-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: 4-Bromofluorobenzene 10 SW8260B 96.8 % 75-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: Toluene-d8 10 SW8260B 99.8 % 85-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: Toluene-d8 10 SW8260B 99.8 % 85-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: Toluene-d8 10 SW8260B 99.8 % 85-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: Toluene-d8 10 SW8270D <111 ug/L	Vinyl acetate	10	SW8260B	<100 ug/L		100	10	01/19/17 13:37	01/19/17 13:37	KCS
Surr: 1,2-Dichloroethane-d4 10 SW8260B 102 % 70-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: 4-Bromofluorobenzene 10 SW8260B 96.8 % 75-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: Dibromofluoromethane 10 SW8260B 103 % 80-119 01/19/17 13:37 01/19/17 13:37 KCS Surr: Toluene-d8 10 SW8260B 99.8 % 85-120 01/19/17 13:37 01/19/17 13:37 KCS Semivolatile Organic Compounts by GCMS SURS 85-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: Toluene-d8 10 SW8270D <111 ug/L	Vinyl chloride	10	SW8260B	<5.00 ug/L		5.00	10	01/19/17 13:37	01/19/17 13:37	KCS
Surr: 4-Bromofluorobenzene 10 SW8260B 96.8 % 75-120 01/19/17 13:37 01/19/17 13:37 KCS Surr: Dibromofluoromethane 10 SW8260B 103 % 80-119 01/19/17 13:37 01/19/17 13:37 KCS Surr: Toluene-d8 10 SW8260B 99.8 % 85-120 01/19/17 13:37 01/19/17 13:37 KCS Semivolatile Organic Compounds by GCMS Surr: Toluene-d8 10 SW8270D <111 ug/L	Xylenes, Total	10	SW8260B	196 ug/L		30.0	10	01/19/17 13:37	01/19/17 13:37	KCS
Surr: Dibromofluoromethane 10 SW8260B 103 % 80-119 01/19/17 13:37 01/19/17 13:37 KCS Surr: Toluene-d8 10 SW8260B 99.8 % 85-120 01/19/17 13:37 01/19/17 13:37 KCS Semivolatile Organic Compounds by GCWS SEMENOISTILE ORGANIC COMPOUNDS VIVID 11 11 12 10 01/19/17 13:37 01/19/17 13:37 KCS 1,2,4,5-Tetrachlorobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,2-Dichlorobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,2-Diphenylhydrazine 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,3-Dinitrobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,4-Dichlorobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,4-Dichlorobenzene	Surr: 1,2-Dichloroethane-d4	10	SW8260B	102 %		70-120		01/19/17 13:37	01/19/17 13:37	KCS
Surr: Toluene-d8 10 SW8260B 99.8 % 85-120 01/19/17 13:37 01/19/17 13:37 KCS Semivolatile Organic Compounds by GCWS SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,2,4-Frichlorobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,2-Dichlorobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,2-Dichlorobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,3-Dichlorobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,3-Dinitrobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1,4-Dichlorobenzene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 1-Naphthylami	Surr: 4-Bromofluorobenzene	10	SW8260B	96.8 %		75-120		01/19/17 13:37	01/19/17 13:37	KCS
Semivolatile Organic Compounts by GCMS 1,2,4,5-Tetrachlorobenzene 10 SW8270D <111 ug/L	Surr: Dibromofluoromethane	10	SW8260B	103 %		80-119		01/19/17 13:37	01/19/17 13:37	KCS
1,2,4,5-Tetrachlorobenzene 10 SW8270D <111 ug/L	Surr: Toluene-d8	10	SW8260B	99.8 %		85-120		01/19/17 13:37	01/19/17 13:37	KCS
1,2,4-Trichlorobenzene 10 SW8270D <111 ug/L	Semivolatile Organic Compou	ınds by GC	MS							
1,2-Dichlorobenzene 10 SW8270D <111 ug/L	1,2,4,5-Tetrachlorobenzene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
1,2-Diphenylhydrazine 10 SW8270D <111 ug/L	1,2,4-Trichlorobenzene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
1,3-Dichlorobenzene 10 SW8270D <111 ug/L	1,2-Dichlorobenzene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
1,3-Dinitrobenzene 10 SW8270D <27.8 ug/L	1,2-Diphenylhydrazine	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
1,4-Dichlorobenzene 10 SW8270D <111 ug/L	1,3-Dichlorobenzene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
1-Naphthylamine 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 2,3,4,6-Tetrachlorophenol 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 2,4,5-Trichlorophenol 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 2,4,6-Trichlorophenol 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 2,4-Dichlorophenol 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 2,4-Dimethylphenol 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 2,4-Dimethylphenol 10 SW8270D <5.56 ug/L 5.56 10 01/20/17 09:03 01/25/17 01:17 SKS 2,4-Dinitrophenol 10 SW8270D <5556 ug/L 5556 10 01/20/17 09:03 01/25/17 01:17 SKS	1,3-Dinitrobenzene	10	SW8270D	<27.8 ug/L		27.8	10	01/20/17 09:03	01/25/17 01:17	SKS
2,3,4,6-Tetrachlorophenol 10 SW8270D <111 ug/L	1,4-Dichlorobenzene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
2,4,5-Trichlorophenol 10 SW8270D <111 ug/L	1-Naphthylamine	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
2,4,6-Trichlorophenol 10 SW8270D <111 ug/L	2,3,4,6-Tetrachlorophenol	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
2,4-Dichlorophenol 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS 2,4-Dimethylphenol 10 SW8270D <5.56 ug/L	2,4,5-Trichlorophenol	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
2,4-Dimethylphenol 10 SW8270D <5.56 ug/L	2,4,6-Trichlorophenol	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
2,4-Dinitrophenol 10 SW8270D <556 ug/L 556 10 01/20/17 09:03 01/25/17 01:17 SKS	2,4-Dichlorophenol	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
· · · · · · · · · · · · · · · · · · ·	2,4-Dimethylphenol	10	SW8270D	<5.56 ug/L		5.56	10	01/20/17 09:03	01/25/17 01:17	SKS
2,4-Dinitrotoluene 10 SW8270D <111 ug/L 111 10 01/20/17 09:03 01/25/17 01:17 SKS	2,4-Dinitrophenol	10	SW8270D	<556 ug/L		556	10	01/20/17 09:03	01/25/17 01:17	SKS
	2,4-Dinitrotoluene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-13 Laboratory Sample ID: 17A0484-10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,6-Dichlorophenol	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
2,6-Dinitrotoluene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
2-Chloronaphthalene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
2-Chlorophenol	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
2-Methylnaphthalene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
2-Naphthylamine	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
2-Nitroaniline	10	SW8270D	<222 ug/L		222	10	01/20/17 09:03	01/25/17 01:17	SKS
2-Nitrophenol	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
3,3'-Dichlorobenzidine	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
3-Methylcholanthrene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
3-Nitroaniline	10	SW8270D	<222 ug/L		222	10	01/20/17 09:03	01/25/17 01:17	SKS
4,6-Dinitro-2-methylphenol	10	SW8270D	<556 ug/L		556	10	01/20/17 09:03	01/25/17 01:17	SKS
4-Aminobiphenyl	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
4-Bromophenyl phenyl ether	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
4-Chloroaniline	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
4-Chlorophenyl phenyl ether	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
4-Nitroaniline	10	SW8270D	<222 ug/L		222	10	01/20/17 09:03	01/25/17 01:17	SKS
4-Nitrophenol	10	SW8270D	<556 ug/L		556	10	01/20/17 09:03	01/25/17 01:17	SKS
7,12-Dimethylbenz (a) anthracene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Acenaphthene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Acenaphthylene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Acetophenone	10	SW8270D	<222 ug/L		222	10	01/20/17 09:03	01/25/17 01:17	SKS
Aniline	10	SW8270D	<556 ug/L		556	10	01/20/17 09:03	01/25/17 01:17	SKS
Anthracene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Benzidine	10	SW8270D	<556 ug/L		556	10	01/20/17 09:03	01/25/17 01:17	SKS
Benzo (a) anthracene	10	SW8270D	<0.56 ug/L		0.56	10	01/20/17 09:03	01/25/17 01:17	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-13 Laboratory Sample ID: 17A0484-10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
Benzo (a) pyrene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Benzo (b) fluoranthene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Benzo (g,h,i) perylene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Benzo (k) fluoranthene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Benzoic acid	10	SW8270D	<556 ug/L		556	10	01/20/17 09:03	01/25/17 01:17	SKS
Benzyl alcohol	10	SW8270D	<222 ug/L		222	10	01/20/17 09:03	01/25/17 01:17	SKS
bis (2-Chloroethoxy) methane	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
bis (2-Chloroethyl) ether	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
bis (2-Chloroisopropyl) ether	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
bis (2-Ethylhexyl) phthalate	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Butyl benzyl phthalate	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Chrysene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Dibenz (a,h) anthracene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Dibenz (a,j) acridine	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Dibenzofuran	10	SW8270D	<55.6 ug/L		55.6	10	01/20/17 09:03	01/25/17 01:17	SKS
Diethyl phthalate	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Dimethyl phthalate	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Di-n-butyl phthalate	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Di-n-octyl phthalate	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Diphenylamine	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Ethyl methanesulfonate	10	SW8270D	<222 ug/L		222	10	01/20/17 09:03	01/25/17 01:17	SKS
Fluoranthene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Fluorene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Hexachlorobenzene	10	SW8270D	<11.1 ug/L		11.1	10	01/20/17 09:03	01/25/17 01:17	SKS
Hexachlorobutadiene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS
Hexachlorocyclopentadiene	10	SW8270D	<111 ug/L		111	10	01/20/17 09:03	01/25/17 01:17	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-13 Laboratory Sample ID: 17A0484-10

Parameter	Samp ID	Method	Result	Reportir Qual Limit	ng D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Comp	ounds by GC	MS						
Hexachloroethane	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Indeno (1,2,3-cd) pyrene	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Isophorone	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
m+p-Cresols	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Methyl methanesulfonate	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Naphthalene	10	SW8270D	788 ug/L	55.6	10	01/20/17 09:03	01/25/17 01:17	SKS
Nitrobenzene	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
n-Nitrosodimethylamine	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
n-Nitrosodi-n-butylamine	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
n-Nitrosodi-n-propylamine	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
n-Nitrosodiphenylamine	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
n-Nitrosopiperidine	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
o+m+p-Cresols	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
o-Cresol	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
p-(Dimethylamino) azobenzene	10	SW8270D	<27.8 ug/L	27.8	10	01/20/17 09:03	01/25/17 01:17	SKS
p-Chloro-m-cresol	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Pentachloronitrobenzene (quintozene)	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Pentachlorophenol	10	SW8270D	<222 ug/L	222	10	01/20/17 09:03	01/25/17 01:17	SKS
Phenacetin	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Phenanthrene	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Phenol	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Pronamide	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Pyrene	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Pyridine	10	SW8270D	<111 ug/L	111	10	01/20/17 09:03	01/25/17 01:17	SKS
Surr: 2,4,6-Tribromophenol	10	SW8270D	68.2 %	40-1	25	01/20/17 09:03	01/25/17 01:17	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-13 Laboratory Sample ID: 17A0484-10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Comp	ounds by GC	MS							
Surr: 2-Fluorobiphenyl	10	SW8270D	44.9 %		23-87		01/20/17 09:03	01/25/17 01:17	SKS
Surr: 2-Fluorophenol	10	SW8270D	27.3 %		14-52		01/20/17 09:03	01/25/17 01:17	SKS
Surr: Nitrobenzene-d5	10	SW8270D	48.7 %		40-110		01/20/17 09:03	01/25/17 01:17	SKS
Surr: Phenol-d5	10	SW8270D	14.2 %		5-33		01/20/17 09:03	01/25/17 01:17	SKS
Surr: p-Terphenyl-d14	10	SW8270D	70.7 %		27-133		01/20/17 09:03	01/25/17 01:17	SKS
Organochlorine Pesticides a	and PCBs by (GC/ECD							
4,4'-DDD	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
4,4'-DDE	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
4,4'-DDT	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Aldrin	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
alpha-BHC	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
beta-BHC	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Chlordane	10	SW8081B	<0.222 ug/L		0.222	1	01/19/17 21:12	01/19/17 21:12	SKS
delta-BHC	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Dieldrin	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Endosulfan I	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Endosulfan II	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Endosulfan sulfate	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Endrin	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Endrin aldehyde	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
gamma-BHC (Lindane)	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Heptachlor	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Heptachlor epoxide	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Methoxychlor	10	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:12	01/19/17 21:12	SKS
Toxaphene	10	SW8081B	<1.11 ug/L		1.11	1	01/19/17 21:12	01/19/17 21:12	SKS
Surr: TCMX	10	SW8081B	50.0 %		18-112		01/19/17 21:12	01/19/17 21:12	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-13 Laboratory Sample ID: 17A0484-10

Date/Time Sampled:	01/17/2017	4:20							
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides	and PCBs by	GC/ECD							
Surr: DCB Wet Chemistry Analysis	10	SW8081B	75.0 %		27-131		01/19/17 21:12	01/19/17 21:12	SKS
Cyanide	10	SW9012	0.38 mg/L	CI	0.01	1	01/25/17 15:56	01/25/17 15:56	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-14 Laboratory Sample ID: 17A0484-11

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	eries Method	s							
Silver	11	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:17	CWO
Arsenic	11	EPA200.8 R5.4	25.3 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:15	BG
Beryllium	11	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	01/19/17 13:30	01/20/17 13:17	CWO
Cadmium	11	EPA200.7 Rev 4.4	0.0125 mg/L		0.0040	1	01/19/17 13:30	01/20/17 13:17	CWO
Chromium	11	EPA200.7 Rev 4.4	0.0264 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:17	CWO
Copper	11	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:17	CWO
Mercury	11	EPA245.1 R3.0	0.0002 mg/L		0.0002	1	01/23/17 08:45	01/24/17 09:54	RCV
Nickel	11	EPA200.7 Rev 4.4	0.0147 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:17	CWO
Lead	11	EPA200.7 Rev 4.4	0.0395 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:17	CWO
Antimony	11	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:15	BG
Selenium	11	EPA200.8 R5.4	3.59 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:15	BG
Thallium	11	EPA200.8 R5.4	<1.00 ug/L		1.00	1	01/19/17 13:30	01/20/17 16:15	BG
Zinc	11	EPA200.7 Rev 4.4	0.104 mg/L		0.0100	1	01/19/17 13:30	01/20/17 13:17	CWO
Volatile Organic Compounds	s by GCMS								
1,1,1,2-Tetrachloroethane	11RE1	SW8260B	<8.00 ug/L		8.00	20	01/20/17 12:51	01/20/17 12:51	KCS
1,1,1-Trichloroethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,1,2,2-Tetrachloroethane	11RE1	SW8260B	<8.00 ug/L		8.00	20	01/20/17 12:51	01/20/17 12:51	KCS
1,1,2-Trichloroethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,1-Dichloroethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,1-Dichloroethylene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,1-Dichloropropene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,2,3-Trichlorobenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,2,3-Trichloropropane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,2,4-Trichlorobenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,2,4-Trimethylbenzene	11RE1	SW8260B	162 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Client Site I.D.:

Sample I.D. MW-14 Laboratory Sample ID: 17A0484-11

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds I	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	11RE1	SW8260B	<80.0 ug/L		80.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,2-Dibromoethane (EDB)	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,2-Dichlorobenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,2-Dichloroethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,2-Dichloropropane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,3,5-Trimethylbenzene	11RE1	SW8260B	59.8 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,3-Dichlorobenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,3-Dichloropropane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
1,4-Dichlorobenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
2,2-Dichloropropane	11RE1	SW8260B	<40.0 ug/L		40.0	20	01/20/17 12:51	01/20/17 12:51	KCS
2-Butanone (MEK)	11RE1	SW8260B	<200 ug/L		200	20	01/20/17 12:51	01/20/17 12:51	KCS
2-Chlorotoluene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
2-Hexanone (MBK)	11RE1	SW8260B	<100 ug/L		100	20	01/20/17 12:51	01/20/17 12:51	KCS
4-Chlorotoluene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
4-Isopropyltoluene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
4-Methyl-2-pentanone (MIBK)	11RE1	SW8260B	<100 ug/L		100	20	01/20/17 12:51	01/20/17 12:51	KCS
Acetone	11RE1	SW8260B	<200 ug/L		200	20	01/20/17 12:51	01/20/17 12:51	KCS
Benzene	11	SW8260B	20000 ug/L		100	100	01/19/17 15:36	01/19/17 15:36	KCS
Bromobenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Bromochloromethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Bromodichloromethane	11RE1	SW8260B	<10.0 ug/L		10.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Bromoform	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Bromomethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Carbon disulfide	11RE1	SW8260B	<200 ug/L		200	20	01/20/17 12:51	01/20/17 12:51	KCS
Carbon tetrachloride	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Chlorobenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-14 Laboratory Sample ID: 17A0484-11

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Chloroform	11RE1	SW8260B	<10.0 ug/L		10.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Chloromethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
cis-1,2-Dichloroethylene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
cis-1,3-Dichloropropene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Dibromochloromethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Dibromomethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Dichlorodifluoromethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Di-isopropyl ether (DIPE)	11RE1	SW8260B	<100 ug/L		100	20	01/20/17 12:51	01/20/17 12:51	KCS
Ethylbenzene	11RE1	SW8260B	2040 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Hexachlorobutadiene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
lodomethane	11RE1	SW8260B	<200 ug/L		200	20	01/20/17 12:51	01/20/17 12:51	KCS
Isopropylbenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
m+p-Xylenes	11RE1	SW8260B	2160 ug/L		40.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Methylene chloride	11RE1	SW8260B	<80.0 ug/L		80.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Methyl-t-butyl ether (MTBE)	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Naphthalene	11	SW8260B	11300 ug/L		100	100	01/19/17 15:36	01/19/17 15:36	KCS
n-Butylbenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
n-Propylbenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
o-Xylene	11RE1	SW8260B	781 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
sec-Butylbenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Styrene	11RE1	SW8260B	23.4 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
tert-Butylbenzene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Tetrachloroethylene (PCE)	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Toluene	11	SW8260B	9120 ug/L		100	100	01/19/17 15:36	01/19/17 15:36	KCS
trans-1,2-Dichloroethylene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-14 Laboratory Sample ID: 17A0484-11

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Trichloroethylene	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Trichlorofluoromethane	11RE1	SW8260B	<20.0 ug/L		20.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Vinyl acetate	11RE1	SW8260B	<200 ug/L		200	20	01/20/17 12:51	01/20/17 12:51	KCS
Vinyl chloride	11RE1	SW8260B	<10.0 ug/L		10.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Xylenes, Total	11RE1	SW8260B	2940 ug/L		60.0	20	01/20/17 12:51	01/20/17 12:51	KCS
Surr: 1,2-Dichloroethane-d4	11	SW8260B	102 %		70-120		01/19/17 15:36	01/19/17 15:36	KCS
Surr: 4-Bromofluorobenzene	11	SW8260B	96.1 %		75-120		01/19/17 15:36	01/19/17 15:36	KCS
Surr: Dibromofluoromethane	11	SW8260B	102 %		80-119		01/19/17 15:36	01/19/17 15:36	KCS
Surr: Toluene-d8	11	SW8260B	100 %		85-120		01/19/17 15:36	01/19/17 15:36	KCS
Surr: 1,2-Dichloroethane-d4	11RE1	SW8260B	101 %		70-120		01/20/17 12:51	01/20/17 12:51	KCS
Surr: 4-Bromofluorobenzene	11RE1	SW8260B	97.6 %		75-120		01/20/17 12:51	01/20/17 12:51	KCS
Surr: Dibromofluoromethane	11RE1	SW8260B	99.7 %		80-119		01/20/17 12:51	01/20/17 12:51	KCS
Surr: Toluene-d8	11RE1	SW8260B	99.8 %		85-120		01/20/17 12:51	01/20/17 12:51	KCS
Semivolatile Organic Compou	nds by GC	MS							
1,2,4,5-Tetrachlorobenzene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
1,2,4-Trichlorobenzene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
1,2-Dichlorobenzene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
1,2-Diphenylhydrazine	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
1,3-Dichlorobenzene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
1,3-Dinitrobenzene	11	SW8270D	<55.6 ug/L		55.6	20	01/20/17 09:03	01/25/17 05:16	SKS
1,4-Dichlorobenzene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
1-Naphthylamine	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
2,3,4,6-Tetrachlorophenol	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
2,4,5-Trichlorophenol	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
2,4,6-Trichlorophenol	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Laboratory Sample ID: 17A0484-11 Sample I.D. MW-14

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,4-Dichlorophenol	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
2,4-Dimethylphenol	11	SW8270D	<11.1 ug/L		11.1	20	01/20/17 09:03	01/25/17 05:16	SKS
2,4-Dinitrophenol	11	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 05:16	SKS
2,4-Dinitrotoluene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
2,6-Dichlorophenol	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
2,6-Dinitrotoluene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
2-Chloronaphthalene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
2-Chlorophenol	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
2-Methylnaphthalene	11	SW8270D	268 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
2-Naphthylamine	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
2-Nitroaniline	11	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 05:16	SKS
2-Nitrophenol	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
3,3'-Dichlorobenzidine	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
3-Methylcholanthrene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
3-Nitroaniline	11	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 05:16	SKS
4,6-Dinitro-2-methylphenol	11	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 05:16	SKS
4-Aminobiphenyl	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
4-Bromophenyl phenyl ether	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
4-Chloroaniline	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
4-Chlorophenyl phenyl ether	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
4-Nitroaniline	11	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 05:16	SKS
4-Nitrophenol	11	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 05:16	SKS
7,12-Dimethylbenz (a) anthracene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Acenaphthene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Acenaphthylene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Acetophenone	11	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 05:16	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Fulton Gas

Laboratory Order ID: 17A0484

Analytical Results

Client Site I.D.:

Laboratory Sample ID: 17A0484-11 Sample I.D. MW-14

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	nds by GC	MS							
Aniline	11	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 05:16	SKS
Anthracene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Benzidine	11	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 05:16	SKS
Benzo (a) anthracene	11	SW8270D	<1.11 ug/L		1.11	20	01/20/17 09:03	01/25/17 05:16	SKS
Benzo (a) pyrene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Benzo (b) fluoranthene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Benzo (g,h,i) perylene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Benzo (k) fluoranthene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Benzoic acid	11	SW8270D	<1110 ug/L		1110	20	01/20/17 09:03	01/25/17 05:16	SKS
Benzyl alcohol	11	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 05:16	SKS
bis (2-Chloroethoxy) methane	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
bis (2-Chloroethyl) ether	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
bis (2-Chloroisopropyl) ether	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
bis (2-Ethylhexyl) phthalate	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Butyl benzyl phthalate	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Chrysene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Dibenz (a,h) anthracene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Dibenz (a,j) acridine	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Dibenzofuran	11	SW8270D	<111 ug/L		111	20	01/20/17 09:03	01/25/17 05:16	SKS
Diethyl phthalate	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Dimethyl phthalate	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Di-n-butyl phthalate	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Di-n-octyl phthalate	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Diphenylamine	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Ethyl methanesulfonate	11	SW8270D	<444 ug/L		444	20	01/20/17 09:03	01/25/17 05:16	SKS
Fluoranthene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

36156.015

Project Number:

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-14 Laboratory Sample ID: 17A0484-11

Parameter	Samp ID	Method	Result		orting imit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Fluorene	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
Hexachlorobenzene	11	SW8270D	<22.2 ug/L	2	22.2	20	01/20/17 09:03	01/25/17 05:16	SKS
Hexachlorobutadiene	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
Hexachlorocyclopentadiene	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
Hexachloroethane	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
Indeno (1,2,3-cd) pyrene	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
Isophorone	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
m+p-Cresols	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
Methyl methanesulfonate	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
Naphthalene	11RE1	SW8270D	11200 ug/L	1	110	200	01/20/17 09:03	01/25/17 01:51	SKS
Nitrobenzene	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
n-Nitrosodimethylamine	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
n-Nitrosodi-n-butylamine	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
n-Nitrosodi-n-propylamine	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
n-Nitrosodiphenylamine	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
n-Nitrosopiperidine	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
o+m+p-Cresols	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
o-Cresol	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
p-(Dimethylamino) azobenzene	11	SW8270D	<55.6 ug/L	5	55.6	20	01/20/17 09:03	01/25/17 05:16	SKS
p-Chloro-m-cresol	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
Pentachloronitrobenzene (quintozene)	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
Pentachlorophenol	11	SW8270D	<444 ug/L	4	444	20	01/20/17 09:03	01/25/17 05:16	SKS
Phenacetin	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
Phenanthrene	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS
Phenol	11	SW8270D	<222 ug/L	2	222	20	01/20/17 09:03	01/25/17 05:16	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-14 Laboratory Sample ID: 17A0484-11

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Pronamide	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Pyrene	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Pyridine	11	SW8270D	<222 ug/L		222	20	01/20/17 09:03	01/25/17 05:16	SKS
Surr: 2,4,6-Tribromophenol	11	SW8270D	75.7 %		40-125		01/20/17 09:03	01/25/17 05:16	SKS
Surr: 2-Fluorobiphenyl	11	SW8270D	48.3 %		23-87		01/20/17 09:03	01/25/17 05:16	SKS
Surr: 2-Fluorophenol	11	SW8270D	17.8 %		14-52		01/20/17 09:03	01/25/17 05:16	SKS
Surr: Nitrobenzene-d5	11	SW8270D	55.0 %		40-110		01/20/17 09:03	01/25/17 05:16	SKS
Surr: Phenol-d5	11	SW8270D	7.86 %		5-33		01/20/17 09:03	01/25/17 05:16	SKS
Surr: p-Terphenyl-d14	11	SW8270D	62.3 %		27-133		01/20/17 09:03	01/25/17 05:16	SKS
Surr: 2,4,6-Tribromophenol	11RE1	SW8270D	340 %	DS	40-125		01/20/17 09:03	01/25/17 01:51	SKS
Surr: 2-Fluorobiphenyl	11RE1	SW8270D	182 %	DS	23-87		01/20/17 09:03	01/25/17 01:51	SKS
Surr: 2-Fluorophenol	11RE1	SW8270D	%	DS	14-52		01/20/17 09:03	01/25/17 01:51	SKS
Surr: Nitrobenzene-d5	11RE1	SW8270D	155 %	DS	40-110		01/20/17 09:03	01/25/17 01:51	SKS
Surr: Phenol-d5	11RE1	SW8270D	%	DS	5-33		01/20/17 09:03	01/25/17 01:51	SKS
Surr: p-Terphenyl-d14	11RE1	SW8270D	275 %	DS	27-133		01/20/17 09:03	01/25/17 01:51	SKS
Organochlorine Pesticides an	nd PCBs by (GC/ECD							
4,4'-DDD	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
4,4'-DDE	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
4,4'-DDT	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
Aldrin	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
alpha-BHC	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
beta-BHC	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
Chlordane	11	SW8081B	<0.222 ug/L		0.222	1	01/19/17 21:31	01/19/17 21:31	SKS
delta-BHC	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
Dieldrin	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
Endosulfan I	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. MW-14 Laboratory Sample ID: 17A0484-11

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides a	nd PCBs by	GC/ECD							
Endosulfan II	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
Endosulfan sulfate	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
Endrin	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
Endrin aldehyde	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
gamma-BHC (Lindane)	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
Heptachlor	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
Heptachlor epoxide	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
Methoxychlor	11	SW8081B	<0.056 ug/L		0.056	1	01/19/17 21:31	01/19/17 21:31	SKS
Toxaphene	11	SW8081B	<1.11 ug/L		1.11	1	01/19/17 21:31	01/19/17 21:31	SKS
Surr: TCMX	11	SW8081B	15.0 %	S	18-112		01/19/17 21:31	01/19/17 21:31	SKS
Surr: DCB	11	SW8081B	5.00 %	S	27-131		01/19/17 21:31	01/19/17 21:31	SKS
Wet Chemistry Analysis									
Cyanide	11RE1	SW9012	1.60 mg/L	CI	0.05	5	01/25/17 16:23	01/25/17 16:23	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Sample I.D. Trip Blank Laboratory Sample ID: 17A0484-12

Date/Time Sampled: 12/01/2016 16:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	12	SW8260B	<0.40 ug/L		0.40	1	01/19/17 11:39	01/19/17 11:39	KCS
1,1,1-Trichloroethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,1,2,2-Tetrachloroethane	12	SW8260B	<0.40 ug/L		0.40	1	01/19/17 11:39	01/19/17 11:39	KCS
1,1,2-Trichloroethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,1-Dichloroethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,1-Dichloroethylene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,1-Dichloropropene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,2,3-Trichlorobenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,2,3-Trichloropropane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,2,4-Trichlorobenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,2,4-Trimethylbenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,2-Dibromo-3-chloropropane (DBCP)	12	SW8260B	<4.00 ug/L		4.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,2-Dibromoethane (EDB)	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,2-Dichlorobenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,2-Dichloroethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,2-Dichloropropane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,3,5-Trimethylbenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,3-Dichlorobenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,3-Dichloropropane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
1,4-Dichlorobenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
2,2-Dichloropropane	12	SW8260B	<2.00 ug/L		2.00	1	01/19/17 11:39	01/19/17 11:39	KCS
2-Butanone (MEK)	12	SW8260B	<10.0 ug/L		10.0	1	01/19/17 11:39	01/19/17 11:39	KCS
2-Chlorotoluene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
2-Hexanone (MBK)	12	SW8260B	<5.00 ug/L		5.00	1	01/19/17 11:39	01/19/17 11:39	KCS
4-Chlorotoluene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
4-Isopropyltoluene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

36156.015

Project Number:

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 17A0484

- Analytical Results

Sample I.D. Trip Blank Laboratory Sample ID: 17A0484-12

Date/Time Sampled: 12/01/2016 16:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
4-Methyl-2-pentanone (MIBK)	12	SW8260B	<5.00 ug/L		5.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Acetone	12	SW8260B	<10.0 ug/L		10.0	1	01/19/17 11:39	01/19/17 11:39	KCS
Benzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Bromobenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Bromochloromethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Bromodichloromethane	12	SW8260B	<0.50 ug/L		0.50	1	01/19/17 11:39	01/19/17 11:39	KCS
Bromoform	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Bromomethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Carbon disulfide	12	SW8260B	<10.0 ug/L		10.0	1	01/19/17 11:39	01/19/17 11:39	KCS
Carbon tetrachloride	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Chlorobenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Chloroethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Chloroform	12	SW8260B	<0.50 ug/L		0.50	1	01/19/17 11:39	01/19/17 11:39	KCS
Chloromethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
cis-1,2-Dichloroethylene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
cis-1,3-Dichloropropene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Dibromochloromethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Dibromomethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Dichlorodifluoromethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Di-isopropyl ether (DIPE)	12	SW8260B	<5.00 ug/L		5.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Ethylbenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Hexachlorobutadiene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
lodomethane	12	SW8260B	<10.0 ug/L		10.0	1	01/19/17 11:39	01/19/17 11:39	KCS
Isopropylbenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
m+p-Xylenes	12	SW8260B	<2.00 ug/L		2.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Methylene chloride	12	SW8260B	<4.00 ug/L		4.00	1	01/19/17 11:39	01/19/17 11:39	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Laboratory Order ID: 17A0484

Analytical Results

Laboratory Sample ID: 17A0484-12 Sample I.D. Trip Blank

Date/Time Sampled: 12/01/2016 16:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Methyl-t-butyl ether (MTBE)	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Naphthalene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
n-Butylbenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
n-Propylbenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
o-Xylene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
sec-Butylbenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Styrene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
tert-Butylbenzene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Tetrachloroethylene (PCE)	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Toluene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
trans-1,2-Dichloroethylene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
trans-1,3-Dichloropropene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Trichloroethylene	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Trichlorofluoromethane	12	SW8260B	<1.00 ug/L		1.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Vinyl acetate	12	SW8260B	<10.0 ug/L		10.0	1	01/19/17 11:39	01/19/17 11:39	KCS
Vinyl chloride	12	SW8260B	<0.50 ug/L		0.50	1	01/19/17 11:39	01/19/17 11:39	KCS
Xylenes, Total	12	SW8260B	<3.00 ug/L		3.00	1	01/19/17 11:39	01/19/17 11:39	KCS
Surr: 1,2-Dichloroethane-d4	12	SW8260B	98.6 %		70-120		01/19/17 11:39	01/19/17 11:39	KCS
Surr: 4-Bromofluorobenzene	12	SW8260B	95.5 %		75-120		01/19/17 11:39	01/19/17 11:39	KCS
Surr: Dibromofluoromethane	12	SW8260B	101 %		80-119		01/19/17 11:39	01/19/17 11:39	KCS
Surr: Toluene-d8	12	SW8260B	100 %		85-120		01/19/17 11:39	01/19/17 11:39	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Analytical Summary

Preparation Method:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by E	PA 200 Series Methods	Preparation Method:	EPA200.2/R2.8	8	
17A0484-01	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BAA0400	SAA0480	AA70097
17A0484-02	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BAA0400	SAA0480	AA70097
17A0484-03	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BAA0400	SAA0480	AA70097
17A0484-04	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BAA0400	SAA0480	AA70097
17A0484-05	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BAA0400	SAA0480	AA70097
17A0484-06	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BAA0400	SAA0480	AA70097
17A0484-07	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BAA0400	SAA0480	AA70097
17A0484-08	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BAA0400	SAA0480	AA70097
17A0484-09	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BAA0400	SAA0480	AA70097
17A0484-10	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BAA0400	SAA0480	AA70097
17A0484-11	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BAA0400	SAA0480	AA70097
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Motolo (Total) by E	PA 200 Series Methods	Preparation Method:	EPA200.8 R5.4	4	
17A0484-01	50.0 mL / 50.0 mL	EPA200.8 R5.4	BAA0402	SAA0512	AA70102
17A0484-02	50.0 mL / 50.0 mL	EPA200.8 R5.4	BAA0402	SAA0512 SAA0512	AA70102 AA70102
17A0484-03	50.0 mL / 50.0 mL	EPA200.8 R5.4	BAA0402	SAA0512 SAA0512	AA70102 AA70102
17A0484-04	50.0 mL / 50.0 mL	EPA200.8 R5.4	BAA0402	SAA0512 SAA0512	AA70102 AA70102
17A0484-05	50.0 mL / 50.0 mL	EPA200.8 R5.4	BAA0402	SAA0512 SAA0512	AA70102 AA70102
17A0484-06	50.0 mL / 50.0 mL	EPA200.8 R5.4	BAA0402	SAA0512 SAA0512	AA70102 AA70102
17A0484-07	50.0 mL / 50.0 mL	EPA200.8 R5.4	BAA0402	SAA0512 SAA0512	AA70102 AA70102
17A0484-08	50.0 mL / 50.0 mL	EPA200.8 R5.4	BAA0402	SAA0512 SAA0512	AA70102 AA70102
17A0484-09	50.0 mL / 50.0 mL	EPA200.8 R5.4	BAA0402	SAA0512 SAA0512	AA70102 AA70102
17A0484-10	50.0 mL / 50.0 mL	EPA200.8 R5.4	BAA0402	SAA0512 SAA0512	AA70102 AA70102
17A0484-11	50.0 mL / 50.0 mL	EPA200.8 R5.4	BAA0402	SAA0512 SAA0512	AA70102 AA70102
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Ana	alysis	Preparation Method:	No Prep Wet 0	Chem	
17A0484-01	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17A0484-02	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-03	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-04	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-04RE1	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-05	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-05RE1	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-06	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-06RE1	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-07	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-07RE1	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-08	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-08RE1	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-09	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-09RE1	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-10	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-11	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
17A0484-11RE1	6.00 mL / 6.00 mL	SW9012	BAA0538	SAA0587	AA70120
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Organochlorine Pes	ticides and PCBs by GC/ECD	Preparation Met	hod: SW3510C		
17A0484-01	900 mL / 1.00 mL	SW8081B	BAA0391	SAA0509	AA70059
17A0484-02	900 mL / 1.00 mL	SW8081B	BAA0391	SAA0509	AA70059
17A0484-03	890 mL / 1.00 mL	SW8081B	BAA0391	SAA0509	AA70059
17A0484-04	890 mL / 1.00 mL	SW8081B	BAA0391	SAA0509	AA70059
17A0484-05	900 mL / 1.00 mL	SW8081B	BAA0391	SAA0509	AA70059
17A0484-06	900 mL / 1.00 mL	SW8081B	BAA0391	SAA0509	AA70059
17A0484-07	950 mL / 1.00 mL	SW8081B	BAA0391	SAA0509	AA70059
17A0484-08	910 mL / 1.00 mL	SW8081B	BAA0391	SAA0509	AA70059
17A0484-09	900 mL / 1.00 mL	SW8081B	BAA0391	SAA0509	AA70059
17A0484-10	900 mL / 1.00 mL	SW8081B	BAA0391	SAA0509	AA70059
17A0484-11	900 mL / 1.00 mL	SW8081B	BAA0391	SAA0509	AA70059
Semivolatile Organic	c Compounds by GCMS	Preparation Met	hod: SW3510C		
commodatile organic				SAA0564	AA70049
17A0484-01	890 mL / 1.00 mL	EPA625	BAA0426	3AA0304	AA70049
_	890 mL / 1.00 mL 910 mL / 1.00 mL	EPA625 EPA625	BAA0426 BAA0426	SAA0564	AA70049



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

	Preparation Factors				
Sample ID	Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17A0484-07	910 mL / 1.00 mL	EPA625	BAA0426	SAA0564	AA70049
17A0484-01	890 mL / 1.00 mL	SW8270D	BAA0426	SAA0564 SAA0564	AA70049 AA70049
17A0484-01	910 mL / 1.00 mL	SW8270D SW8270D	BAA0426	SAA0564	AA70049
17A0404-02 17A0484-03	900 mL / 1.00 mL	SW8270D	BAA0426	SAA0564	AA70049
17A0484-04	900 mL / 1.00 mL	SW8270D SW8270D	BAA0426	SAA0564	AA70049
17A0484-04RE1	900 mL / 1.00 mL	SW8270D	BAA0426	SAA0564	AA70049
17A0484-04RE2	900 mL / 1.00 mL	SW8270D	BAA0426	SAA0582	AA70049
17A0484-041CE2	910 mL / 1.00 mL	SW8270D SW8270D	BAA0426	SAA0564	AA70049
17A0484-05RE1	910 mL / 1.00 mL	SW8270D	BAA0426	SAA0564	AA70049
17A0484-05RE2	910 mL / 1.00 mL	SW8270D	BAA0426	SAA0582	AA70049
17A0484-05KE2	910 mL / 1.00 mL	SW8270D	BAA0426	SAA0562 SAA0564	AA70049 AA70049
17A0484-06RE1	910 mL / 1.00 mL	SW8270D	BAA0426	SAA0564 SAA0564	AA70049 AA70049
17A0484-00KE1 17A0484-07	910 mL / 1.00 mL	SW8270D SW8270D	BAA0426	SAA0564 SAA0564	AA70049 AA70049
17A0484-07RE1	910 mL / 1.00 mL	SW8270D	BAA0426	SAA0564 SAA0564	AA70049 AA70049
17A0484-07KE1	930 mL / 1.00 mL	SW8270D	BAA0426	SAA0564 SAA0564	AA70049 AA70049
17A0484-08 17A0484-08RE1	930 mL / 1.00 mL	SW8270D	BAA0426	SAA0564 SAA0564	AA70049 AA70049
			BAA0426	SAA0504 SAA0582	AA70049 AA70049
17A0484-08RE2 17A0484-09	930 mL / 1.00 mL	SW8270D SW8270D	BAA0426	SAA0562 SAA0564	AA70049 AA70049
	900 mL / 1.00 mL				
17A0484-09RE1	900 mL / 1.00 mL	SW8270D	BAA0426	SAA0582	AA70049
17A0484-10	900 mL / 1.00 mL	SW8270D	BAA0426	SAA0564	AA70049
17A0484-11	900 mL / 1.00 mL	SW8270D	BAA0426	SAA0564	AA70049
17A0484-11RE1	900 mL / 1.00 mL	SW8270D	BAA0426	SAA0564	AA70049
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Organic Com	•	Preparation Meth			
17A0484-01	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
17A0484-02	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
17A0484-03	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
17A0484-04	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
17A0484-04RE1	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0507	AA70077
17A0484-05	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
17A0484-05RE1	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0507	AA70077
17A0484-06	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
17A0484-06RE1	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
17A0484-07	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
17A0484-07RE1	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077

17A0484-08	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
17A0484-09	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
17A0484-10	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
17A0484-11	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
17A0484-11RE1	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0507	AA70077
17A0484-12	5.00 mL / 5.00 mL	SW8260B	BAA0430	SAA0469	AA70077
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EP	A 200 Series Methods	Preparation Method:	SW7470A		
` , ,	A 200 Series Methods 20.0 mL / 20.0 mL	Preparation Method: EPA245.1 R3.0	SW7470A BAA0488	SAA0580	AA70118
7A0484-01		•		SAA0580 SAA0580	AA70118 AA70118
Metals (Total) by EP/ 17A0484-01 17A0484-02 17A0484-03	20.0 mL / 20.0 mL	EPA245.1 R3.0	BAA0488		
7A0484-01 7A0484-02 7A0484-03	20.0 mL / 20.0 mL 20.0 mL / 20.0 mL	EPA245.1 R3.0 EPA245.1 R3.0	BAA0488 BAA0488	SAA0580	AA70118
7A0484-01 7A0484-02 7A0484-03 7A0484-04	20.0 mL / 20.0 mL 20.0 mL / 20.0 mL 20.0 mL / 20.0 mL	EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0	BAA0488 BAA0488 BAA0488	SAA0580 SAA0580	AA70118 AA70118
7A0484-01 7A0484-02 7A0484-03 7A0484-04 7A0484-05	20.0 mL / 20.0 mL 20.0 mL / 20.0 mL 20.0 mL / 20.0 mL 20.0 mL / 20.0 mL	EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0	BAA0488 BAA0488 BAA0488 BAA0488	SAA0580 SAA0580 SAA0580	AA70118 AA70118 AA70118
17A0484-01 17A0484-02	20.0 mL / 20.0 mL 20.0 mL / 20.0 mL 20.0 mL / 20.0 mL 20.0 mL / 20.0 mL 20.0 mL / 20.0 mL	EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0	BAA0488 BAA0488 BAA0488 BAA0488	SAA0580 SAA0580 SAA0580 SAA0580	AA70118 AA70118 AA70118 AA70118
7A0484-01 7A0484-02 7A0484-03 7A0484-04 7A0484-05 7A0484-06	20.0 mL / 20.0 mL 20.0 mL / 20.0 mL	EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0	BAA0488 BAA0488 BAA0488 BAA0488 BAA0488	SAA0580 SAA0580 SAA0580 SAA0580 SAA0580	AA70118 AA70118 AA70118 AA70118 AA70118
7A0484-01 7A0484-02 7A0484-03 7A0484-04 7A0484-05 7A0484-06 7A0484-07	20.0 mL / 20.0 mL 20.0 mL / 20.0 mL	EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0	BAA0488 BAA0488 BAA0488 BAA0488 BAA0488 BAA0488	SAA0580 SAA0580 SAA0580 SAA0580 SAA0580	AA70118 AA70118 AA70118 AA70118 AA70118
7A0484-01 7A0484-02 7A0484-03 7A0484-04 7A0484-05 7A0484-06 7A0484-07 7A0484-08	20.0 mL / 20.0 mL 20.0 mL / 20.0 mL	EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0 EPA245.1 R3.0	BAA0488 BAA0488 BAA0488 BAA0488 BAA0488 BAA0488 BAA0488	SAA0580 SAA0580 SAA0580 SAA0580 SAA0580 SAA0580	AA70118 AA70118 AA70118 AA70118 AA70118 AA70118



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

1/25/2017 17:23

RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: **Fulton Gas**

Purchase Order:

Source

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

A male da	Desult	Reporting	1.1	Spike	Desult	0/ DEC	/OINEO	RPD	KFD Limit	0
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	KPD	Limit	Qual
Batch BAA0400 - EPA200.2/R2.8										
Blank (BAA0400-BLK1)				Prepared	: 01/19/2017	' Analyze	d: 01/20/2	017		
Beryllium	<0.0040 mg/L	0.0040	mg/L							
Cadmium	<0.0040 mg/L	0.0040	mg/L							
Chromium	<0.0100 mg/L	0.0100	mg/L							
Copper	<0.0100 mg/L	0.0100	mg/L							
ead	<0.0100 mg/L	0.0100	mg/L							
lickel	<0.0100 mg/L	0.0100	mg/L							
Silver	<0.0100 mg/L	0.0100	mg/L							
inc	<0.0100 mg/L	0.0100	mg/L							
CS (BAA0400-BS1)				Prepared	: 01/19/2017	' Analyze	d: 01/20/2	017		
eryllium	0.535 mg/L	0.0040	mg/L	0.500	mg/L	107	80-120			
admium	0.535 mg/L	0.0040	mg/L	0.500	mg/L	107	80-120			
hromium	0.525 mg/L	0.0100	mg/L	0.500	mg/L	105	80-120			
Copper	0.524 mg/L	0.0100	mg/L	0.500	mg/L	105	80-120			
ead	0.532 mg/L	0.0100	mg/L	0.500	mg/L	106	80-120			
lickel	0.526 mg/L	0.0100	mg/L	0.500	mg/L	105	80-120			
ilver	0.106 mg/L	0.0100	mg/L	0.100	mg/L	106	80-120			E
inc	0.532 mg/L	0.0100	mg/L	0.500	mg/L	106	80-120			
latrix Spike (BAA0400-MS1)	Soul	rce: 17A048	4-01	Prepared	: 01/19/2017	' Analyze	d: 01/20/2	017		
Seryllium	0.552 mg/L	0.0040	mg/L	0.500 <	<0.0040 mg/L	110	75-125			
admium	0.542 mg/L	0.0040	mg/L	0.500 <	<0.0040 mg/L	108	75-125			
Chromium	0.535 mg/L	0.0100	mg/L	0.500 <	<0.0100 mg/L	107	75-125			
opper	0.555 mg/L	0.0100	mg/L	0.500 <	<0.0100 mg/L	110	75-125			
ead	0.545 mg/L	0.0100	mg/L	0.500 <	<0.0100 mg/L	109	75-125			
ickel	0.538 mg/L	0.0100	mg/L	0.500 <	<0.0100 mg/L	108	75-125			
ilver	0.107 mg/L	0.0100	mg/L	0.100 <	<0.0100 mg/L	107	75-125			E
inc	0.558 mg/L	0.0100	mg/L	0.500 (0.0201 mg/L	108	75-125			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/25/2017 17:23

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

. . . .

Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Submitted To:

Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
·										

Batch BAA0400 - EPA200.2/R2.8 Source: 17A0484-10 Prepared: 01/19/2017 Analyzed: 01/20/2017 Matrix Spike (BAA0400-MS2) Beryllium 0.501 mg/L 0.0040 mg/L 0.500 < 0.0040 mg/L 100 75-125 0.0040 0.500 0.0088 mg/L Cadmium 0.526 mg/L mg/L 103 75-125 0.0100 Chromium 0.516 mg/L mg/L 0.500 < 0.0100 mg/L 102 75-125 0.599 mg/L 0.0100 0.500 0.0815 mg/L 75-125 Copper mg/L 103 0.516 mg/L 0.0100 mg/L 0.500 < 0.0100 mg/L 103 75-125 Lead Nickel 0.571 mg/L 0.0100 mg/L 0.500 0.0641 mg/L 101 75-125 Silver 0.102 mg/L 0.0100 0.100 < 0.0100 mg/L 102 75-125 Е mq/L Zinc 1.59 mg/L 0.0100 mg/L 0.500 1.19 mg/L 80.2 75-125 Matrix Spike Dup (BAA0400-MSD1) Source: 17A0484-01 Prepared: 01/19/2017 Analyzed: 01/20/2017 Beryllium 0.558 mg/L 0.0040 mg/L 0.500 < 0.0040 mg/L 112 75-125 0.960 20 Cadmium 0.547 mg/L 0.0040 mg/L 0.500 < 0.0040 mg/L 109 75-125 0.842 20 Chromium 0.534 mg/L 0.0100 mg/L 0.500 < 0.0100 mg/L 107 75-125 0.190 20 Copper 0.560 mg/L 0.0100 mg/L 0.500 < 0.0100 mg/L 111 75-125 0.880 20 0.0100 0.500 < 0.0100 mg/L 0.509 20 Lead 0.542 mg/L mg/L 108 75-125 Nickel 0.535 mg/L 0.0100 mg/L 0.500 < 0.0100 mg/L 107 75-125 0.580 20 0.0100 Silver 0.108 mg/L mg/L 0.100 < 0.0100 mg/L 108 75-125 0.966 20 F 0.564 mg/L 0.0100 mg/L 0.500 0.0201 mg/L 109 75-125 0.966 20 Matrix Spike Dup (BAA0400-MSD2) Source: 17A0484-10 Prepared: 01/19/2017 Analyzed: 01/20/2017 Beryllium 0.541 mg/L 0.0040 mg/L 0.500 < 0.0040 mg/L 108 75-125 7.72 20 Cadmium 0.566 mg/L 0.0040 mg/L 0.500 0.0088 mg/L 111 75-125 7.34 20 Chromium 0.558 mg/L 0.0100 mg/L 0.500 < 0.0100 mg/L 110 75-125 7.83 20 0.650 mg/L 0.0100 mg/L 0.500 0.0815 mg/L 75-125 8.16 20 Copper 114 Lead 0.561 mg/L 0.0100 mg/L 0.500 < 0.0100 mg/L 112 75-125 8.32 20 Nickel 0.618 mg/L 0.0100 mg/L 0.500 0.0641 mg/L 111 75-125 8.02 20 20 Silver 0.109 mg/L 0.0100 mg/L 0.100 < 0.0100 mg/L 109 75-125 6.91 Ε Zinc 1.72 mg/L 0.0100 0.500 1.19 mg/L 106 75-125 7.91 20 mg/L



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/25/2017 17:23

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BAA0402 - EPA200.8 R5.4										
Blank (BAA0402-BLK1)				Prepared	I: 01/19/201	7 Analyze	d: 01/20/2	017		
Antimony	<1.00 ug/L	1.00	ug/L							
Arsenic	<1.00 ug/L	1.00	ug/L							
Selenium	<1.00 ug/L	1.00	ug/L							
Thallium	<1.00 ug/L	1.00	ug/L							
Blank (BAA0402-BLK3)				Prepared	I: 01/19/201	7 Analyze	d: 01/24/2	017		
Antimony	<1.00 ug/L	1.00	ug/L							
Arsenic	<1.00 ug/L	1.00	ug/L							
Selenium	<1.00 ug/L	1.00	ug/L							
Thallium	<1.00 ug/L	1.00	ug/L							
LCS (BAA0402-BS1)				Prepared	I: 01/19/201	7 Analyze	d: 01/20/2	017		
Antimony	55.0 ug/L	1.00	ug/L	50.0	ug/L	110	85-115			
Arsenic	54.8 ug/L	1.00	ug/L	50.0	ug/L	110	85-115			
Selenium	56.4 ug/L	1.00	ug/L	50.0	ug/L	113	85-115			
Thallium	50.1 ug/L	1.00	ug/L	50.0	ug/L	100	85-115			
LCS (BAA0402-BS3)				Prepared	I: 01/19/201	7 Analyze	d: 01/24/2	017		
Antimony	53.5 ug/L	1.00	ug/L	50.0	ug/L	107	85-115			
Arsenic	55.2 ug/L	1.00	ug/L	50.0	ug/L	110	85-115			
Selenium	55.4 ug/L	1.00	ug/L	50.0	ug/L	111	85-115			
Thallium	52.1 ug/L	1.00	ug/L	50.0	ug/L	104	85-115			
LCS Dup (BAA0402-BSD1)				Prepared	I: 01/19/201	7 Analyze	d: 01/20/2	017		
Antimony	54.8 ug/L	1.00	ug/L	50.0	ug/L	110	85-115	0.471	20	
Arsenic	56.1 ug/L	1.00	ug/L	50.0	ug/L	112	85-115	2.38	20	
Selenium	56.0 ug/L	1.00	ug/L	50.0	ug/L	112	85-115	0.608	20	
Thallium	51.6 ug/L	1.00	ug/L	50.0	ug/L	103	85-115	3.02	20	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/2

1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BAA0402 - EPA200.8 R5.4										
LCS Dup (BAA0402-BSD3)				Prepare	d: 01/19/201	7 Analyze	d: 01/24/2	.017		
Antimony	55.5 ug/L	1.00	ug/L	50.0	ug/L	111	85-115	3.56	20	
Arsenic	54.5 ug/L	1.00	ug/L	50.0	ug/L	109	85-115	1.21	20	
Selenium	55.9 ug/L	1.00	ug/L	50.0	ug/L	112	85-115	0.834	20	
Thallium	52.3 ug/L	1.00	ug/L	50.0	ug/L	105	85-115	0.433	20	
Matrix Spike (BAA0402-MS1)	Sour	ce: 17A048	4-01	Prepare	d: 01/19/201	7 Analyze	d: 01/20/2	017		
Antimony	54.5 ug/L	1.00	ug/L	50.0	<1.00 ug/L	109	70-130			
Arsenic	70.7 ug/L	1.00	ug/L	50.0	2.57 ug/L	136	70-130			M
Selenium	24.3 ug/L	1.00	ug/L	50.0	<1.00 ug/L	48.6	70-130			M
Thallium	49.3 ug/L	1.00	ug/L	50.0	<1.00 ug/L	98.6	70-130			
Matrix Spike (BAA0402-MS2)	Sour	ce: 17A048	4-10	Prepare	d: 01/19/201	7 Analyze	d: 01/20/2	017		
Antimony	54.1 ug/L	1.00	ug/L	50.0	<1.00 ug/L	108	70-130			
Arsenic	57.3 ug/L	1.00	ug/L	50.0	2.77 ug/L	109	70-130			
Selenium	59.9 ug/L	1.00	ug/L	50.0	3.71 ug/L	112	70-130			
Thallium	48.6 ug/L	1.00	ug/L	50.0	<1.00 ug/L	97.2	70-130			
Matrix Spike (BAA0402-MS4)	Sour	ce: 17A048	4-01	Prepare	d: 01/19/201	7 Analyze	d: 01/24/2	017		
Antimony	55.7 ug/L	1.00	ug/L	50.0	<1.00 ug/L	111	70-130			
Arsenic	58.9 ug/L	1.00	ug/L	50.0	2.57 ug/L	113	70-130			
Selenium	21.2 ug/L	1.00	ug/L	50.0	<1.00 ug/L	42.4	70-130			
Thallium	49.8 ug/L	1.00	ug/L	50.0	<1.00 ug/L	99.6	70-130			
Matrix Spike Dup (BAA0402-MSD1)	Sour	ce: 17A048	4-01	Prepare	d: 01/19/201	7 Analyze	d: 01/20/2	.017		
Antimony	53.1 ug/L	1.00	ug/L	50.0	<1.00 ug/L	106	70-130	2.59	20	
Arsenic	67.0 ug/L	1.00	ug/L	50.0	2.57 ug/L	129	70-130	5.41	20	
Selenium	24.2 ug/L	1.00	ug/L	50.0	<1.00 ug/L	48.3	70-130	0.611	20	M
Thallium	49.9 ug/L	1.00	ug/L	E0.0	<1.00 ug/L	99.8	70-130	1.24	20	



Certificate of Analysis

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Richmond VA, 23225

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Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

		Reporting		Spike Source			%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BAA0402 - EPA200.8 R5.4										
Matrix Spike Dup (BAA0402-MSD2)	Sour	ce: 17A048	4-10	Prepared	d: 01/19/201	7 Analyze	d: 01/20/2	.017		
Antimony	55.2 ug/L	1.00	ug/L	50.0	<1.00 ug/L	110	70-130	1.87	20	
Arsenic	67.1 ug/L	1.00	ug/L	50.0	2.77 ug/L	129	70-130	15.8	20	
Selenium	73.4 ug/L	1.00	ug/L	50.0	3.71 ug/L	139	70-130	20.2	20	M, P
Thallium	50.7 ug/L	1.00	ug/L	50.0	<1.00 ug/L	101	70-130	4.19	20	
Matrix Spike Dup (BAA0402-MSD4)	Sour	ce: 17A048	4-01	Prepared	d: 01/19/201	7 Analyze	d: 01/24/2	017		
Antimony	54.9 ug/L	1.00	ug/L	50.0	<1.00 ug/L	110	70-130	1.42	20	
Arsenic	59.8 ug/L	1.00	ug/L	50.0	2.57 ug/L	114	70-130	1.41	20	
Selenium	22.2 ug/L	1.00	ug/L	50.0	<1.00 ug/L	44.4	70-130	4.46	20	
Thallium	49.1 ug/L	1.00	ug/L	50.0	<1.00 ug/L	98.3	70-130	1.34	20	
Batch BAA0488 - SW7470A										
Blank (BAA0488-BLK1)				Prepared	d: 01/23/201	7 Analyze	d: 01/24/2	017		
Mercury	<0.0002 mg/L	0.0002	mg/L							
LCS (BAA0488-BS1)				Prepared	d: 01/23/201	7 Analyze	d: 01/24/2	017		
Mercury	0.0027 mg/L	0.0002	mg/L	0.00250	mg/L	107	85-115			
LCS Dup (BAA0488-BSD1)				Prepared	d: 01/23/201	7 Analyze	d: 01/24/2	017		
Mercury	0.0028 mg/L	0.0002	mg/L	0.00250	mg/L	110	85-115	3.21	20	
Matrix Spike (BAA0488-MS1)	Sour	ce: 17A050	0-02	Prepared	d: 01/23/201	7 Analyze	d: 01/24/2	017		
Mercury	0.0025 mg/L	0.0002	mg/L	0.00250	<0.0002 mg/l	_ 98.8	70-130			
Matrix Spike (BAA0488-MS2)	Sour	ce: 17A051	7-04	Prepared	d: 01/23/201	7 Analyze	d: 01/24/2	017		
Mercury	0.0027 mg/L	0.0002	mg/L	0.00250	<0.0002 mg/l	_ 108	70-130			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BAA0488 - SW7470A										
Matrix Spike Dup (BAA0488-MSD1)	Source: 17A0500-02			Prepared: 01/23/2017 Analyze			d: 01/24/2	017		
Mercury	0.0023 mg/L	0.0002	mg/L	0.00250<0	.0002 mg/L	93.2	70-130	5.83	20	
Matrix Spike Dup (BAA0488-MSD2)	Source: 17A0517-04			Prepared: 01/23/2017 Analyzed: 01/24/			d: 01/24/2	017		
Mercury	0.0026 mg/L	0.0002	mg/L	0.00250<0	.0002 mg/L	104	70-130	3.71	20	



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Final Report

Client Name: Timmons Group

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1/25/2017 17:23

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0430 - SW5030B

Submitted To:

Blank (BAA0430-BLK1)				Prepared & Analyzed: 01/19/2017
1,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L	
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L	
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L	
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L	
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L	
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L	
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L	
1,2,3-Trichlorobenzene	<1.00 ug/L	1.00	ug/L	
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L	
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L	
1,2,4-Trimethylbenzene	<1.00 ug/L	1.00	ug/L	
1,2-Dibromo-3-chloropropane (DBCP)	<4.00 ug/L	4.00	ug/L	
1,2-Dibromoethane (EDB)	<1.00 ug/L	1.00	ug/L	
1,2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	
1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L	
1,2-Dichloropropane	<1.00 ug/L	1.00	ug/L	
1,3,5-Trimethylbenzene	<1.00 ug/L	1.00	ug/L	
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L	
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	
2,2-Dichloropropane	<2.00 ug/L	2.00	ug/L	
2-Butanone (MEK)	<10.0 ug/L	10.0	ug/L	
2-Chlorotoluene	<1.00 ug/L	1.00	ug/L	
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L	
4-Chlorotoluene	<1.00 ug/L	1.00	ug/L	
4-Isopropyltoluene	<1.00 ug/L	1.00	ug/L	
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L	
Acetone	10.4 ug/L	10.0	ug/L	В
Benzene	<1.00 ug/L	1.00	ug/L	
Bromobenzene	<1.00 ug/L	1.00	ug/L	
Bromochloromethane	<1.00 ug/L	1.00	ug/L	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0430 - SW5030B

Blank (BAA0430-BLK1)				Prepared & Analyzed: 01/19/2017
Bromodichloromethane	<0.50 ug/L	0.50	ug/L	
Bromoform	<1.00 ug/L	1.00	ug/L	
Bromomethane	<1.00 ug/L	1.00	ug/L	
Carbon disulfide	<10.0 ug/L	10.0	ug/L	
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L	
Chlorobenzene	<1.00 ug/L	1.00	ug/L	
Chloroethane	<1.00 ug/L	1.00	ug/L	
Chloroform	<0.50 ug/L	0.50	ug/L	
Chloromethane	<1.00 ug/L	1.00	ug/L	
cis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L	
cis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L	
Dibromochloromethane	<1.00 ug/L	1.00	ug/L	
Dibromomethane	<1.00 ug/L	1.00	ug/L	
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L	
Di-isopropyl ether (DIPE)	<5.00 ug/L	5.00	ug/L	
Ethylbenzene	<1.00 ug/L	1.00	ug/L	
Hexachlorobutadiene	<1.00 ug/L	1.00	ug/L	
lodomethane	<10.0 ug/L	10.0	ug/L	
Isopropylbenzene	<1.00 ug/L	1.00	ug/L	
m+p-Xylenes	<2.00 ug/L	2.00	ug/L	
Methylene chloride	<4.00 ug/L	4.00	ug/L	
Methyl-t-butyl ether (MTBE)	<1.00 ug/L	1.00	ug/L	
Naphthalene	<1.00 ug/L	1.00	ug/L	
n-Butylbenzene	<1.00 ug/L	1.00	ug/L	
n-Propylbenzene	<1.00 ug/L	1.00	ug/L	
o-Xylene	<1.00 ug/L	1.00	ug/L	
sec-Butylbenzene	<1.00 ug/L	1.00	ug/L	
Styrene	<1.00 ug/L	1.00	ug/L	
tert-Butylbenzene	<1.00 ug/L	1.00	ug/L	
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L	
Toluene	<1.00 ug/L	1.00	ug/L	



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

1/25/2017 17:23

RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: **Fulton Gas**

Purchase Order:

Source

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BAA0430 - SW5030B										
Blank (BAA0430-BLK1)				Prepared	& Analyze	d: 01/19/2	017			
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L							
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L							
Trichloroethylene	<1.00 ug/L	1.00	ug/L							
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L							
Vinyl acetate	<10.0 ug/L	10.0	ug/L							
Vinyl chloride	<0.50 ug/L	0.50	ug/L							
Xylenes, Total	<3.00 ug/L	3.00	ug/L							
Surr: 1,2-Dichloroethane-d4	50.6		ug/L	50.0		101	70-120			
Surr: 4-Bromofluorobenzene	47.5		ug/L	50.0		95.0	75-120			
Surr: Dibromofluoromethane	50.2		ug/L	50.0		100	80-119			
Surr: Toluene-d8	50.0		ug/L	50.0		100	85-120			
Blank (BAA0430-BLK2)				Prepared	& Analyze	d: 01/20/2	017			
1,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L							
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L							
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L							
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L							
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L							
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L							
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L							
1,2,3-Trichlorobenzene	<1.00 ug/L	1.00	ug/L							
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L							
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L							
1,2,4-Trimethylbenzene	<1.00 ug/L	1.00	ug/L							
1,2-Dibromo-3-chloropropane (DBCP)	<4.00 ug/L	4.00	ug/L							
1,2-Dibromoethane (EDB)	<1.00 ug/L	1.00	ug/L							
1,2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L							
1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L							
1,2-Dichloropropane	<1.00 ug/L	1.00	ug/L							
1,3,5-Trimethylbenzene	<1.00 ug/L	1.00	ug/L							
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L							



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0430 - SW5030B

Blank (BAA0430-BLK2)				Prepared & Analyzed: 01/20/2017
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L	
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	
2,2-Dichloropropane	<2.00 ug/L	2.00	ug/L	
2-Butanone (MEK)	<10.0 ug/L	10.0	ug/L	
2-Chlorotoluene	<1.00 ug/L	1.00	ug/L	
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L	
1-Chlorotoluene	<1.00 ug/L	1.00	ug/L	
1-Isopropyltoluene	<1.00 ug/L	1.00	ug/L	
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L	
Acetone	<10.0 ug/L	10.0	ug/L	
Benzene	<1.00 ug/L	1.00	ug/L	
Bromobenzene	<1.00 ug/L	1.00	ug/L	
Bromochloromethane	<1.00 ug/L	1.00	ug/L	
Bromodichloromethane	<0.50 ug/L	0.50	ug/L	
Bromoform	<1.00 ug/L	1.00	ug/L	
Bromomethane	<1.00 ug/L	1.00	ug/L	
Carbon disulfide	<10.0 ug/L	10.0	ug/L	
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L	
Chlorobenzene	<1.00 ug/L	1.00	ug/L	
Chloroethane	<1.00 ug/L	1.00	ug/L	
Chloroform	<0.50 ug/L	0.50	ug/L	
Chloromethane	<1.00 ug/L	1.00	ug/L	
sis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L	
sis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L	
Dibromochloromethane	<1.00 ug/L	1.00	ug/L	
Dibromomethane	<1.00 ug/L	1.00	ug/L	
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L	
Di-isopropyl ether (DIPE)	<5.00 ug/L	5.00	ug/L	
Ethylbenzene	<1.00 ug/L	1.00	ug/L	
Hexachlorobutadiene	<1.00 ug/L	1.00	ug/L	
odomethane	<10.0 ug/L	10.0	ug/L	



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

1/25/2017 17:23

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: **Fulton Gas**

1,1-Dichloroethane

Purchase Order:

Source

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

52.3 ug/L

		reporting		Spike	Source		701 KEO		INFD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BAA0430 - SW5030B										
Blank (BAA0430-BLK2)				Prepared	ł & Analyze	d: 01/20/20)17			
Isopropylbenzene	<1.00 ug/L	1.00	ug/L							
m+p-Xylenes	<2.00 ug/L	2.00	ug/L							
Methylene chloride	<4.00 ug/L	4.00	ug/L							
Methyl-t-butyl ether (MTBE)	<1.00 ug/L	1.00	ug/L							
Naphthalene	1.02 ug/L	1.00	ug/L							В
n-Butylbenzene	<1.00 ug/L	1.00	ug/L							
n-Propylbenzene	<1.00 ug/L	1.00	ug/L							
o-Xylene	<1.00 ug/L	1.00	ug/L							
sec-Butylbenzene	<1.00 ug/L	1.00	ug/L							
Styrene	<1.00 ug/L	1.00	ug/L							
tert-Butylbenzene	<1.00 ug/L	1.00	ug/L							
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L							
Toluene	<1.00 ug/L	1.00	ug/L							
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L							
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L							
Trichloroethylene	<1.00 ug/L	1.00	ug/L							
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L							
Vinyl acetate	<10.0 ug/L	10.0	ug/L							
Vinyl chloride	<0.50 ug/L	0.50	ug/L							
Xylenes, Total	<3.00 ug/L	3.00	ug/L							
Surr: 1,2-Dichloroethane-d4	49.7		ug/L	50.0		99.3	70-120			
Surr: 4-Bromofluorobenzene	47.8		ug/L	50.0		95.7	75-120			
Surr: Dibromofluoromethane	50.5		ug/L	50.0		101	80-119			
Surr: Toluene-d8	50.4		ug/L	50.0		101	85-120			
LCS (BAA0430-BS1)				Prepared	d & Analyze	d: 01/19/20	017			
1,1,1,2-Tetrachloroethane	51.1 ug/L	0.4	ug/L	50.0	ug/L	102	80-130			
1,1,1-Trichloroethane	52.6 ug/L	1	ug/L	50.0	ug/L	105	65-130			
1,1,2,2-Tetrachloroethane	48.7 ug/L	0.4	ug/L	50.0	ug/L	97.4	65-130			
1,1,2-Trichloroethane	49.7 ug/L	1	ug/L	50.0	ug/L	99.4	75-125			

50.0 ug/L

105

70-135



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0430 - SW5030B Prepared & Analyzed: 01/19/2017 LCS (BAA0430-BS1) 1,1-Dichloroethylene 52.3 ug/L 1 ug/L 50.0 ug/L 105 70-130 50.4 ug/L 1,1-Dichloropropene 1 ug/L 50.0 ug/L 101 75-135 1,2,3-Trichlorobenzene 54.3 ug/L ug/L 50.0 109 55-140 ug/L 46.4 ug/L 92.9 75-125 1,2,3-Trichloropropane ug/L 50.0 ug/L 52.6 ug/L 105 65-135 1.2.4-Trichlorobenzene ug/L 50.0 ug/L 1,2,4-Trimethylbenzene 52.2 ug/L ug/L 50.0 ug/L 104 75-130 1,2-Dibromo-3-chloropropane (DBCP) 46.3 ug/L ug/L 50.0 ug/L 92.6 50-130 1,2-Dibromoethane (EDB) 49.5 ug/L ug/L 50.0 ug/L 99.0 80-120 1,2-Dichlorobenzene 53.2 ug/L ug/L 50.0 ug/L 106 70-120 1,2-Dichloroethane 47.7 ug/L ug/L 50.0 ug/L 95.4 70-130 75-125 1,2-Dichloropropane 49.2 ug/L ug/L 50.0 ug/L 98.5 75-125 1,3,5-Trimethylbenzene 52.8 ug/L 50.0 106 ug/L ug/L 75-125 1,3-Dichlorobenzene 54.3 ug/L ug/L 50.0 ug/L 109 1,3-Dichloropropane 49.0 ug/L ug/L 50.0 ug/L 97.9 75-125 1,4-Dichlorobenzene 53.4 ug/L ug/L 50.0 107 75-125 ug/L 2 50.0 2,2-Dichloropropane 54.9 ug/L 110 70-135 ug/L ug/L 2-Butanone (MEK) 55.8 ug/L 10 ug/L 50.0 ug/L 112 30-150 2-Chlorotoluene 54.0 ug/L ug/L 50.0 108 75-125 1 ug/L 2-Hexanone (MBK) 52.4 ug/L 5 ug/L 50.0 ug/L 105 55-130 4-Chlorotoluene 51.7 ug/L 1 ug/L 50.0 ug/L 103 75-130 4-Isopropyltoluene 53.3 ug/L 1 ug/L 50.0 ug/L 107 75-130 4-Methyl-2-pentanone (MIBK) 49.6 ug/L 5 ug/L 50.0 ug/L 99.2 60-135 Acetone 54.1 ug/L 10 ug/L 50.0 108 40-140 ug/L Benzene 51.9 ug/L 1 ug/L 50.0 ug/L 104 80-120 50.0 105 75-125 Bromobenzene 52.3 ug/L 1 ug/L ug/L Bromochloromethane 53.6 ug/L 1 ug/L 50.0 107 65-130 ug/L Bromodichloromethane 54.3 ug/L 0.5 109 75-120 ug/L 50.0 ug/L Bromoform 51.7 ug/L 1 ug/L 50.0 ug/L 103 70-130 50.0 Bromomethane 50.0 ug/L 1 ug/L ug/L 100 30-145 57.2 ug/L 35-160 Carbon disulfide 10 ug/L 50.0 ug/L 114 Carbon tetrachloride 54.5 ug/L 1 ug/L 50.0 ug/L 109 65-140



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/20

1/25/2017 17:23

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0430 - SW5030B LCS (BAA0430-BS1) Prepared & Analyzed: 01/19/2017 Chlorobenzene 53.4 ug/L 1 ug/L 50.0 ug/L 107 80-120 Chloroethane 49.9 ug/L 1 ug/L 50.0 ug/L 99.9 60-135 Chloroform 52.1 ug/L 50.0 104 0.5 ug/L 65-135 ug/L 48.5 ug/L 96.9 40-125 Chloromethane 1 ug/L 50.0 ug/L cis-1,2-Dichloroethylene 52.9 ug/L ug/L 106 70-125 1 50.0 ug/L cis-1,3-Dichloropropene 48.2 ug/L ug/L 50.0 ug/L 96.3 70-130 Dibromochloromethane 56.1 ug/L ug/L 50.0 ug/L 112 60-135 Dibromomethane 51.6 ug/L ug/L 50.0 ug/L 103 75-125 Dichlorodifluoromethane 52.0 ug/L ug/L 50.0 ug/L 104 30-155 Ethylbenzene 51.5 ug/L ug/L 50.0 ug/L 103 75-125 50-140 Hexachlorobutadiene 50.9 ug/L ug/L 50.0 ug/L 102 108 75-125 Isopropylbenzene 54.0 ug/L ug/L 50.0 ug/L 2 75-130 m+p-Xylenes 106 ug/L ug/L 100 ug/L 106 Methylene chloride 45.8 ug/L ug/L 50.0 ug/L 91.6 55-140 Methyl-t-butyl ether (MTBE) 49.4 ug/L ug/L 50.0 98.8 65-125 ug/L 50.0 102 Naphthalene 51.1 ug/L ug/L 55-140 ug/L n-Butylbenzene 53.6 ug/L ug/L 50.0 ug/L 107 70-135 n-Propylbenzene 53.3 ug/L ug/L 50.0 107 70-130 ug/L o-Xylene 52.8 ug/L ug/L 50.0 ug/L 106 80-120 sec-Butylbenzene 53.1 ug/L ug/L 50.0 ug/L 106 70-125 Styrene 52.7 ug/L ug/L 50.0 ug/L 105 65-135 tert-Butylbenzene 52.5 ug/L ug/L 50.0 ug/L 105 70-130 Tetrachloroethylene (PCE) 51.4 ug/L ug/L 50.0 ug/L 103 45-150 51.7 ug/L ug/L 50.0 ug/L 103 75-120 50.0 107 60-140 trans-1,2-Dichloroethylene 53.6 ug/L ug/L ug/L trans-1,3-Dichloropropene 50.2 ug/L ug/L 50.0 ug/L 100 55-140 Trichloroethylene 50.2 ug/L 100 70-125 ug/L 50.0 ug/L Trichlorofluoromethane 46.5 ug/L 1 ug/L 50.0 ug/L 92.9 60-145 Vinyl chloride 54.6 ug/L 0.5 ug/L 50.0 ug/L 109 50-145 Surr: 1,2-Dichloroethane-d4 49.4 ug/L 50.0 ug/L 98.8 70-120 Surr: 4-Bromofluorobenzene 49.1 50.0 ug/L 98.1 75-120 ug/L



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/2

1/25/2017 17:23

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

LCS (BAA0430-BS1)	Prepared & Analyzed: 01/19/2017									
Surr: Dibromofluoromethane	51.9		ug/L	50.0	ug/L	104	80-119			
Surr: Toluene-d8	50.1		ug/L	50.0	ug/L	100	85-120			
Matrix Spike (BAA0430-MS1)	Source	Prepared & Analyzed: 01/20/2017								
1,1,1,2-Tetrachloroethane	48.2 ug/L	0.4	ug/L	50.0	<0.4 ug/L	96.4	80-130			
1,1,1-Trichloroethane	49.5 ug/L	1	ug/L	50.0	<1 ug/L	99.0	65-130			
1,1,2,2-Tetrachloroethane	50.8 ug/L	0.4	ug/L	50.0	<0.4 ug/L	102	65-130			
1,1,2-Trichloroethane	49.1 ug/L	1	ug/L	50.0	<1 ug/L	98.2	75-125			
1,1-Dichloroethane	49.2 ug/L	1	ug/L	50.0	<1 ug/L	98.3	70-135			
,1-Dichloroethylene	48.6 ug/L	1	ug/L	50.0	<1 ug/L	97.2	70-130			
1,1-Dichloropropene	47.4 ug/L	1	ug/L	50.0	<1 ug/L	94.8	75-135			
,2,3-Trichlorobenzene	51.6 ug/L	1	ug/L	50.0	<1 ug/L	103	55-140			
,2,3-Trichloropropane	50.0 ug/L	1	ug/L	50.0	<1 ug/L	99.9	75-125			
,2,4-Trichlorobenzene	48.0 ug/L	1	ug/L	50.0	<1 ug/L	96.0	65-135			
,2,4-Trimethylbenzene	48.2 ug/L	1	ug/L	50.0	<1 ug/L	96.4	75-130			
2-Dibromo-3-chloropropane (DBCP)	54.7 ug/L	4	ug/L	50.0	<4 ug/L	109	50-130			
2-Dibromoethane (EDB)	49.8 ug/L	1	ug/L	50.0	<1 ug/L	99.5	80-120			
2-Dichlorobenzene	50.8 ug/L	1	ug/L	50.0	<1 ug/L	102	70-120			
,2-Dichloroethane	47.1 ug/L	1	ug/L	50.0	<1 ug/L	94.2	70-130			
,2-Dichloropropane	46.7 ug/L	1	ug/L	50.0	<1 ug/L	93.4	75-125			
,3,5-Trimethylbenzene	49.1 ug/L	1	ug/L	50.0	<1 ug/L	98.3	75-125			
,3-Dichlorobenzene	50.3 ug/L	1	ug/L	50.0	<1 ug/L	101	75-125			
,3-Dichloropropane	49.0 ug/L	1	ug/L	50.0	<1 ug/L	97.9	75-125			
,4-Dichlorobenzene	49.2 ug/L	1	ug/L	50.0	<1 ug/L	98.4	75-125			
.,2-Dichloropropane	48.6 ug/L	2	ug/L	50.0	<2 ug/L	97.2	70-135			
-Butanone (MEK)	56.6 ug/L	10	ug/L	50.0	<10 ug/L	113	30-150			
-Chlorotoluene	50.3 ug/L	1	ug/L	50.0	<1 ug/L	101	75-125			
-Hexanone (MBK)	59.3 ug/L	5	ug/L	50.0	<5 ug/L	119	55-130			
-Chlorotoluene	48.5 ug/L	1	ug/L	50.0	<1 ug/L	96.9	75-130			
-Isopropyltoluene	49.2 ug/L	1	ug/L	50.0	<1 ug/L	98.4	75-130			
-Methyl-2-pentanone (MIBK)	56.2 ug/L	5	ug/L	50.0	<5 ug/L	112	60-135			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD		l
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	l

Batch BAA0430 - SW5030B

Matrix Spike (BAA0430-MS1)	Source	e: 17A0484-	02	Prepare	ed & Analyze	d: 01/20/2	017
Acetone	57.5 ug/L	10	ug/L	50.0	<10 ug/L	109	40-140
Benzene	49.4 ug/L	1	ug/L	50.0	<1 ug/L	98.7	80-120
Bromobenzene	49.8 ug/L	1	ug/L	50.0	<1 ug/L	99.7	75-125
Bromochloromethane	52.3 ug/L	1	ug/L	50.0	<1 ug/L	105	65-130
Bromodichloromethane	51.4 ug/L	0.5	ug/L	50.0	<0.5 ug/L	103	75-120
Bromoform	50.9 ug/L	1	ug/L	50.0	<1 ug/L	102	70-130
Bromomethane	44.8 ug/L	1	ug/L	50.0	<1 ug/L	89.7	30-145
Carbon disulfide	52.9 ug/L	10	ug/L	50.0	<10 ug/L	106	35-160
Carbon tetrachloride	49.8 ug/L	1	ug/L	50.0	<1 ug/L	99.6	65-140
Chlorobenzene	50.5 ug/L	1	ug/L	50.0	<1 ug/L	101	80-120
Chloroethane	47.2 ug/L	1	ug/L	50.0	<1 ug/L	94.5	60-135
Chloroform	49.0 ug/L	0.5	ug/L	50.0	<0.5 ug/L	97.9	65-135
Chloromethane	44.2 ug/L	1	ug/L	50.0	<1 ug/L	88.3	40-125
cis-1,2-Dichloroethylene	50.2 ug/L	1	ug/L	50.0	<1 ug/L	100	70-125
cis-1,3-Dichloropropene	45.1 ug/L	1	ug/L	50.0	<1 ug/L	90.2	70-130
Dibromochloromethane	55.4 ug/L	1	ug/L	50.0	<1 ug/L	111	60-135
Dibromomethane	51.3 ug/L	1	ug/L	50.0	<1 ug/L	103	75-125
Dichlorodifluoromethane	48.7 ug/L	1	ug/L	50.0	<1 ug/L	97.3	30-155
Ethylbenzene	48.0 ug/L	1	ug/L	50.0	<1 ug/L	96.0	75-125
Hexachlorobutadiene	45.4 ug/L	1	ug/L	50.0	<1 ug/L	90.7	50-140
Isopropylbenzene	50.4 ug/L	1	ug/L	50.0	<1 ug/L	101	75-125
m+p-Xylenes	98.6 ug/L	2	ug/L	100	<2 ug/L	98.5	75-130
Methylene chloride	45.0 ug/L	4	ug/L	50.0	<4 ug/L	89.7	55-140
Methyl-t-butyl ether (MTBE)	49.0 ug/L	1	ug/L	50.0	<1 ug/L	98.0	65-125
Naphthalene	60.6 ug/L	1	ug/L	50.0	1.39 ug/L	118	55-140
n-Butylbenzene	49.0 ug/L	1	ug/L	50.0	<1 ug/L	98.0	70-135
n-Propylbenzene	49.4 ug/L	1	ug/L	50.0	<1 ug/L	98.8	70-130
o-Xylene	49.5 ug/L	1	ug/L	50.0	<1 ug/L	99.0	80-120
sec-Butylbenzene	49.4 ug/L	1	ug/L	50.0	<1 ug/L	98.8	70-125
Styrene	49.3 ug/L	1	ug/L	50.0	<1 ug/L	98.7	65-135
tert-Butylbenzene	49.4 ug/L	1	ug/L	50.0	<1 ug/L	98.7	70-130



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/

1/25/2017 17:23

RPD

RPD

Limit

Qual

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Result

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Limits

%REC

Client Site I.D.: Fulton Gas

Analyte

Purchase Order:

Source

Result

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Units

Spike

Level

Reporting

Limit

latrix Spike (BAA0430-MS1)	Source	Prepare	ed & Analyze	d: 01/20/2	017				
etrachloroethylene (PCE)	48.4 ug/L	1	ug/L	50.0	<1 ug/L	96.7	45-150		
oluene	48.7 ug/L	1	ug/L	50.0	<1 ug/L	97.4	75-120		
ans-1,2-Dichloroethylene	48.6 ug/L	1	ug/L	50.0	<1 ug/L	97.2	60-140		
ans-1,3-Dichloropropene	47.7 ug/L	1	ug/L	50.0	<1 ug/L	95.3	55-140		
richloroethylene	47.2 ug/L	1	ug/L	50.0	<1 ug/L	94.3	70-125		
richlorofluoromethane	43.7 ug/L	1	ug/L	50.0	<1 ug/L	87.5	60-145		
inyl chloride	51.2 ug/L	0.5	ug/L	50.0	<0.5 ug/L	102	50-145		
urr: 1,2-Dichloroethane-d4	53.4		ug/L	50.0	ug/L	107	70-120		
urr: 4-Bromofluorobenzene	49.2		ug/L	50.0	ug/L	98.3	75-120		
urr: Dibromofluoromethane	50.9		ug/L	50.0	ug/L	102	80-119		
urr: Toluene-d8	50.2		ug/L	50.0	ug/L	100	85-120		
latrix Spike Dup (BAA0430-MSD1)	Source: 17A0484-02			Prepare	ed & Analyze	017			
1,1,2-Tetrachloroethane	49.6 ug/L	0.4	ug/L	50.0	<0.4 ug/L	99.3	80-130	2.92	30
1,1-Trichloroethane	50.3 ug/L	1	ug/L	50.0	<1 ug/L	101	65-130	1.70	30
1,2,2-Tetrachloroethane	50.2 ug/L	0.4	ug/L	50.0	<0.4 ug/L	100	65-130	1.23	30
1,2-Trichloroethane	49.4 ug/L	1	ug/L	50.0	<1 ug/L	98.7	75-125	0.508	30
1-Dichloroethane	50.4 ug/L	1	ug/L	50.0	<1 ug/L	101	70-135	2.47	30
1-Dichloroethylene	49.9 ug/L	1	ug/L	50.0	<1 ug/L	99.8	70-130	2.66	30
1-Dichloropropene	48.4 ug/L	1	ug/L	50.0	<1 ug/L	96.9	75-135	2.13	30
2,3-Trichlorobenzene	53.3 ug/L	1	ug/L	50.0	<1 ug/L	107	55-140	3.38	30
2,3-Trichloropropane	49.0 ug/L	1	ug/L	50.0	<1 ug/L	98.0	75-125	1.92	30
2,4-Trichlorobenzene	49.5 ug/L	1	ug/L	50.0	<1 ug/L	99.1	65-135	3.16	30
2,4-Trimethylbenzene	50.2 ug/L	1	ug/L	50.0	<1 ug/L	100	75-130	3.96	30
2-Dibromo-3-chloropropane (DBCP)	53.9 ug/L	4	ug/L	50.0	<4 ug/L	108	50-130	1.42	30
2-Dibromoethane (EDB)	50.1 ug/L	1	ug/L	50.0	<1 ug/L	100	80-120	0.641	30
2-Dichlorobenzene	52.2 ug/L	1	ug/L	50.0	<1 ug/L	104	70-120	2.82	30
2-Dichloroethane	47.2 ug/L	1	ug/L	50.0	<1 ug/L	94.4	70-130	0.212	30
2-Dichloropropane	47.7 ug/L	1	ug/L	50.0	<1 ug/L	95.5	75-125	2.18	30
3,5-Trimethylbenzene	50.6 ug/L	1	ug/L	50.0	<1 ug/L	101	75-125	3.05	30
.3-Dichlorobenzene	51.7 ug/L	1	ug/L	E0.0	<1 ug/L	103	75-125	2.71	30



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/

1/25/2017 17:23

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

	Reporting			Spike	Source		%REC		RPD	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	

Batch BAA0430 - SW5030B Source: 17A0484-02 Prepared & Analyzed: 01/20/2017 Matrix Spike Dup (BAA0430-MSD1) 1,3-Dichloropropane 49.3 ug/L 1 ug/L 50.0 <1 ug/L 98.7 75-125 0.753 30 50.0 ug/L 1,4-Dichlorobenzene 1 ug/L 50.0 <1 ug/L 99.9 75-125 1.47 30 50.0 <2 ug/L 30 2,2-Dichloropropane 49.3 ug/L 2 ug/L 98.5 70-135 1.39 49.9 ug/L 50.0 <10 ug/L 30-150 12.7 30 2-Butanone (MEK) 10 ug/L 99.8 30 2-Chlorotoluene 50.0 <1 ug/L 103 75-125 2 77 51.7 ug/L 1 ug/L 2-Hexanone (MBK) 58.1 ug/L 5 ug/L 50.0 <5 ug/L 116 55-130 2.13 30 4-Chlorotoluene 49.2 ug/L ug/L 50.0 <1 ug/L 98.4 75-130 1.47 30 1 4-Isopropyltoluene 50.9 ug/L 1 ug/L 50.0 <1 ug/L 102 75-130 3.40 30 4-Methyl-2-pentanone (MIBK) 55.4 ug/L 5 ug/L 50.0 <5 ug/L 111 60-135 1.52 30 50.0 <10 ug/L Acetone 56.2 ug/L 10 ug/L 107 40-140 2.25 30 Benzene 49.9 ug/L 1 ug/L 50.0 <1 ug/L 99.8 80-120 1.05 30 75-125 Bromobenzene 50.8 ug/L 50.0 <1 ug/L 102 1.89 30 1 ug/L 65-130 0.515 Bromochloromethane 52.6 ug/L 1 ug/L 50.0 <1 ug/L 105 30 Bromodichloromethane 52.9 ug/L 0.5 ug/L 50.0 < 0.5 ug/L 106 75-120 2 78 30 Bromoform 50.9 ug/L 50.0 <1 ug/L 102 70-130 0.0196 30 1 ug/L Bromomethane 48.2 ug/L 50.0 <1 ug/L 96.4 30-145 7.22 30 1 ug/L Carbon disulfide 55.7 ug/L 10 ug/L 50.0 <10 ug/L 111 35-160 5.23 30 Carbon tetrachloride 51.2 ug/L ug/L 50.0 <1 ug/L 102 65-140 2.79 30 1 Chlorobenzene 51.8 ug/L 1 ug/L 50.0 <1 ug/L 104 80-120 2.72 30 Chloroethane 48.3 ug/L 1 ug/L 50.0 <1 ug/L 96.6 60-135 2.26 30 Chloroform 50.1 ug/L 0.5 ug/L 50.0 < 0.5 ug/L 100 65-135 2.30 30 Chloromethane 45.4 ug/L 1 ug/L 50.0 <1 ug/L 90.8 40-125 2.75 30 70-125 30 cis-1,2-Dichloroethylene 50.7 ug/L ug/L 50.0 <1 ug/L 101 1.07 1 cis-1,3-Dichloropropene 46.2 ug/L ug/L 50.0 <1 ug/L 92.3 70-130 2.28 30 Dibromochloromethane 112 60-135 1.02 30 56.0 ug/L ug/L 50.0 <1 ug/L Dibromomethane 50.4 ug/L ug/L 50.0 <1 ug/L 101 75-125 1.69 30 Dichlorodifluoromethane 49.1 ug/L 50.0 <1 ug/L 98.2 30-155 0.941 30 ug/L Ethylbenzene 49.6 ug/L ug/L 50.0 <1 ug/L 99.1 75-125 3.24 30 Hexachlorobutadiene 47.8 ug/L 1 ug/L 50.0 <1 ug/L 95.6 50-140 5.24 30 52.1 ug/L 50.0 <1 ug/L 75-125 Isopropylbenzene 1 ug/L 104 3.29 30 m+p-Xylenes 103 ug/L 2 ug/L 100 <2 ug/L 103 75-130 4.03 30



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0430 - SW5030B

Matrix Spike Dup (BAA0430-MSD1)	Source:	17A0484	-02	Prepare	d & Analyze					
Methylene chloride	45.1 ug/L	4	ug/L	•	<4 ug/L	89.7	55-140	0.0666	30	
Methyl-t-butyl ether (MTBE)	48.9 ug/L	1	ug/L	50.0	<1 ug/L	97.7	65-125	0.286	30	
Naphthalene	59.1 ug/L	1	ug/L	50.0	1.39 ug/L	115	55-140	2.59	30	
n-Butylbenzene	50.4 ug/L	1	ug/L	50.0	<1 ug/L	101	70-135	2.74	30	
n-Propylbenzene	51.4 ug/L	1	ug/L	50.0	<1 ug/L	103	70-130	3.99	30	
o-Xylene	51.1 ug/L	1	ug/L	50.0	<1 ug/L	102	80-120	3.28	30	
sec-Butylbenzene	51.2 ug/L	1	ug/L	50.0	<1 ug/L	102	70-125	3.50	30	
Styrene	50.9 ug/L	1	ug/L	50.0	<1 ug/L	102	65-135	3.07	30	
tert-Butylbenzene	51.0 ug/L	1	ug/L	50.0	<1 ug/L	102	70-130	3.25	30	
Tetrachloroethylene (PCE)	49.1 ug/L	1	ug/L	50.0	<1 ug/L	98.2	45-150	1.50	30	
Toluene	50.6 ug/L	1	ug/L	50.0	<1 ug/L	101	75-120	3.75	30	
trans-1,2-Dichloroethylene	50.4 ug/L	1	ug/L	50.0	<1 ug/L	101	60-140	3.70	30	
trans-1,3-Dichloropropene	48.6 ug/L	1	ug/L	50.0	<1 ug/L	97.2	55-140	1.95	30	
Trichloroethylene	47.8 ug/L	1	ug/L	50.0	<1 ug/L	95.6	70-125	1.33	30	
Trichlorofluoromethane	45.2 ug/L	1	ug/L	50.0	<1 ug/L	90.4	60-145	3.28	30	
Vinyl chloride	52.8 ug/L	0.5	ug/L	50.0	<0.5 ug/L	106	50-145	3.12	30	
Surr: 1,2-Dichloroethane-d4	51.4		ug/L	50.0	ug/L	103	70-120			
Surr: 4-Bromofluorobenzene	49.1		ug/L	50.0	ug/L	98.2	75-120			
Surr: Dibromofluoromethane	50.1		ug/L	50.0	ug/L	100	80-119			
Surr: Toluene-d8	50.0		ua/L	50.0	ug/L	100	85-120			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BAA0426-BLK1)			Prepared & Analyzed: 01/20/2017
1,2,4,5-Tetrachlorobenzene	<10.0 ug/L	10.0	ug/L
1,2,4-Trichlorobenzene	<10.0 ug/L	10.0	ug/L
1,2-Dichlorobenzene	<10.0 ug/L	10.0	ug/L
1,2-Diphenylhydrazine	<10.0 ug/L	10.0	ug/L
1,3-Dichlorobenzene	<10.0 ug/L	10.0	ug/L
1,3-Dinitrobenzene	<2.50 ug/L	2.50	ug/L
1,4-Dichlorobenzene	<10.0 ug/L	10.0	ug/L
1-Naphthylamine	<10.0 ug/L	10.0	ug/L
2,3,4,6-Tetrachlorophenol	<10.0 ug/L	10.0	ug/L
2,4,5-Trichlorophenol	<10.0 ug/L	10.0	ug/L
2,4,6-Trichlorophenol	<10.0 ug/L	10.0	ug/L
2,4-Dichlorophenol	<10.0 ug/L	10.0	ug/L
2,4-Dimethylphenol	<0.50 ug/L	0.50	ug/L
2,4-Dinitrophenol	<50.0 ug/L	50.0	ug/L
2,4-Dinitrotoluene	<10.0 ug/L	10.0	ug/L
2,6-Dichlorophenol	<10.0 ug/L	10.0	ug/L
2,6-Dinitrotoluene	<10.0 ug/L	10.0	ug/L
2-Chloronaphthalene	<10.0 ug/L	10.0	ug/L
2-Chlorophenol	<10.0 ug/L	10.0	ug/L
2-Methylnaphthalene	<10.0 ug/L	10.0	ug/L
2-Naphthylamine	<10.0 ug/L	10.0	ug/L
2-Nitroaniline	<20.0 ug/L	20.0	ug/L
2-Nitrophenol	<10.0 ug/L	10.0	ug/L
3,3'-Dichlorobenzidine	<10.0 ug/L	10.0	ug/L
3-Methylcholanthrene	<10.0 ug/L	10.0	ug/L
3-Nitroaniline	<20.0 ug/L	20.0	ug/L
4,6-Dinitro-2-methylphenol	<50.0 ug/L	50.0	ug/L
4-Aminobiphenyl	<10.0 ug/L	10.0	ug/L
4-Bromophenyl phenyl ether	<10.0 ug/L	10.0	ug/L
4-Chloroaniline	<10.0 ug/L	10.0	ug/L
4-Chlorophenyl phenyl ether	<10.0 ug/L	10.0	ug/L



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

Client Site I.D.: Fulton Gas Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BAA0426-BLK1)				Prepared & Analyzed: 01/20/2017
4-Nitroaniline	<20.0 ug/L	20.0	ug/L	
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	
7,12-Dimethylbenz (a) anthracene	<10.0 ug/L	10.0	ug/L	
Acenaphthene	<10.0 ug/L	10.0	ug/L	
Acenaphthylene	<10.0 ug/L	10.0	ug/L	
Acetophenone	<20.0 ug/L	20.0	ug/L	
Aniline	<50.0 ug/L	50.0	ug/L	
Anthracene	<10.0 ug/L	10.0	ug/L	
Benzidine	<50.0 ug/L	50.0	ug/L	
Benzo (a) anthracene	<0.05 ug/L	0.05	ug/L	
Benzo (a) pyrene	<10.0 ug/L	10.0	ug/L	
Benzo (b) fluoranthene	<10.0 ug/L	10.0	ug/L	
Benzo (g,h,i) perylene	<10.0 ug/L	10.0	ug/L	
Benzo (k) fluoranthene	<10.0 ug/L	10.0	ug/L	
Benzoic acid	<50.0 ug/L	50.0	ug/L	
Benzyl alcohol	<20.0 ug/L	20.0	ug/L	
is (2-Chloroethoxy) methane	<10.0 ug/L	10.0	ug/L	
is (2-Chloroethyl) ether	<10.0 ug/L	10.0	ug/L	
is (2-Chloroisopropyl) ether	<10.0 ug/L	10.0	ug/L	
is (2-Ethylhexyl) phthalate	<10.0 ug/L	10.0	ug/L	
Butyl benzyl phthalate	<10.0 ug/L	10.0	ug/L	
Chrysene	<10.0 ug/L	10.0	ug/L	
Dibenz (a,h) anthracene	<10.0 ug/L	10.0	ug/L	
Dibenz (a,j) acridine	<10.0 ug/L	10.0	ug/L	
Dibenzofuran	<5.00 ug/L	5.00	ug/L	
Diethyl phthalate	<10.0 ug/L	10.0	ug/L	
imethyl phthalate	<10.0 ug/L	10.0	ug/L	
i-n-butyl phthalate	<10.0 ug/L	10.0	ug/L	
Di-n-octyl phthalate	<10.0 ug/L	10.0	ug/L	
Diphenylamine	<10.0 ug/L	10.0	ug/L	
Ethyl methanesulfonate	<20.0 ug/L	20.0	ug/L	



Certificate of Analysis

Final Report

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Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BAA0426-BLK1)				Prepared & Analyzed: 01/20/2017
Fluoranthene	<10.0 ug/L	10.0	ug/L	
Fluorene	<10.0 ug/L	10.0	ug/L	
Hexachlorobenzene	<1.00 ug/L	1.00	ug/L	
Hexachlorobutadiene	<10.0 ug/L	10.0	ug/L	
Hexachlorocyclopentadiene	<10.0 ug/L	10.0	ug/L	
Hexachloroethane	<10.0 ug/L	10.0	ug/L	
Indeno (1,2,3-cd) pyrene	<10.0 ug/L	10.0	ug/L	
Isophorone	<10.0 ug/L	10.0	ug/L	
m+p-Cresols	<10.0 ug/L	10.0	ug/L	
Methyl methanesulfonate	<10.0 ug/L	10.0	ug/L	
Naphthalene	<5.00 ug/L	5.00	ug/L	J
Nitrobenzene	<10.0 ug/L	10.0	ug/L	
n-Nitrosodimethylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosodi-n-butylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosodi-n-propylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosodiphenylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosopiperidine	<10.0 ug/L	10.0	ug/L	
o+m+p-Cresols	<10.0 ug/L	10.0	ug/L	
o-Cresol	<10.0 ug/L	10.0	ug/L	
p-(Dimethylamino) azobenzene	<2.50 ug/L	2.50	ug/L	
p-Chloro-m-cresol	<10.0 ug/L	10.0	ug/L	
Pentachloronitrobenzene (quintozene)	<10.0 ug/L	10.0	ug/L	
Pentachlorophenol	<20.0 ug/L	20.0	ug/L	
Phenacetin	<10.0 ug/L	10.0	ug/L	
Phenanthrene	<10.0 ug/L	10.0	ug/L	
Phenol	<10.0 ug/L	10.0	ug/L	
Pronamide	<10.0 ug/L	10.0	ug/L	
Pyrene	<10.0 ug/L	10.0	ug/L	
Pyridine	<10.0 ug/L	10.0	ug/L	
Surr: 2,4,6-Tribromophenol	63.0		ug/L	100 63.0 40-125
Surr: 2-Fluorobiphenyl	31.6		ug/L	50.0 63.2 23-87



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

1/25/2017 17:23

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: **Fulton Gas**

Purchase Order:

Source

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BAA0426 - SW3510C										
Blank (BAA0426-BLK1)				Prepared	d & Analyze	d: 01/20/2	2017			
Surr: 2-Fluorophenol	48.6		ug/L	100		48.6	14-52			
Surr: Nitrobenzene-d5	34.3		ug/L	50.0		68.6	40-110			
Surr: Phenol-d5	29.1		ug/L	100		29.1	5-33			
Surr: p-Terphenyl-d14	47.7		ug/L	50.0		95.4	27-133			
LCS (BAA0426-BS1)				Prepared	d & Analyze	d: 01/20/2	2017			
1,2,4-Trichlorobenzene	37.1 ug/L	10.0	ug/L	49.7	ug/L	74.6	21.8-66.7			L
1,4-Dichlorobenzene	38.9 ug/L	10.0	ug/L	50.0	ug/L	77.8	20-124			
2,4-Dinitrotoluene	40.1 ug/L	10.0	ug/L	50.0	ug/L	80.3	39-139			
2-Chlorophenol	86.2 ug/L	10.0	ug/L	99.0	ug/L	87.0	35-105			
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	ug/L	46.8	0-125			J
Acenaphthene	42.0 ug/L	10.0	ug/L	49.8	ug/L	84.5	45-110			
n-Nitrosodi-n-propylamine	44.7 ug/L	10.0	ug/L	49.8	ug/L	89.7	35-130			
p-Chloro-m-cresol	83.2 ug/L	10.0	ug/L	100	ug/L	83.2	45-110			
Pentachlorophenol	102 ug/L	20.0	ug/L	99.0	ug/L	103	40-115			
Phenol	41.7 ug/L	10.0	ug/L	100	ug/L	41.7	0-115			
Pyrene	49.1 ug/L	10.0	ug/L	50.0	ug/L	98.1	50-130			
Surr: 2,4,6-Tribromophenol	95.5		ug/L	100	ug/L	95.5	40-125			
Surr: 2-Fluorobiphenyl	45.3		ug/L	50.0	ug/L	90.7	23-87			S
Surr: 2-Fluorophenol	71.0		ug/L	100	ug/L	71.0	14-52			S
Surr: Nitrobenzene-d5	46.9		ug/L	50.0	ug/L	93.8	40-110			
Surr: Phenol-d5	46.0		ug/L	100	ug/L	46.0	5-33			S
Surr: p-Terphenyl-d14	45.8		ug/L	50.0	ug/L	91.7	27-133			
LCS (BAA0426-BS2)				Prepared	d & Analyze	d: 01/20/2	2017			
1,2,4-Trichlorobenzene	37.7 ug/L	10.0	ug/L	100	ug/L	37.7	21.8-66.7			
1,4-Dichlorobenzene	42.4 ug/L	10.0	ug/L	100	ug/L	42.4	20-124			
2,4-Dinitrotoluene	92.7 ug/L	10.0	ug/L	100	ug/L	92.7	39-139			
2-Chlorophenol	44.9 ug/L	10.0	ug/L	100	ug/L	44.9	35-105			
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	ug/L	35.6	0-125			J
Acenaphthene	61.2 ug/L	10.0	ug/L	100	ug/L	61.2	45-110			
n-Nitrosodi-n-propylamine	49.6 ug/L	10.0	ug/L	100	ug/L	49.6	35-130			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

LCS (BAA0426-BS2)		Prepared & Analyzed: 01/20/2017							
p-Chloro-m-cresol	53.0 ug/L	10.0	ug/L	100	ug/L	53.0	45-110		
Pentachlorophenol	86.0 ug/L	20.0	ug/L	100	ug/L	86.0	40-115		
Phenol	20.1 ug/L	10.0	ug/L	101	ug/L	19.9	0-115		
Pyrene	90.1 ug/L	10.0	ug/L	100	ug/L	90.1	50-130		
Surr: 2,4,6-Tribromophenol	75.1		ug/L	100	ug/L	75.1	40-125		
Surr: 2-Fluorobiphenyl	20.0		ug/L	50.0	ug/L	40.0	23-87		
Surr: 2-Fluorophenol	34.2		ug/L	100	ug/L	34.2	14-52		
Surr: Nitrobenzene-d5	24.8		ug/L	50.0	ug/L	49.5	40-110		
Surr: Phenol-d5	21.0		ug/L	100	ug/L	21.0	5-33		
Surr: p-Terphenyl-d14	38.4		ug/L	50.0	ug/L	76.8	27-133		



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Client Name: Timmons Group

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BAA0391 - SW3510C Blank (BAA0391-BLK1) Prepared & Analyzed: 01/19/2017 4,4'-DDD <0.050 ug/L 0.050 ug/L 4,4'-DDE <0.050 ug/L 0.050 ug/L 4,4'-DDT <0.050 ug/L 0.050 ug/L Aldrin <0.050 ug/L 0.050 ug/L 0.050 ug/L alpha-BHC <0.050 ug/L beta-BHC <0.050 ug/L 0.050 ug/L Chlordane <0.200 ug/L 0.200 ug/L delta-BHC 0.050 <0.050 ug/L ug/L Dieldrin 0.050 <0.050 ug/L ug/L Endosulfan I <0.050 ug/L 0.050 ug/L Endosulfan II 0.050 <0.050 ug/L ug/L Endosulfan sulfate 0.050 <0.050 ug/L ug/L Endrin <0.050 ug/L 0.050 ug/L 0.050 ug/L Endrin aldehyde <0.050 ug/L gamma-BHC (Lindane) <0.050 ug/L 0.050 ug/L 0.050 Heptachlor <0.050 ug/L ug/L Heptachlor epoxide <0.050 ug/L 0.050 ug/L Methoxychlor <0.050 ug/L 0.050 ug/L Toxaphene <1.00 ug/L 1.00 ug/L Surr: TCMX 0 140 0.200 70.0 18-112 ug/L Surr: DCB 0.220 0.200 110 27-131 ug/L LCS (BAA0391-BS1) Prepared & Analyzed: 01/19/2017 4,4'-DDD 0.080 ug/L 0.050 ug/L 0.100 ug/L 0.08 23-134 4,4'-DDE 0.080 ug/L 0.050 0.08 23-134 ug/L 0.100 ug/L 4,4'-DDT 0.080 ug/L 0.050 ug/L 0.100 ug/L 80.0 23-134 70.0 Aldrin 0.070 ug/L 0.050 ug/L 0.100 ug/L 23-134 alpha-BHC 0.080 ug/L 0.050 ug/L 0.100 ug/L 0.08 23-134 beta-BHC 0.080 ug/L 0.050 ug/L 0.100 ug/L 0.08 23-134 delta-BHC 0.090 ug/L 0.050 90.0 23-134 ug/L 0.100 ug/L Dieldrin 0.070 ug/L 0.050 0.100 ug/L 70.0 23-134 ug/L



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

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36156.015

RPD

%REC

Client Site I.D.: Fulton Gas

Purchase Order:

Source

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BAA0391 - SW3510C										
LCS (BAA0391-BS1)				Prepared	d & Analyzed	I: 01/19/20	017			
Endosulfan I	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134			
Endosulfan II	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134			
Endosulfan sulfate	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134			
Endrin	0.090 ug/L	0.050	ug/L	0.100	ug/L	90.0	23-134			
Endrin aldehyde	0.070 ug/L	0.050	ug/L	0.100	ug/L	70.0	23-134			
gamma-BHC (Lindane)	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134			
Heptachlor	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134			
Heptachlor epoxide	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134			
Methoxychlor	0.090 ug/L	0.050	ug/L	0.100	ug/L	90.0	23-134			
Mirex	0.070 ug/L	0.050	ug/L	0.100	ug/L	70.0	23-134			
Surr: TCMX	0.130		ug/L	0.200	ug/L	65.0	18-112			
Surr: DCB	0.200		ug/L	0.200		100	27-131			
_CS (BAA0391-BS2)				Prepared	d & Analyzed	l: 01/19/20	017			
Toxaphene	1.59 ug/L	1.00	ug/L	2.50	ug/L	63.6	23-134			
LCS (BAA0391-BS3)				Prepared	d & Analyzed	l: 01/19/20	017			
Chlordane	1.52 ug/L	0.200	ug/L	2.50	ug/L	60.8	23-134			
Matrix Spike (BAA0391-MS1)	Soui	rce: 17A048	4-08	Prepared	d & Analyzed	I: 01/19/20	017			
1,4'-DDD	0.111 ug/L	0.056	ug/L	0.111	<0.056 ug/L	100	23-134			
I,4'-DDE	0.167 ug/L	0.056	ug/L	0.111	<0.056 ug/L	150	23-134			М
1,4'-DDT	0.222 ug/L	0.056	ug/L	0.111	<0.056 ug/L	200	23-134			М
Aldrin	0.111 ug/L	0.056	ug/L	0.111	<0.056 ug/L	100	23-134			
alpha-BHC	0.078 ug/L	0.056	ug/L	0.111	<0.056 ug/L	70.0	23-134			
peta-BHC	0.356 ug/L	0.056	ug/L	0.111	<0.056 ug/L	320	23-134			М
delta-BHC	0.111 ug/L	0.056	ug/L	0.111	<0.056 ug/L	100	23-134			
Dieldrin	0.133 ug/L	0.056	ug/L	0.111	<0.056 ug/L	120	23-134			
Endosulfan I	0.156 ug/L	0.056	ug/L	0.111	<0.056 ug/L	140	23-134			М
Endosulfan II	0.111 ug/L	0.056	ug/L	0.111	<0.056 ug/L	100	23-134			
Endosulfan sulfate	0.100 ug/L	0.056	ug/L	0.111	<0.056 ug/L	90.0	23-134			
Endrin	0.133 ug/L	0.056	ug/L	0.111	<0.056 ug/L	120	23-134			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/

1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gas

Purchase Order:

Source

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qua
Batch BAA0391 - SW3510C										
Matrix Spike (BAA0391-MS1)	Sour	ce: 17A048	4-08	Prepared	& Analyzed	l: 01/19/20	017			
Endrin aldehyde	0.133 ug/L	0.056	ug/L	0.111	<0.056 ug/L	120	23-134			
gamma-BHC (Lindane)	0.222 ug/L	0.056	ug/L	0.111	<0.056 ug/L	200	23-134			М
Heptachlor	0.067 ug/L	0.056	ug/L	0.111	<0.056 ug/L	60.0	23-134			
leptachlor epoxide	0.122 ug/L	0.056	ug/L	0.111	<0.056 ug/L	110	23-134			
Methoxychlor	0.422 ug/L	0.056	ug/L	0.111	<0.056 ug/L	380	23-134			М
Mirex	0.067 ug/L	0.056	ug/L	0.111	<0.056 ug/L	60.0	23-134			
Surr: TCMX	0.211		ug/L	0.222	ug/L	95.0	18-112			
Surr: DCB	0.211		ug/L	0.222	ug/L	95.0	27-131			
Matrix Spike Dup (BAA0391-MSD1)	Sour	ce: 17A048	4-08	Prepared	& Analyzed	l: 01/19/20	017			
,4'-DDD	0.154 ug/L	0.055	ug/L	0.110	<0.055 ug/L	140	23-134	32.3	20	M, P
,4'-DDE	0.132 ug/L	0.055	ug/L	0.110	<0.055 ug/L	120	23-134	23.3	20	Р
,4'-DDT	0.231 ug/L	0.055	ug/L	0.110	<0.055 ug/L	210	23-134	3.77	20	М
ldrin	0.121 ug/L	0.055	ug/L	0.110	<0.055 ug/L	110	23-134	8.42	20	
lpha-BHC	0.066 ug/L	0.055	ug/L	0.110	<0.055 ug/L	60.0	23-134	16.5	20	
eta-BHC	0.516 ug/L	0.055	ug/L	0.110	<0.055 ug/L	470	23-134	36.9	20	M, P
elta-BHC	0.132 ug/L	0.055	ug/L	0.110	<0.055 ug/L	120	23-134	17.1	20	
Dieldrin	0.088 ug/L	0.055	ug/L	0.110	<0.055 ug/L	80.0	23-134	41.1	20	Р
indosulfan I	0.110 ug/L	0.055	ug/L	0.110	<0.055 ug/L	100	23-134	34.4	20	Р
Endosulfan II	0.286 ug/L	0.055	ug/L	0.110	<0.055 ug/L	260	23-134	88.0	20	M, P
ndosulfan sulfate	0.077 ug/L	0.055	ug/L	0.110	<0.055 ug/L	70.0	23-134	26.1	20	Р
ndrin	0.143 ug/L	0.055	ug/L	0.110	<0.055 ug/L	130	23-134	6.90	20	
ndrin aldehyde	0.110 ug/L	0.055	ug/L	0.110	<0.055 ug/L	100	23-134	19.3	20	
amma-BHC (Lindane)	0.220 ug/L	0.055	ug/L	0.110	<0.055 ug/L	200	23-134	1.10	20	М
leptachlor	0.088 ug/L	0.055	ug/L	0.110	<0.055 ug/L	80.0	23-134	27.5	20	Р
leptachlor epoxide	0.165 ug/L	0.055	ug/L	0.110	<0.055 ug/L	150	23-134	29.7	20	M, P
lethoxychlor	0.495 ug/L	0.055	ug/L	0.110	<0.055 ug/L	450	23-134	15.8	20	М
Mirex	0.066 ug/L	0.055	ug/L	0.110	<0.055 ug/L	60.0	23-134	1.10	20	
Surr: TCMX	0.220		ug/L	0.220	ug/L	100	18-112			
Surr: DCB	0.187		ug/L	0.220	ug/L	85.0	27-131			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BAA0538 - No Prep Wet Chem										
Blank (BAA0538-BLK1)				Prepared	& Analyzed	: 01/25/20	017			
Cyanide	<0.01 mg/L	0.01	mg/L							
LCS (BAA0538-BS1)				Prepared	& Analyzed	: 01/25/20	017			
Cyanide	0.25 mg/L	0.01	mg/L	0.250 r	mg/L	101	80-120			
LCS Dup (BAA0538-BSD1)				Prepared	& Analyzed	: 01/25/20	017			
Cyanide	0.24 mg/L	0.01	mg/L	0.250 r	mg/L	97.0	80-120	3.56	20	
Matrix Spike (BAA0538-MS1)	Sour	ce: 17A0497	'-02	Prepared	& Analyzed	: 01/25/20	017			
Cyanide	0.22 mg/L	0.01	mg/L	0.250 <	0.01 mg/L	87.8	80-120			
Matrix Spike (BAA0538-MS2)	Sour	ce: 17A0497	'-08	Prepared	& Analyzed	: 01/25/20	017			
Cyanide	0.28 mg/L	0.01	mg/L	0.250 0	.04 mg/L	96.3	80-120			
Matrix Spike Dup (BAA0538-MSD1)	Sour	ce: 17A0497	'-02	Prepared	& Analyzed	: 01/25/20	017			
Cyanide	0.22 mg/L	0.01	mg/L	0.250 <	0.01 mg/L	88.9	80-120	1.18	20	
Matrix Spike Dup (BAA0538-MSD2)	Sour	ce: 17A0497	'-08	Prepared	& Analyzed	: 01/25/20	017			
Cyanide	0.27 mg/L	0.01	mg/L	0.250 0	.04 mg/L	92.2	80-120	3.69	20	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Analyte	Certifications
EPA200.7 Rev 4.4 in Non-Potable Water	
Beryllium	VELAP,NC,WVDEP
Cadmium	VELAP,NC,WVDEP
Chromium	VELAP,NC,WVDEP
Copper	VELAP,NC,WVDEP
Lead	VELAP,NC,WVDEP
Nickel	VELAP,NC,WVDEP
Silver	VELAP,NC,WVDEP
Zinc	VELAP,NC,WVDEP
EPA200.8 R5.4 in Non-Potable Water	
Antimony	VELAP
Arsenic	VELAP,WVDEP
Selenium	VELAP,WVDEP
Thallium	VELAP,WVDEP
EPA245.1 R3.0 in Non-Potable Water	
Mercury	VELAP,NC,WVDEP
SW8081B in Non-Potable Water	
4,4'-DDD	NC,VELAP,WVDEP
4,4'-DDE	NC,VELAP,WVDEP
4,4'-DDT	NC,VELAP,WVDEP
Aldrin	NC,VELAP,WVDEP
alpha-BHC	NC,VELAP,WVDEP
beta-BHC	NC,VELAP,WVDEP
Chlordane	NC,VELAP,WVDEP
delta-BHC	NC,VELAP,WVDEP
Dieldrin	NC,VELAP,WVDEP
Endosulfan I	NC,VELAP,WVDEP
Endosulfan II	NC,VELAP,WVDEP
Endosulfan sulfate	NC,VELAP,WVDEP
Endrin	NC,VELAP,WVDEP
Endrin aldehyde	NC,VELAP,WVDEP
gamma-BHC (Lindane)	NC,VELAP,WVDEP
Heptachlor	NC,VELAP,WVDEP
Heptachlor epoxide	NC,VELAP,WVDEP
Methoxychlor	NC,VELAP,WVDEP
Toxaphene	NC,VELAP,WVDEP



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Final Report

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

SW8280B in Non-Potable Water 1,1,1,2-Tetrachicroethane NC, VELAP,WVDEP 1,1,1-Trichtorethane NC, VELAP,WVDEP 1,1,1-Trichtorethane NC, VELAP,WVDEP 1,1,2-Trichtoroethane NC, VELAP,WVDEP 1,1,2-Trichtoroethane NC, VELAP,WVDEP 1,1,2-Trichtoroethane NC, VELAP,WVDEP 1,1-Dichtorethane NC, VELAP,WVDEP NC, VELAP,W	Analyte	Certifications
1,1.1-Trichloroethane NC,VELAP,WDEP 1,1,2.2-Trichloroethane NC,VELAP,WDEP 1,1-Dichloroethane NC,VELAP,WDEP 1,1-Dichloroethane NC,VELAP,WDEP 1,1-Dichloroptiyene NC,VELAP,WDEP 1,2-Trichloroptiyene NC,VELAP,WDEP 1,2.3-Trichlorobenzene NC,VELAP,WDEP 1,2.3-Trichlorobenzene NC,VELAP,WDEP 1,2.4-Trichlorobenzene NC,VELAP,WDEP 1,2.4-Trimethylbenzene NC,VELAP,WDEP 1,2-Dibromo-Schloropropane (BBCP) NC,VELAP,WDEP 1,2-Dibromo-Schloropropane (BBCP) NC,VELAP,WDEP 1,2-Dichlorobenzene NC,VELAP,WDEP 1,2-Dichlorobenzene NC,VELAP,WDEP 1,2-Dichlorobenzene NC,VELAP,WDEP 1,3-Trimethylbenzene NC,VELAP,WDEP 1,3-Dichlorobenzene NC,VELAP,WDEP 1,3-Dichlorobenzene NC,VELAP,WDEP 1,3-Dichlorobenzene NC,VELAP,WDEP 1,4-Dichlorobenzene NC,VELAP,WDEP 1,4-Dichlorobenzene NC,VELAP,WDEP 1,4-Dichlorobenzene NC,VELAP,WDEP 1,4-Dichlorobenzene NC,VELAP,WDEP <td>SW8260B in Non-Potable Water</td> <td></td>	SW8260B in Non-Potable Water	
1,1,2,2-Tetrachloroethane NC,VELAP,WVDEP 1,1,2-Titchloroethane NC,VELAP,WVDEP 1,1-Dichloroethane NC,VELAP,WVDEP 1,1-Dichloropropene NC,VELAP,WVDEP 1,1-Dichloropropene NC,VELAP,WVDEP 1,2-3-Tritchloropropane NC,VELAP,WVDEP 1,2-3-Tritchloropropane NC,VELAP,WVDEP 1,2-4-Trimethylbenzene NC,VELAP,WVDEP 1,2-4-Trimethylbenzene NC,VELAP,WVDEP 1,2-0-Dichloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 2-Dichlorotoluene NC,VELAP,WVDEP	1,1,1,2-Tetrachloroethane	NC, VELAP, WVDEP
1,1-2-Trichloroethane NC,VELAP,WVDEP 1,1-Dichloroethyne NC,VELAP,WVDEP 1,1-Dichloroethyne NC,VELAP,WVDEP 1,2-3-Trichloropropene NC,VELAP,WVDEP 1,2-3-Trichloropenzene NC,VELAP,WVDEP 1,2-4-Trichloropenzene NC,VELAP,WVDEP 1,2-4-Trichloropopane (DBCP) NC,VELAP,WVDEP 1,2-4-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromo-dane (EDB) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2,4-Dichloropropane NC,VELAP,WVDEP 2,4-Dichloropropane NC,VELAP,WVDEP 4-Bothorootluene NC,VELAP,WVDEP 2-Hexanone (MBK) NC,VELAP,WVDEP <td>1,1,1-Trichloroethane</td> <td>NC,VELAP,WVDEP</td>	1,1,1-Trichloroethane	NC,VELAP,WVDEP
1,1-Dichloroethylene NC,VELAP,WVDEP 1,1-Dichloropropree NC,VELAP,WVDEP 1,2,3-Trichloropropane NC,VELAP,WVDEP 1,2,3-Trichloropropane NC,VELAP,WVDEP 1,2,3-Trichlorobenzene NC,VELAP,WVDEP 1,2,4-Trichlorobenzene NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 4-Eutanone (MEK) NC,VELAP,WVDEP 2-Chlorotoluene NC,VELAP,WVDEP 4-Hospropyllouene NC,VELAP,WVDEP 4-Hospropyllouene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Bromodichloromethane NC,VEL	1,1,2,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1-Dichloroethylene NC,VELAP,WVDEP 1,1-Dichloropropene NC,VELAP,WVDEP 1,2,3-Trichlorobenzene NC,VELAP,WVDEP 1,2,3-Trichloropropane NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromo-dethane (EDB) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-5-Trimethylbenzene NC,WDEP 1,3-Dichlorobenzene NC,WDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 2-Butanone (MEK) NC,VELAP,WVDEP 2-Butanone (MEK) NC,VELAP,WVDEP 2-Hexanone (MBK) NC,VELAP,WVDEP 4-Hexanone (MBK) NC,VELAP,WVDEP 4-Hohrofoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP <	1,1,2-Trichloroethane	NC,VELAP,WVDEP
1,1-Dichloropropene NC,VELAP,WVDEP 1,2,3-Trichlorobenzene NC,VELAP,WVDEP 1,2,3-Trichloropropane NC,VELAP,WVDEP 1,2,4-Trichlorobenzene NC,VELAP,WVDEP 1,2,4-Trichloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2,4-Dichloropropane NC,VELAP,WVDEP 4-Houthyl-2-pertanone (MEK) NC,VELAP,WVDEP 4-Hoxanone (MBK) NC,VELAP,WVDEP Acetone NC,VELAP,WVDEP	1,1-Dichloroethane	NC,VELAP,WVDEP
1,2,3-Trichlorobenzene NC,VELAP,WVDEP 1,2,3-Trichloropropane NC,VELAP,WVDEP 1,2,4-Trichlorobenzene NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dichloroperpane (DBCP) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2-Putanone (MEK) NC,VELAP,WVDEP 2-Putanone (MEK) NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Kontorotoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MBK) NC,VELAP,WVDEP Acetone NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform	1,1-Dichloroethylene	NC,VELAP,WVDEP
1,2,3-Trichloropropane 1,2,4-Trichlorobenzene NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromoethane (EDB) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP	1,1-Dichloropropene	NC,VELAP,WVDEP
1,2,4-Trinchlorobenzene NC,VELAP,WVDEP 1,2-L-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloroptane NC,VELAP,WVDEP 1,2-Dichloroptopane NC,VELAP,WVDEP 1,3-Frimethylbenzene NC,VELAP,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2-Butanone (MEK) NC,VELAP,WVDEP 2-Chiorotoluene NC,VELAP,WVDEP 2-Hexanone (MBK) NC,VELAP,WVDEP 4-Kolprotoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobelorzene NC,VELAP,WVDEP Bromobeloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP	1,2,3-Trichlorobenzene	NC,VELAP,WVDEP
1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromoethane (EDB) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,2-Dichloropropane NC,WELAP,WVDEP 1,3-5-Trimethylbenzene NC,WELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2-Butanone (MEK) NC,VELAP,WVDEP 2-Chlorotoluene NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MBK) NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromoehrzene NC,VELAP,WVDEP Bromoehrzene NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Carbon di	1,2,3-Trichloropropane	NC,VELAP,WVDEP
1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloropethane 1,2-Dichloropethane 1,2-Dichloropethane 1,2-Dichloropethane 1,2-Dichloropethane 1,3-5-Trimethylbenzene 1,3-5-Trimethylbenzene 1,3-5-Trimethylbenzene 1,3-Dichloropenzene 1,4-Dichlorobenzene 1,5-Dichloropenzene 1,5-Dichloropenzene 1,6-Dichloropenzene 1,6-Dichloropenzen	1,2,4-Trichlorobenzene	NC,VELAP,WVDEP
1,2-Dibromoethane (EDB) NC,VELAP,WVDEP 1,2-Dichloroebrane NC,VELAP,WVDEP 1,2-Dichloropthane NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-5-Trimethylbenzene NC,WDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2-Butanone (MEK) NC,VELAP,WVDEP 2-Hexanone (MBK) NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Isopropyltoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Acetone NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VE	1,2,4-Trimethylbenzene	NC,VELAP,WVDEP
1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloroethane NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3,5-Trimethylbenzene NC,WELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2-Butanone (MEK) NC,VELAP,WVDEP 2-Chlorotoluene NC,VELAP,WVDEP 2-Hexanone (MBK) NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Isopropyltoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Acetone NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Carbon disulfide NC,VEL	1,2-Dibromo-3-chloropropane (DBCP)	NC,VELAP,WVDEP
1,2-Dichloroethane 1,2-Dichloropropane 1,2-Dichloropropane 1,3-S-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichlorobenzene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,4-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichloropenzene 1,4-Dichloropropane 1,4-Dichloropropane 1,4-Dichloropropane 1,2-Dichloropropane 1,4-Dichloropropane 1,4-Dichloropropane 1,4-Dichlorobenzene 1,5-Dichloropropane 1,5-	1,2-Dibromoethane (EDB)	NC,VELAP,WVDEP
1,2-Dichloropropane NC,VELAP,WVDEP 1,3,5-Trimethylbenzene NC,WDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2-Butanone (MEK) NC,VELAP,WVDEP 2-Chlorotoluene NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Isopropyltoluene NC,VELAP,WVDEP 4-Isopropyltoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Acetone NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Carbon disulfide NC,VELAP,WVDEP	1,2-Dichlorobenzene	NC,VELAP,WVDEP
1,3,5-Trimethylbenzene NC,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2-Butanone (MEK) NC,VELAP,WVDEP 2-Horotoluene NC,VELAP,WVDEP 2-Hexanone (MBK) NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Isopropyltoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Acetone NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Carbon disulfide NC,VELAP,WVDEP	1,2-Dichloroethane	NC,VELAP,WVDEP
1,3-Dichlorobenzene NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP 2-Butanone (MEK) NC,VELAP,WVDEP 2-Chlorotoluene NC,VELAP,WVDEP 2-Hexanone (MBK) NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Isopropyltoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Acetone NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Carbon disulfide NC,VELAP,WVDEP	1,2-Dichloropropane	NC,VELAP,WVDEP
1,3-Dichloropropane 1,4-Dichlorobenzene 1,4-Dichlorobenzene 2,2-Dichloropropane 2,2-Dichloropropane NC,VELAP,WVDEP 2-Butanone (MEK) NC,VELAP,WVDEP 2-Chlorotoluene NC,VELAP,WVDEP 2-Hexanone (MBK) NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Isopropyltoluene NC,VELAP,WVDEP 4-Isopropyltoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Acetone Renzene NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP	1,3,5-Trimethylbenzene	NC,WVDEP
1,4-DichlorobenzeneNC,VELAP,WVDEP2,2-DichloropropaneNC,VELAP,WVDEP2-Butanone (MEK)NC,VELAP,WVDEP2-ChlorotolueneNC,VELAP,WVDEP2-Hexanone (MBK)NC,VELAP,WVDEP4-ChlorotolueneNC,VELAP,WVDEP4-IsopropyltolueneNC,VELAP,WVDEP4-Methyl-2-pentanone (MIBK)NC,VELAP,WVDEPAcetoneNC,VELAP,WVDEPBenzeneNC,VELAP,WVDEPBromobenzeneNC,VELAP,WVDEPBromochloromethaneNC,VELAP,WVDEPBromodichloromethaneNC,VELAP,WVDEPBromoformNC,VELAP,WVDEPBromomethaneNC,VELAP,WVDEPBromomethaneNC,VELAP,WVDEPBromomethaneNC,VELAP,WVDEPCarbon disulfideNC,VELAP,WVDEP	1,3-Dichlorobenzene	NC,VELAP,WVDEP
2,2-Dichloropropane 2-Butanone (MEK) NC,VELAP,WVDEP 2-Chlorotoluene NC,VELAP,WVDEP 2-Hexanone (MBK) NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Isopropyltoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Acetone NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP	1,3-Dichloropropane	NC,VELAP,WVDEP
2-Butanone (MEK) 2-Chlorotoluene 2-Chlorotoluene NC,VELAP,WVDEP 2-Hexanone (MBK) NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Isopropyltoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Acetone NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Rromomethane NC,VELAP,WVDEP	1,4-Dichlorobenzene	NC,VELAP,WVDEP
2-Chlorotoluene NC,VELAP,WVDEP 2-Hexanone (MBK) NC,VELAP,WVDEP 4-Chlorotoluene NC,VELAP,WVDEP 4-Isopropyltoluene NC,VELAP,WVDEP 4-Methyl-2-pentanone (MIBK) NC,VELAP,WVDEP Acetone NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP	2,2-Dichloropropane	NC,VELAP,WVDEP
2-Hexanone (MBK) 4-Chlorotoluene 4-Isopropyltoluene 4-Isopropyltoluene 4-Methyl-2-pentanone (MIBK) Acetone Benzene Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromoform Bromomethane Bromomethane	2-Butanone (MEK)	NC,VELAP,WVDEP
4-Chlorotoluene 4-Isopropyltoluene 4-Methyl-2-pentanone (MIBK) Acetone Benzene NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Rromoform NC,VELAP,WVDEP Rromoform NC,VELAP,WVDEP Rromoform NC,VELAP,WVDEP Rromoform NC,VELAP,WVDEP Rromomethane NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP	2-Chlorotoluene	NC,VELAP,WVDEP
4-Isopropyltoluene 4-Methyl-2-pentanone (MIBK) Acetone Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Rromoform NC,VELAP,WVDEP Rromomethane NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP	2-Hexanone (MBK)	NC,VELAP,WVDEP
4-Methyl-2-pentanone (MIBK) Acetone NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Rromomethane NC,VELAP,WVDEP Rromomethane NC,VELAP,WVDEP NC,VELAP,WVDEP	4-Chlorotoluene	NC,VELAP,WVDEP
Acetone NC,VELAP,WVDEP Benzene NC,VELAP,WVDEP Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Carbon disulfide NC,VELAP,WVDEP	4-Isopropyltoluene	NC,VELAP,WVDEP
BenzeneNC,VELAP,WVDEPBromobenzeneNC,VELAP,WVDEPBromochloromethaneNC,VELAP,WVDEPBromodichloromethaneNC,VELAP,WVDEPBromoformNC,VELAP,WVDEPBromomethaneNC,VELAP,WVDEPCarbon disulfideNC,VELAP,WVDEP	4-Methyl-2-pentanone (MIBK)	NC,VELAP,WVDEP
Bromobenzene NC,VELAP,WVDEP Bromochloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Carbon disulfide NC,VELAP,WVDEP	Acetone	NC,VELAP,WVDEP
Bromochloromethane Bromodichloromethane NC,VELAP,WVDEP NC,VELAP,WVDEP Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP	Benzene	NC,VELAP,WVDEP
Bromodichloromethane Bromoform NC,VELAP,WVDEP NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP	Bromobenzene	NC,VELAP,WVDEP
BromoformNC,VELAP,WVDEPBromomethaneNC,VELAP,WVDEPCarbon disulfideNC,VELAP,WVDEP	Bromochloromethane	NC,VELAP,WVDEP
Bromomethane NC,VELAP,WVDEP Carbon disulfide NC,VELAP,WVDEP	Bromodichloromethane	NC,VELAP,WVDEP
Carbon disulfide NC,VELAP,WVDEP	Bromoform	NC,VELAP,WVDEP
	Bromomethane	NC,VELAP,WVDEP
Carbon tetrachloride NC,VELAP,WVDEP	Carbon disulfide	NC,VELAP,WVDEP
	Carbon tetrachloride	NC,VELAP,WVDEP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Analyte	Certifications	
Chlorobenzene	NC,VELAP,WVDEP	
Chloroethane	NC,VELAP,WVDEP	
Chloroform	NC,VELAP,WVDEP	
Chloromethane	NC,VELAP,WVDEP	
cis-1,2-Dichloroethylene	NC,VELAP,WVDEP	
cis-1,3-Dichloropropene	NC,VELAP,WVDEP	
Dibromochloromethane	NC,VELAP,WVDEP	
Dibromomethane	NC,VELAP,WVDEP	
Dichlorodifluoromethane	NC,VELAP,WVDEP	
Di-isopropyl ether (DIPE)	NC,VELAP,WVDEP	
Ethylbenzene	NC,VELAP,WVDEP	
Hexachlorobutadiene	NC,VELAP,WVDEP	
lodomethane	NC,VELAP,WVDEP	
Isopropylbenzene	NC,VELAP,WVDEP	
m+p-Xylenes	NC,VELAP,WVDEP	
Methylene chloride	NC,VELAP,WVDEP	
Methyl-t-butyl ether (MTBE)	NC,VELAP,WVDEP	
Naphthalene	NC,VELAP,WVDEP	
n-Butylbenzene	NC,VELAP,WVDEP	
n-Propylbenzene	NC,VELAP,WVDEP	
o-Xylene	NC,VELAP,WVDEP	
sec-Butylbenzene	NC,VELAP,WVDEP	
Styrene	NC,VELAP,WVDEP	
tert-Butylbenzene	NC,VELAP,WVDEP	
Tetrachloroethylene (PCE)	NC,VELAP,WVDEP	
Toluene	NC,VELAP,WVDEP	
trans-1,2-Dichloroethylene	NC,VELAP,WVDEP	
trans-1,3-Dichloropropene	NC,VELAP,WVDEP	
Trichloroethylene	NC,VELAP,WVDEP	
Trichlorofluoromethane	NC,VELAP,WVDEP	
Vinyl acetate	NC,VELAP,WVDEP	
Vinyl chloride	NC,VELAP,WVDEP	
Xylenes, Total	NC,VELAP,WVDEP	
SW8270D in Non-Potable Water		
1,2,4,5-Tetrachlorobenzene	VELAP,WVDEP,NC	
1,2,4-Trichlorobenzene	VELAP,WVDEP,NC	
1,2-Dichlorobenzene	VELAP,WVDEP,NC	



Certificate of Analysis

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Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Analyte	Certifications	
1,2-Diphenylhydrazine	VELAP,WVDEP,NC	
1,3-Dichlorobenzene	VELAP,WVDEP,NC	
1,3-Dinitrobenzene	VELAP,WVDEP,NC	
1,4-Dichlorobenzene	VELAP,WVDEP,NC	
1-Naphthylamine	VELAP,WVDEP,NC	
2,3,4,6-Tetrachlorophenol	VELAP,WVDEP,NC	
2,4,5-Trichlorophenol	VELAP,WVDEP,NC	
2,4,6-Trichlorophenol	VELAP,WVDEP,NC	
2,4-Dichlorophenol	VELAP,WVDEP,NC	
2,4-Dimethylphenol	VELAP,WVDEP,NC	
2,4-Dinitrophenol	VELAP,WVDEP,NC	
2,4-Dinitrotoluene	VELAP,WVDEP,NC	
2,6-Dichlorophenol	VELAP,WVDEP,NC	
2,6-Dinitrotoluene	VELAP,WVDEP,NC	
2-Chloronaphthalene	VELAP,WVDEP,NC	
2-Chlorophenol	VELAP,WVDEP,NC	
2-Methylnaphthalene	VELAP,WVDEP,NC	
2-Naphthylamine	VELAP,WVDEP,NC	
2-Nitroaniline	VELAP,WVDEP,NC	
2-Nitrophenol	VELAP,WVDEP,NC	
3,3'-Dichlorobenzidine	VELAP,WVDEP,NC	
3-Methylcholanthrene	VELAP,WVDEP,NC	
3-Nitroaniline	VELAP,WVDEP,NC	
4,6-Dinitro-2-methylphenol	VELAP,WVDEP,NC	
4-Aminobiphenyl	VELAP,WVDEP,NC	
4-Bromophenyl phenyl ether	VELAP,WVDEP,NC	
4-Chloroaniline	VELAP,WVDEP,NC	
4-Chlorophenyl phenyl ether	VELAP,WVDEP,NC	
4-Nitroaniline	VELAP,WVDEP,NC	
4-Nitrophenol	VELAP,WVDEP,NC	
7,12-Dimethylbenz (a) anthracene	VELAP,WVDEP,NC	
Acenaphthene	VELAP,WVDEP,NC	
Acenaphthylene	VELAP,WVDEP,NC	
Acetophenone	VELAP,WVDEP,NC	
Aniline	VELAP,WVDEP,NC	
Anthracene	VELAP,WVDEP,NC	
Benzidine	VELAP,WVDEP,NC	
Benzo (a) anthracene	VELAP,WVDEP,NC	



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Client Name: Timmons Group

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Benzo (a) pyrene	Analyte	Certifications	
Benzo (g,h.i) paylene VELAPWODENC Benzo (k) fluoranthene VELAPWODENC Benzy (k) fluoranthene VELAPWODENC Benzy (alcohol VELAPWODENC bis (2-Chloroethy) methane VELAPWODENC bis (2-Chlorosty) methane VELAPWODENC bis (2-Chlorosty) pethane VELAPWODENC bis (2-Chlorosty) phthalate VELAPWODENC bis (2-Ethylbaxy) phthalate VELAPWODENC Butyl benzy phthalate VELAPWODENC Chysene VELAPWODENC Dibenz (a,h) anthracene VELAPWODENC	Benzo (a) pyrene	VELAP,WVDEP,NC	
Benzo (k) fluoranthene VELAPWODENC Benzoi acid VELAPWODENC Benzyi alcohol VELAPWODENC bis (2-Chloroethoxy) methane VELAPWODENC bis (2-Chloroethoxy) ether VELAPWODENC bis (2-Chloroethoxy) phrhalate VELAPWODENC bis (2-Ethylhexyl) phrhalate VELAPWODENC bis (2-Ethylhexyl) phrhalate VELAPWODENC Chrysene VELAPWODENC Chrysene VELAPWODENC Dibenz (a, h) anthracene VELAPWODENC Dibenz (a, b) acidine VELAPWODENC Dibenz (a, b) ardine VELAPWODENC Dibenz (a) phrhalate VELAPWODENC Dibenzofuran VELAPWODENC Di-n-bulyl phrhalate VELAPWODENC Hewachloroothadene VELAPWODENC Hewachloroothadene VELAPWODENC Hewachloroothadene VELAPWODENC </td <td>Benzo (b) fluoranthene</td> <td>VELAP,WVDEP,NC</td> <td></td>	Benzo (b) fluoranthene	VELAP,WVDEP,NC	
Benzola aiold VELAP,WVDEP,NC Benzyl alochol VELAP,WVDEP,NC bis (2-Chloroethoxy) methane VELAP,WVDEP,NC bis (2-Chloroisopropyl) ether VELAP,WVDEP,NC bis (2-Chloroisopropyl) ether VELAP,WVDEP,NC Bis (2-Eth)Heavyl) phthalate VELAP,WVDEP,NC Bulyl benzyl phthalate VELAP,WVDEP,NC Chrysene VELAP,WVDEP,NC Dibenz (a,j) acridine VELAP,WVDEP,NC Dibenz (a,j) acridine VELAP,WVDEP,NC Dibenz (a,j) athinate VELAP,WVDEP,NC Diberby phthalate VELAP,WVDEP,NC Di-n-buly phthalate VELAP,WVDEP,NC Huoranthene VELAP,WVDEP,NC Huoranthene VELAP,WVDEP,NC Huoranthene VELAP,WVDEP,NC Hexachlorocytopentadiene VELAP,WVDEP,NC Hexachlorocytopentadiene VELAP,WVDEP,NC	Benzo (g,h,i) perylene	VELAP,WVDEP,NC	
Benzyl alcohol YELAPWYDEPNC bis (2-Chloroethyl) ether YELAPWYDEPNC bis (2-Chlorospropyl) ether YELAPWYDEPNC bis (2-Chloroisopropyl) ether YELAPWYDEPNC bis (2-Ethylhexyl) phthalate YELAPWYDEPNC Buyl benzyl phthalate YELAPWYDEPNC Chrysene YELAPWYDEPNC Dibenz (a,h) anthracene YELAPWYDEPNC Dibenz (a,j.) acridine YELAPWYDEPNC Directly phthalate YELAPWYDEPNC Directly phthalate YELAPWYDEPNC Directly phthalate YELAPWYDEPNC Elturene YELAPWYDEPNC Hevaschioroberzene YELAPWYDEPNC Hevaschioroberzene YELAPWYDEPNC Inden (1,2,3-cd) pyrene YELAPWYDEPNC Inden (1,2	Benzo (k) fluoranthene	VELAP,WVDEP,NC	
bis (2-Chloroethoxy) methane VELAP,WVDEP,NC bis (2-Chloroethyl) ether VELAP,WVDEP,NC bis (2-Chloroethyl) ether VELAP,WVDEP,NC bis (2-Ethylhexyl) phthalate VELAP,WVDEP,NC Butyl benzyl phthalate VELAP,WVDEP,NC Chlysene VELAP,WVDEP,NC Dibenz (a,l) anthracene VELAP,WVDEP,NC Dibenz (a,l) acridine VELAP,WVDEP,NC Dibenz (a,l) acridine VELAP,WVDEP,NC Dientyl phthalate VELAP,WVDEP,NC Dientyl phthalate VELAP,WVDEP,NC Din-butyl phthalate VELAP,WVDEP,NC Di-b-butyl phthalate VELAP,WVDEP,NC Di-h-butyl phthalate VELAP,WVDEP,NC Di-h-butyl phthalate VELAP,WVDEP,NC Di-h-butyl phthalate VELAP,WVDEP,NC Piloranthene VELAP,WVDEP,NC Fluoranthene VELAP,WVDEP,NC Fluoranthene VELAP,WVDEP,NC Hexachloroevladiene VELAP,WVDEP,NC Hexachloroevloepentadiene VELAP,WVDEP,NC Hexachloroevloepentadiene VELAP,WVDEP,NC Indeno (1,2,3-cd) pyrene VELAP,WVDEP,NC	Benzoic acid	VELAP,WVDEP,NC	
bis (2-Chlorostryl) ether VELAP,WVDEP,NC bis (2-Ethylnexyl) pithalate VELAP,WVDEP,NC Butyl benzyl pithalate VELAP,WVDEP,NC Chrysene VELAP,WVDEP,NC Dibenz (a,h) anthracene VELAP,WVDEP,NC Dibenz (a,h) actidine VELAP,WVDEP,NC Dibenz (a,j) actidine VELAP,WVDEP,NC Dibenz (a)j actidine VELAP,WVDEP,NC Dibenz (b)j actidine VELAP,WVDEP,NC Dibethyl pithalate VELAP,WVDEP,NC Dibethyl pithalate VELAP,WVDEP,NC Di-n-butyl pithalate VELAP,WVDEP,NC Di-n-butyl pithalate VELAP,WVDEP,NC Di-n-butyl pithalate VELAP,WVDEP,NC Elthyl methanesulfonate VELAP,WVDEP,NC Elthyl methanesulfonate VELAP,WVDEP,NC Elthyl methanesulfonate VELAP,WVDEP,NC Hexachlorobutadiene VELAP,WVDEP,NC Hexachlorobutadiene VELAP,WVDEP,NC Hexachlorobutadiene VELAP,WVDEP,NC Hexachlorobethane VELAP,WVDEP,NC Inden O, 12,3-cd) pyrene VELAP,WVDEP,NC Inden O, 12,3-cd) pyrene VELAP,WVDEP,	Benzyl alcohol	VELAP,WVDEP,NC	
bis (2-Chloroisopropyl) ether VELAP,WDEP,NC bis (2-Ethylhexyl) phthalate VELAP,WDEP,NC Chrysene VELAP,WDEP,NC Dibenz (a,h) anthracene VELAP,WDEP,NC Dibenz (a,j) arcifine VELAP,WDEP,NC Dibenz (a,j) arcifine VELAP,WDEP,NC Diethyl phthalate VELAP,WDEP,NC Diethyl phthalate VELAP,WDEP,NC Direthyl phthalate VELAP,WDEP,NC Direnbutyl phthalate VELAP,WDEP,NC Ethyl methanesulfonate VELAP,WDEP,NC Ethyl methanesulfonate VELAP,WDEP,NC Hexachlorobenzene VELAP,WDEP,NC Hexachlorocyclopentadiene VELAP,WDEP,NC Hexachlorocyclopentadiene VELAP,WDEP,NC Hexachlorocyclopentadiene VELAP,WDEP,NC Hexachlorocyclopentadiene VELAP,WDEP,NC Hexachlorocyclopentadiene VELAP,WDEP,NC	bis (2-Chloroethoxy) methane	VELAP,WVDEP,NC	
bis (2-Eirlylhexyl) prithalate VELAP,WVDEP,NC Butyl benzyl prithalate VELAP,WVDEP,NC Chrysene VELAP,WVDEP,NC Dibenz (a,l) anthracene VELAP,WVDEP,NC Dibenzofuran VELAP,WVDEP,NC Dibenzofuran VELAP,WVDEP,NC Dierbyl phthalate VELAP,WVDEP,NC Direbtyl phthalate VELAP,WVDEP,NC Dir-botyl phthalate VELAP,WVDEP,NC Dir-botyl phthalate VELAP,WVDEP,NC Dir-botyl phthalate VELAP,WVDEP,NC Diphonylamine VELAP,WVDEP,NC Eltry methanesulfonate VELAP,WVDEP,NC Fluoranthene VELAP,WVDEP,NC Fluoranthene VELAP,WVDEP,NC Hexachlorobutadiene VELAP,WVDEP,NC Hexachlorocyclopentadiene VELAP,WVDEP,NC	bis (2-Chloroethyl) ether	VELAP,WVDEP,NC	
Butyl benzyl prithalate VELAP,WVDEP,NC Chrysene VELAP,WVDEP,NC Dibenz (a, h) anthracene VELAP,WVDEP,NC Dibenz (a, d) acridine VELAP,WVDEP,NC Dibenzafuran VELAP,WVDEP,NC Dibentyl prithalate VELAP,WVDEP,NC Direntyl prithalate VELAP,WVDEP,NC Diren-butyl prithalate VELAP,WVDEP,NC Direntyl prithalate VELAP,WVDEP,NC Direntyl prithalate VELAP,WVDEP,NC Direntyl prithalate VELAP,WVDEP,NC Direntyl prithalate VELAP,WVDEP,NC Fluoranthene VELAP,WVDEP,NC Fluoranthene VELAP,WVDEP,NC Fluoranthene VELAP,WVDEP,NC Hexachlorobutadiene VELAP,WVDEP,NC Hexachlorobutadiene VELAP,WVDEP,NC Hexachlorocyclopentadiene VELAP,WVDEP,NC Hexachlorocyclopentadiene VELAP,WVDEP,NC Indeno (1,2,3-cd) pyrene VELAP,WVDEP,NC Isophorone VELAP,WVDEP,NC Metryl methanesulfonate VELAP,WVDEP,NC Mitrobenzene VELAP,WVDEP,NC Nitrosodimethylami	bis (2-Chloroisopropyl) ether	VELAP,WVDEP,NC	
Chrysene VELAP,WVDEP,NC Dibenz (a,h) anthracene VELAP,WVDEP,NC Dibenz (a,j) acridine VELAP,WVDEP,NC Dibenzofuran VELAP,WVDEP,NC Diethyl phthalate VELAP,WVDEP,NC Dimethyl phthalate VELAP,WVDEP,NC Di-n-bulyl phthalate VELAP,WVDEP,NC Di-n-bulyl phthalate VELAP,WVDEP,NC Di-n-bulyl phthalate VELAP,WVDEP,NC Diphenylamine VELAP,WVDEP,NC Ethyl methanesulfonate VELAP,WVDEP,NC Fluoranthene VELAP,WVDEP,NC Hexachlorobenzene VELAP,WVDEP,NC Hexachlorobenzene VELAP,WVDEP,NC Hexachlorocyclopentadiene VELAP,WVDEP,NC Hexachlorocyclopentadiene VELAP,WVDEP,NC Indeno (1,2,3-cd) pyrene VELAP,WVDEP,NC Isophorone VELAP,WVDEP,NC Methyl methanesulfonate VELAP,WVDEP,NC Methyl methanesulfonate VELAP,WVDEP,NC Nitrobenzene VELAP,WVDEP,NC Nitrosodin-bulylamine VELAP,WVDEP,NC n-Nitrosodin-brulylamine VELAP,WVDEP,NC n-Nitroso	bis (2-Ethylhexyl) phthalate	VELAP,WVDEP,NC	
Dibenz (a,l) anthracene VELAP,WVDEP,NC Dibenzofuran VELAP,WVDEP,NC Dibenzofuran VELAP,WVDEP,NC Diethyl phthalate VELAP,WVDEP,NC Dimethyl phthalate VELAP,WVDEP,NC Di-n-butyl phthalate VELAP,WVDEP,NC Di-n-octyl phthalate VELAP,WVDEP,NC Di-n-butyl phthalate VELAP,WVDEP,NC Ethyl methanesulfonate VELAP,WVDEP,NC Ethyl methanesulfonate VELAP,WVDEP,NC Fluoranthene VELAP,WVDEP,NC Hexachlorobenzene VELAP,WVDEP,NC Hexachlorocyclopentadiene VELAP,WVDEP,NC Hexachlorocyclopentadiene VELAP,WVDEP,NC Indeno (1,2,3-cd) pyrene VELAP,WVDEP,NC Isophorone VELAP,WVDEP,NC Methyl methanesulfonate VELAP,WVDEP,NC Methyl methanesulfonate VELAP,WVDEP,NC Naphthalene VELAP,WVDEP,NC Nitrosodin-p-tuylamine VELAP,WVDEP,NC n-Nitrosodin-p-tuylamine VELAP,WVDEP,NC n-Nitrosodin-p-tuylamine VELAP,WVDEP,NC n-Nitrosodiphenylamine VELAP,WVDEP,NC	Butyl benzyl phthalate	VELAP,WVDEP,NC	
Dibenz (a,j) acridine VELAP,WVDEP,NC Dibenzofuran VELAP,WVDEP,NC Diethyl phthalate VELAP,WVDEP,NC Dimethyl phthalate VELAP,WVDEP,NC Di-n-butyl phthalate VELAP,WVDEP,NC Di-n-octyl phthalate VELAP,WVDEP,NC Diphenylamine VELAP,WVDEP,NC Ethyl methanesulfonate VELAP,WVDEP,NC Fluoranthene VELAP,WVDEP,NC Fluorane VELAP,WVDEP,NC Hexachlorobutadiene VELAP,WVDEP,NC Hexachlorobutadiene VELAP,WVDEP,NC Hexachlorocyclopentadiene VELAP,WVDEP,NC Hexachlorocyclopentadiene VELAP,WVDEP,NC Indeno (1,2,3-cd) pyrene VELAP,WVDEP,NC Indeno (1,2,3-cd) pyrene VELAP,WVDEP,NC Methyl methanesulfonate VELAP,WVDEP,NC Methyl methanesulfonate VELAP,WVDEP,NC Naphthalene VELAP,WVDEP,NC N-Nitrosodim-thylamine VELAP,WVDEP,NC n-Nitrosodin-propylamine VELAP,WVDEP,NC n-Nitrosodiphenylamine VELAP,WVDEP,NC n-Nitrosodiphenylamine VELAP,WVDEP,NC	Chrysene	VELAP,WVDEP,NC	
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	n-Nitrosodi-n-propylamine	VELAP,WVDEP,NC	
n-Nitrosopiperidine VELAP,WVDEP,NC	n-Nitrosodiphenylamine	VELAP,WVDEP,NC	
	n-Nitrosopiperidine	VELAP,WVDEP,NC	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number:

Client Site I.D.: Fulton Gas Purchase Order:

Certified Analyses included in this Report

Analyte	Certifications	
o+m+p-Cresols	WVDEP,NC	
o-Cresol	VELAP,WVDEP,NC	
p-(Dimethylamino) azobenzene	VELAP,WVDEP,NC	
p-Chloro-m-cresol	VELAP,WVDEP,NC	
Pentachloronitrobenzene (quintozene)	VELAP,WVDEP,NC	
Pentachlorophenol	VELAP,WVDEP,NC	
Phenacetin	VELAP,WVDEP,NC	
Phenanthrene	VELAP,WVDEP,NC	
Phenol	VELAP,WVDEP,NC	
Pronamide	VELAP,WVDEP,NC	
Pyrene	VELAP,WVDEP,NC	
Pyridine	VELAP,WVDEP,NC	

SW9012 in Non-Potable Water

Cyanide VELAP

Code	Description	Lab Number	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2017
NC	North Carolina DENR	495	12/31/2017
PADEP	NELAC-Pennsylvania	001	10/31/2017
VELAP	NELAC-Virginia Certificate #8886	460021	06/15/2017
WVDEP	West Virginia DEP	350	11/30/2017



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25/2017 17:23

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Summary of Data Qualifiers

B Blank contamination. The recorded result is associated with a contaminated blank.

CI Residual Chlorine or other oxidizing agent was detected in the container used to analyze this sample.

DND Not Detected

DS Surrogate concentration reflects a dilution factor.

E Estimated concentration, outside calibration range

LCS recovery is outside of established acceptance limits

M Matrix spike recovery is outside established acceptance limits

P Duplicate analysis does not meet the acceptance criteria for precision

S Surrogate recovery was outside acceptance criteria

RPD Relative Percent Difference

Qual Qualifers

-RE Denotes sample was re-analyzed

D.F. Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.

Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library.

A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated

and are calculated using an internal standard response factor of 1.

1941 REYMET ROAD RICHMOND, VIRGINIA 23237 (804) 358-8295 PHONE (804)358-8297 FAX

Chain of Custody Form #: D1331 Rev. 1.0 Effective: Feb 14, 2014

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1941 REYMET ROAD RICHMOND, VIRGINIA 23237 (804) 358-8295 PHONE (804)358-8297 FAX

Effective: Feb 14, 2014 Rev. 1.0 Chain of Custody Form #: D1331

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PAGE

PLEASE NOTE PRESERVATIVE(S), INTERFERENCE CHECKS or PUMP C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol Preservative Codes: N=Nitric Acid Day(s) COMMENTS xls. RATE (L/min) Recd: 01/18/2017 Due: 01/25/2017 V130325002 COOLER TEMP O. 17A0484 Turn Around Time: FWITT 50156 PWS I.D. Fulton Gasworks PROJECT NAME/Quote #: ANALYSIS / (PRESERVATIVE) Pretreatment Program PROJECT NUMBER: LAB USE ONLY SITE NAME P.O. #: ON. QC Data Package YES Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organic A=Air WP=Wipe OT=Other Level III Level IV Is sample from a chlorinated supply? CHAIN OF CUSTODY evell Level t mmm t Number of Containers 16:30 Matrix (See Codes) THENNE DATE / TIME DATE / TIME SAMPLER SIGNATURE: Time Preserved 1 Ampus 11/2 INVOICE ADDRESS: INVOICE CONTACT INVOICE PHONE #: 5.10 Composite Stop Time Grab Time or INVOICE TO: Composite Stop Date Grab Date or Composite Start Time RECEIVED AMON S EMAIL: Composite Start Date YES (NO andly DATE / TIME TIME DATE / TIME LABORATORIES, INC. Field Filtered (Dissolved Metals) Composite DATE < Dmn 25 my Crab s sample for compliance reporting? COMPANY NAME: TIMMON! 906 (30 V SAMPLER NAME (PRINT): CLIENT SAMPLE I.D. S W 20 SAIL TO INQUISHED NOUISHED INQUISHE CONTACT ADDRESS: PHONE #: こことと FAX#: 6 4 2 6 7 8 5 Page 144 of 148

Order ID_

Sample Preservation Log

Sample Preservation Log Form #; F1301 Rev # 6.0 Effective: Aug 31, 2016 Page 1 of 1

Date Performed: 0:/18/17

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		et ID	Metals			.0		Sulfide	a	Ammonia	_	55	TKN	P.	Phos, Tot		NO3+NO2	2	DRO		Pesticide (8081/608)	cide (608)	(8)	SVOC (8270/625)	(1					
	Sample ID	Contain	PH as Received < 2 Other	Final pH (ft adjust.)	PH as Received		Final pH (H adjust.) v	PH as Received	Final pH (H adjust.)	pH as Received < 2 Other	Hq Isni7 (H adjust.)	pH as Received < 2 Other	Hq leniT (H adjust.)	(H adjust.)		Final pH (If adjust.)	PH as Received	Final pH (If adjust.)	PH as Received	Hq lani PH (ft adjust.)	Res.Clas Received Present Absent	Res.CI	Res.Clas Received Present Absent		I <u>O.298</u> II) AI9 (Jeujbs)	pH as Received Other	Final pH (If adjust.)	pH as Received Other		Final pH (If adjust.)
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Order ID_

Sample Preservation Log

Sample Preservation Log Form #: F1301 Rev # 6.0 Effective: Aug 31, 2016 Page 1 of 1

Date Performed: 01/18/11

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		Ol 190			.91		õ		[TKN		Phos, Tot	Tot	NO3+NO2	102	DRO	0	Pest (808	Pesticide (8081/608)	2	SVOC (8270/625)	(5)				
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Order ID_

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Sample Preservation Log

Sample Preservation Log Form #: F1301 Rev # 6.0 Effective: Aug 31, 2016 Page 1 of 1

Date Performed:

P/A = Present/Absent

Hq Isni3 pH as Received Hq lsni It adjust. pH as Received Analyst Initials: Present Absent (If adjust.) (8270/625)SVOC Res.Clas Received Rescription of the second of t Pesticide (8081/608) Analyst Performing Check: BR Res.Clas Received Final pH (H adjust.) DRO pH as Received < 2 Other CrVI preserved date/time:_ NO3+NO2 pH as Received <2 Other <2 Final pH Stanjbs H) Phos, Tot pH as Received < 2 Other Final pH (ft adjust.) X pH as Received < 2 Other Final pH (H adjust.) Ammonia pH as Received < 2 Other Received Other (If adjust.) HNO₃ ID: Sulfide Hq Isni7 (ff adjust. Cyanide pH as Received > 12 Other PH as Received PH adjust 2 Other Line adjust 2 Metals Container ID 9 Sample ID Page 147 of 148 = Ξ

THIS DOCUMENT IS UNCONTROLLED WHEN PRINTED F1301 Sample Preservation Log 6_0.xls

5N NaOH:

Buffer Sol'n ID:

NazSzO3 ID:

NazSO3 ID:

1N NaOH ID:



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 1/25

1/25/2017 17:23

0.10°C

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Samples Received at:

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Sample Conditions Checklist

Samples Received at:	0.10°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	Yes
Are all volatile organic and TOX containers free of headspace?	Yes
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	Yes
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes

Trip Blanks received with samples and added to workorder. Trip Blank date and time (12/01/16 1635) taken from sample labels. BAR 01/18/17 1638

As per Julia Campus via email: the 40mIHCI voa labeled "Duplicate" is to be logged along with the other containers for sample: "MW-18". BAR 01/19/17 1126



Certificate of Analysis

Final Report

Laboratory Order ID 16J0614

Client Name: Timmons Group

Date Received: 0

October 25, 2016 15:47

1001 Boulders Parkway, Suite 300

Date Issued:

November 2, 2016 15:45

Richmond, VA 23225

Project Number:

36156.015

Submitted To:

Julia Campus

Purchase Order:

Client Site I.D.:

Fulton Gas Works

Enclosed are the results of analyses for samples received by the laboratory on 10/25/2016 15:47. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

Mandy Mishra

Quality Assurance Manager

m.mish-

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

This report shall not be reproduced except in full without the expressed and written approval of an authorized representative of Air Water & Soil Laboratories, Inc.









Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

ANALYTICAL REPORT FOR SAMPLES Laboratory Order ID 16J0614

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
East Main Well 1	16J0614-01	Ground Water	10/25/2016 12:00	10/25/2016 15:47
Trip Blanks	16J0614-02	Ground Water	10/21/2016 15:45	10/25/2016 15:47



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

Sample I.D. East Main Well 1 Laboratory Sample ID: 16J0614-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	eries Method	s							
Silver	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	10/26/16 09:50	10/28/16 13:28	CWO
Arsenic	01	EPA200.8 R5.4	7.73 ug/L		1.00	1	10/26/16 09:50	10/27/16 13:35	BG
Beryllium	01	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	10/26/16 09:50	10/28/16 13:28	CWO
Cadmium	01	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	10/26/16 09:50	10/28/16 13:28	CWO
Chromium	01RE1	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	10/26/16 09:50	10/29/16 16:00	CWO
Copper	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	10/26/16 09:50	10/28/16 13:28	CWO
Mercury	01	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	10/28/16 08:30	10/31/16 11:28	MWL
Nickel	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	10/26/16 09:50	10/28/16 13:28	CWO
Lead	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	10/26/16 09:50	10/28/16 13:28	CWO
Antimony	01	EPA200.8 R5.4	<1.00 ug/L		1.00	1	10/26/16 09:50	10/27/16 13:35	BG
Selenium	01	EPA200.8 R5.4	<1.00 ug/L		1.00	1	10/26/16 09:50	10/27/16 13:35	BG
Thallium	01	EPA200.8 R5.4	<1.00 ug/L		1.00	1	10/26/16 09:50	10/27/16 13:35	BG
Zinc	01	EPA200.7 Rev 4.4	0.0111 mg/L		0.0100	1	10/26/16 09:50	10/28/16 13:28	CWO
Volatile Organic Compounds	s by GCMS								
1,1,1,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	10/26/16 11:30	10/26/16 11:30	JDW
1,1,1-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,1,2,2-Tetrachloroethane	01	SW8260B	<0.40 ug/L		0.40	1	10/26/16 11:30	10/26/16 11:30	JDW
1,1,2-Trichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,1-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,1-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,1-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,2,3-Trichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,2,3-Trichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,2,4-Trichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,2,4-Trimethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

Sample I.D. East Main Well 1 Laboratory Sample ID: 16J0614-01

Danamatan	Samp ID	Mathad	Result	Ougl	Reporting Limit	D.F.	Sample Prep	Analysis	Analyst
Parameter	Oamp ib	Method	Result	Qual	Liiiii	D.F.	Date/Time	Date/Time	Allalyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	01	SW8260B	<4.00 ug/L		4.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,2-Dibromoethane (EDB)	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,2-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,2-Dichloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,2-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,3,5-Trimethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,3-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,3-Dichloropropane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
1,4-Dichlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
2,2-Dichloropropane	01	SW8260B	<2.00 ug/L		2.00	1	10/26/16 11:30	10/26/16 11:30	JDW
2-Butanone (MEK)	01	SW8260B	<10.0 ug/L		10.0	1	10/26/16 11:30	10/26/16 11:30	JDW
2-Chlorotoluene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
2-Hexanone (MBK)	01	SW8260B	<5.00 ug/L		5.00	1	10/26/16 11:30	10/26/16 11:30	JDW
4-Chlorotoluene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
4-Isopropyltoluene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
4-Methyl-2-pentanone (MIBK)	01	SW8260B	<5.00 ug/L		5.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Acetone	01	SW8260B	<10.0 ug/L		10.0	1	10/26/16 11:30	10/26/16 11:30	JDW
Benzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Bromobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Bromochloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Bromodichloromethane	01	SW8260B	<0.50 ug/L		0.50	1	10/26/16 11:30	10/26/16 11:30	JDW
Bromoform	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Bromomethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Carbon disulfide	01	SW8260B	<10.0 ug/L		10.0	1	10/26/16 11:30	10/26/16 11:30	JDW
Carbon tetrachloride	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Chlorobenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

Sample I.D. East Main Well 1 Laboratory Sample ID: 16J0614-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Chloroform	01	SW8260B	<0.50 ug/L		0.50	1	10/26/16 11:30	10/26/16 11:30	JDW
Chloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
cis-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
cis-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Dibromochloromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Dibromomethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Dichlorodifluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Di-isopropyl ether (DIPE)	01	SW8260B	<5.00 ug/L		5.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Ethylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Hexachlorobutadiene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
lodomethane	01	SW8260B	<10.0 ug/L		10.0	1	10/26/16 11:30	10/26/16 11:30	JDW
Isopropylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
m+p-Xylenes	01	SW8260B	<2.00 ug/L		2.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Methylene chloride	01	SW8260B	<4.00 ug/L		4.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Methyl-t-butyl ether (MTBE)	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Naphthalene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
n-Butylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
n-Propylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
o-Xylene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
sec-Butylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Styrene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
tert-Butylbenzene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Tetrachloroethylene (PCE)	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Toluene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
trans-1,2-Dichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

Sample I.D. East Main Well 1 Laboratory Sample ID: 16J0614-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Trichloroethylene	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Trichlorofluoromethane	01	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Vinyl acetate	01	SW8260B	<10.0 ug/L		10.0	1	10/26/16 11:30	10/26/16 11:30	JDW
Vinyl chloride	01	SW8260B	<0.50 ug/L		0.50	1	10/26/16 11:30	10/26/16 11:30	JDW
Xylenes, Total	01	SW8260B	<3.00 ug/L		3.00	1	10/26/16 11:30	10/26/16 11:30	JDW
Surr: 1,2-Dichloroethane-d4	01	SW8260B	103 %		70-120		10/26/16 11:30	10/26/16 11:30	JDW
Surr: 4-Bromofluorobenzene	01	SW8260B	99.9 %		75-120		10/26/16 11:30	10/26/16 11:30	JDW
Surr: Dibromofluoromethane	01	SW8260B	102 %		80-119		10/26/16 11:30	10/26/16 11:30	JDW
Surr: Toluene-d8	01	SW8260B	102 %		85-120		10/26/16 11:30	10/26/16 11:30	JDW
Semivolatile Organic Compou	ınds by GC	MS							
1,2,4,5-Tetrachlorobenzene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
1,2,4-Trichlorobenzene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
1,2-Dichlorobenzene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
1,2-Diphenylhydrazine	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
1,3-Dichlorobenzene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
1,3-Dinitrobenzene	01	SW8270D	<2.72 ug/L		2.72	1	10/28/16 09:05	11/01/16 17:01	EWS
1,4-Dichlorobenzene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
1-Naphthylamine	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
2,3,4,6-Tetrachlorophenol	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
2,4,5-Trichlorophenol	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
2,4,6-Trichlorophenol	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
2,4-Dichlorophenol	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
2,4-Dimethylphenol	01	SW8270D	<0.54 ug/L		0.54	1	10/28/16 09:05	11/01/16 17:01	EWS
2,4-Dinitrophenol	01	SW8270D	<54.3 ug/L		54.3	1	10/28/16 09:05	11/01/16 17:01	EWS
2,4-Dinitrotoluene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

Sample I.D. East Main Well 1 Laboratory Sample ID: 16J0614-01

Parameter	Samp ID	Method	Result	eporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS						
2,6-Dichlorophenol	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
2,6-Dinitrotoluene	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
2-Chloronaphthalene	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
2-Chlorophenol	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
2-Methylnaphthalene	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
2-Naphthylamine	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
2-Nitroaniline	01	SW8270D	<21.7 ug/L	21.7	1	10/28/16 09:05	11/01/16 17:01	EWS
2-Nitrophenol	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
3,3'-Dichlorobenzidine	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
3-Methylcholanthrene	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
3-Nitroaniline	01	SW8270D	<21.7 ug/L	21.7	1	10/28/16 09:05	11/01/16 17:01	EWS
4,6-Dinitro-2-methylphenol	01	SW8270D	<54.3 ug/L	54.3	1	10/28/16 09:05	11/01/16 17:01	EWS
4-Aminobiphenyl	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
4-Bromophenyl phenyl ether	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
4-Chloroaniline	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
4-Chlorophenyl phenyl ether	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
4-Nitroaniline	01	SW8270D	<21.7 ug/L	21.7	1	10/28/16 09:05	11/01/16 17:01	EWS
4-Nitrophenol	01	SW8270D	<54.3 ug/L	54.3	1	10/28/16 09:05	11/01/16 17:01	EWS
7,12-Dimethylbenz (a) anthracene	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Acenaphthene	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Acenaphthylene	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Acetophenone	01	SW8270D	<21.7 ug/L	21.7	1	10/28/16 09:05	11/01/16 17:01	EWS
Aniline	01	SW8270D	<54.3 ug/L	54.3	1	10/28/16 09:05	11/01/16 17:01	EWS
Anthracene	01	SW8270D	<10.9 ug/L	10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Benzidine	01	SW8270D	<54.3 ug/L	54.3	1	10/28/16 09:05	11/01/16 17:01	EWS
Benzo (a) anthracene	01	SW8270D	<0.05 ug/L	0.05	1	10/28/16 09:05	11/01/16 17:01	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

36156.015

Project Number:

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Client Site I.D.: Fulton Gas Works Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

Sample I.D. East Main Well 1 Laboratory Sample ID: 16J0614-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	inds by GC	MS							
Benzo (a) pyrene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Benzo (b) fluoranthene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Benzo (g,h,i) perylene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Benzo (k) fluoranthene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Benzoic acid	01	SW8270D	<54.3 ug/L		54.3	1	10/28/16 09:05	11/01/16 17:01	EWS
Benzyl alcohol	01	SW8270D	<21.7 ug/L		21.7	1	10/28/16 09:05	11/01/16 17:01	EWS
bis (2-Chloroethoxy) methane	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
bis (2-Chloroethyl) ether	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
bis (2-Chloroisopropyl) ether	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
bis (2-Ethylhexyl) phthalate	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Butyl benzyl phthalate	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Chrysene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Dibenz (a,h) anthracene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Dibenz (a,j) acridine	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Dibenzofuran	01	SW8270D	<5.43 ug/L		5.43	1	10/28/16 09:05	11/01/16 17:01	EWS
Diethyl phthalate	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Dimethyl phthalate	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Di-n-butyl phthalate	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Di-n-octyl phthalate	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Diphenylamine	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Ethyl methanesulfonate	01	SW8270D	<21.7 ug/L		21.7	1	10/28/16 09:05	11/01/16 17:01	EWS
Fluoranthene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Fluorene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Hexachlorobenzene	01	SW8270D	<1.09 ug/L		1.09	1	10/28/16 09:05	11/01/16 17:01	EWS
Hexachlorobutadiene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Hexachlorocyclopentadiene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

Sample I.D. East Main Well 1 Laboratory Sample ID: 16J0614-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Comp	ounds by GC	MS							
Hexachloroethane	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Indeno (1,2,3-cd) pyrene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Isophorone	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
m+p-Cresols	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Methyl methanesulfonate	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Naphthalene	01	SW8270D	<5.43 ug/L		5.43	1	10/28/16 09:05	11/01/16 17:01	EWS
Nitrobenzene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
n-Nitrosodimethylamine	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
n-Nitrosodi-n-butylamine	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
n-Nitrosodi-n-propylamine	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
n-Nitrosodiphenylamine	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
n-Nitrosopiperidine	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
o+m+p-Cresols	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
o-Cresol	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
p-(Dimethylamino) azobenzene	01	SW8270D	<2.72 ug/L	С	2.72	1	10/28/16 09:05	11/01/16 17:01	EWS
p-Chloro-m-cresol	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Pentachloronitrobenzene (quintozene)	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Pentachlorophenol	01	SW8270D	<21.7 ug/L		21.7	1	10/28/16 09:05	11/01/16 17:01	EWS
Phenacetin	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Phenanthrene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Phenol	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Pronamide	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Pyrene	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Pyridine	01	SW8270D	<10.9 ug/L		10.9	1	10/28/16 09:05	11/01/16 17:01	EWS
Surr: 2,4,6-Tribromophenol	01	SW8270D	61.5 %		40-125		10/28/16 09:05	11/01/16 17:01	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 30

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

Sample I.D. East Main Well 1 Laboratory Sample ID: 16J0614-01

Parameter	Samp ID	Method	Result	F Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Comp	pounds by GC	MS							
Surr: 2-Fluorobiphenyl	01	SW8270D	60.4 %		23-87		10/28/16 09:05	11/01/16 17:01	EWS
Surr: 2-Fluorophenol	01	SW8270D	37.6 %		14-52		10/28/16 09:05	11/01/16 17:01	EWS
Surr: Nitrobenzene-d5	01	SW8270D	59.3 %		40-110		10/28/16 09:05	11/01/16 17:01	<i>EW</i> S
Surr: Phenol-d5	01	SW8270D	24.8 %		5-33		10/28/16 09:05	11/01/16 17:01	<i>EW</i> S
Surr: p-Terphenyl-d14	01	SW8270D	73.8 %		27-133		10/28/16 09:05	11/01/16 17:01	EWS
Organochlorine Pesticides	and PCBs by	GC/ECD							
PCB as Aroclor 1016	01	SW8082A	<0.217 ug/L		0.217	1	10/27/16 08:45	10/27/16 23:12	SKS
PCB as Aroclor 1221	01	SW8082A	<0.217 ug/L		0.217	1	10/27/16 08:45	10/27/16 23:12	SKS
PCB as Aroclor 1232	01	SW8082A	<0.217 ug/L		0.217	1	10/27/16 08:45	10/27/16 23:12	SKS
PCB as Aroclor 1242	01	SW8082A	<0.217 ug/L		0.217	1	10/27/16 08:45	10/27/16 23:12	SKS
PCB as Aroclor 1248	01	SW8082A	<0.217 ug/L		0.217	1	10/27/16 08:45	10/27/16 23:12	SKS
PCB as Aroclor 1254	01	SW8082A	<0.217 ug/L		0.217	1	10/27/16 08:45	10/27/16 23:12	SKS
PCB as Aroclor 1260	01	SW8082A	<0.217 ug/L		0.217	1	10/27/16 08:45	10/27/16 23:12	SKS
Surr: DCB	01	SW8082A	70.0 %		30-105		10/27/16 08:45	10/27/16 23:12	SKS
Surr: TCMX	01	SW8082A	65.0 %		30-105		10/27/16 08:45	10/27/16 23:12	SKS
4,4'-DDD	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
4,4'-DDE	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
4,4'-DDT	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
Aldrin	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
alpha-BHC	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
beta-BHC	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
Chlordane	01	SW8081B	<0.217 ug/L		0.217	1	10/27/16 08:45	10/27/16 23:12	SKS
delta-BHC	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
Dieldrin	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
Endosulfan I	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
Endosulfan II	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2

11/2/2016 15:45

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To:

Julia Campus

Project Number:

36156.015

Client Site I.D.:

Fulton Gas Works

Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

Sample I.D. East Main Well 1

Laboratory Sample ID: 1

16J0614-01

Date/Time Sampled:

10/25/2016 12:00

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides and	d PCBs by	GC/ECD							
Endosulfan sulfate	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
Endrin	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
Endrin aldehyde	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
gamma-BHC (Lindane)	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
Heptachlor	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
Heptachlor epoxide	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
Methoxychlor	01	SW8081B	<0.054 ug/L		0.054	1	10/27/16 08:45	10/27/16 23:12	SKS
Toxaphene	01	SW8081B	<1.09 ug/L		1.09	1	10/27/16 08:45	10/27/16 23:12	SKS
Surr: TCMX	01	SW8081B	95.0 %		18-112		10/27/16 08:45	10/27/16 23:12	SKS
Surr: DCB	01	SW8081B	95.0 %		27-131		10/27/16 08:45	10/27/16 23:12	SKS
Organochlorine Herbicides by	y GC/ECD								
2,4,5-T	01	SW8151A	<0.500 ug/L		0.500	1	10/26/16 14:40	10/28/16 17:23	CVH
2,4,5-TP (Silvex)	01	SW8151A	<0.500 ug/L		0.500	1	10/26/16 14:40	10/28/16 17:23	CVH
2,4-D	01	SW8151A	<0.500 ug/L		0.500	1	10/26/16 14:40	10/28/16 17:23	CVH
Dinoseb	01	SW8151A	<0.500 ug/L		0.500	1	10/26/16 14:40	10/28/16 17:23	CVH
Pentachlorophenol	01	SW8151A	<0.500 ug/L		0.500	1	10/26/16 14:40	10/28/16 17:23	CVH
Surr: DCAA	01	SW8151A	100 %		60-112		10/26/16 14:40	10/28/16 17:23	CVH
Wet Chemistry Analysis									
Cyanide	01	SW9012	0.01 mg/L	CI	0.01	1	10/26/16 16:12	10/26/16 16:12	BBP
Chromium, Hexavalent	01	SW7196A	<0.005 mg/L		0.005	1	10/26/16 11:00	10/26/16 11:00	CMB



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

Sample I.D. Trip Blanks Laboratory Sample ID: 16J0614-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	10/26/16 11:07	10/26/16 11:07	JDW
1,1,1-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,1,2,2-Tetrachloroethane	02	SW8260B	<0.40 ug/L		0.40	1	10/26/16 11:07	10/26/16 11:07	JDW
1,1,2-Trichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,1-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,1-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,1-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,2,3-Trichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,2,3-Trichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,2,4-Trichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,2,4-Trimethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,2-Dibromo-3-chloropropane (DBCP)	02	SW8260B	<4.00 ug/L		4.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,2-Dibromoethane (EDB)	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,2-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,2-Dichloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,2-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,3,5-Trimethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,3-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,3-Dichloropropane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
1,4-Dichlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
2,2-Dichloropropane	02	SW8260B	<2.00 ug/L		2.00	1	10/26/16 11:07	10/26/16 11:07	JDW
2-Butanone (MEK)	02	SW8260B	<10.0 ug/L		10.0	1	10/26/16 11:07	10/26/16 11:07	JDW
2-Chlorotoluene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
2-Hexanone (MBK)	02	SW8260B	<5.00 ug/L		5.00	1	10/26/16 11:07	10/26/16 11:07	JDW
4-Chlorotoluene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
4-Isopropyltoluene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

36156.015

Project Number:

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Client Site I.D.: Fulton Gas Works Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

Sample I.D. Trip Blanks Laboratory Sample ID: 16J0614-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
4-Methyl-2-pentanone (MIBK)	02	SW8260B	<5.00 ug/L		5.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Acetone	02	SW8260B	<10.0 ug/L		10.0	1	10/26/16 11:07	10/26/16 11:07	JDW
Benzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Bromobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Bromochloromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Bromodichloromethane	02	SW8260B	<0.50 ug/L		0.50	1	10/26/16 11:07	10/26/16 11:07	JDW
Bromoform	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Bromomethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Carbon disulfide	02	SW8260B	<10.0 ug/L		10.0	1	10/26/16 11:07	10/26/16 11:07	JDW
Carbon tetrachloride	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Chlorobenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Chloroethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Chloroform	02	SW8260B	<0.50 ug/L		0.50	1	10/26/16 11:07	10/26/16 11:07	JDW
Chloromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
cis-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
cis-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Dibromochloromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Dibromomethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Dichlorodifluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Di-isopropyl ether (DIPE)	02	SW8260B	<5.00 ug/L		5.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Ethylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Hexachlorobutadiene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
lodomethane	02	SW8260B	<10.0 ug/L		10.0	1	10/26/16 11:07	10/26/16 11:07	JDW
Isopropylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
m+p-Xylenes	02	SW8260B	<2.00 ug/L		2.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Methylene chloride	02	SW8260B	<4.00 ug/L		4.00	1	10/26/16 11:07	10/26/16 11:07	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

11/2/2016 15:45

36156.015

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To:

Julia Campus

Project Number:

Client Site I.D.: Fulton Gas Works Purchase Order:

Laboratory Order ID: 16J0614

Analytical Results

16J0614-02 Sample I.D. Trip Blanks Laboratory Sample ID:

Date/Time Sampled: 10/21/2016 15:45

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Methyl-t-butyl ether (MTBE)	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Naphthalene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
n-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
n-Propylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
o-Xylene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
sec-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Styrene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
tert-Butylbenzene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Tetrachloroethylene (PCE)	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Toluene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
trans-1,2-Dichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
trans-1,3-Dichloropropene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Trichloroethylene	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Trichlorofluoromethane	02	SW8260B	<1.00 ug/L		1.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Vinyl acetate	02	SW8260B	<10.0 ug/L		10.0	1	10/26/16 11:07	10/26/16 11:07	JDW
Vinyl chloride	02	SW8260B	<0.50 ug/L		0.50	1	10/26/16 11:07	10/26/16 11:07	JDW
Xylenes, Total	02	SW8260B	<3.00 ug/L		3.00	1	10/26/16 11:07	10/26/16 11:07	JDW
Surr: 1,2-Dichloroethane-d4	02	SW8260B	104 %		70-120		10/26/16 11:07	10/26/16 11:07	JDW
Surr: 4-Bromofluorobenzene	02	SW8260B	99.9 %		75-120		10/26/16 11:07	10/26/16 11:07	JDW
Surr: Dibromofluoromethane	02	SW8260B	102 %		80-119		10/26/16 11:07	10/26/16 11:07	JDW
Surr: Toluene-d8	02	SW8260B	101 %		85-120		10/26/16 11:07	10/26/16 11:07	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas Works

Submitted To: Julia Campus

Client Site I.D.:

Project Number: 36156.015

Purchase Order:

Analytical Summary

Preparation Method:

Preparation Method:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EF	PA 200 Series Methods	Preparation Method:	EPA200.2/R2.8		
16J0614-01	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZJ0739	SZJ0920	AJ60158
16J0614-01RE1	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZJ0739	SZJ0940	AJ60163
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EF	PA 200 Series Methods	Preparation Method:	EPA200.8 R5.4	ı	
16J0614-01	50.0 mL / 50.0 mL	EPA200.8 R5.4	BZJ0741	SZJ0878	AJ60153
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Ana	ılysis	Preparation Method:	No Prep Wet C	Chem	
16J0614-01	6.00 mL / 6.00 mL	SW9012	BZJ0729	SZJ0807	AJ60144
Wet Chemistry Ana	llysis	Preparation Method:	No Prep Wet C	Chem	
16J0614-01	100 mL / 100 mL	SW7196A	BZJ0771	SZJ0840	AJ60149
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Organochlorine Pe	sticides and PCBs by GC/ECD	Preparation Method:	SW3510C		
16J0614-01	920 mL / 1.00 mL	SW8081B	BZJ0750	SZJ0900	Al60014
16J0614-01	920 mL / 1.00 mL	SW8082A	BZJ0750	SZK0045	AJ60160
Organochlorine He	rbicides by GC/ECD	Preparation Method:	SW3510C		
16J0614-01	900 mL / 5.00 mL	SW8151A	BZJ0760	SZJ0968	AJ60095
Semivolatile Organ	ic Compounds by GCMS	Preparation Method:	SW3510C		
16J0614-01	920 mL / 1.00 mL	SW8270D	BZJ0826	SZK0055	AH60004
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID



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Final Report

Client Name: Timmons Group

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11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

Date Issued:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Sample ID	Preparation Factors Initial / Final	Method	Method Batch ID		Calibration ID
Volatile Organic C	ompounds by GCMS	Preparation Method:	SW5030B		
16J0614-01	5.00 mL / 5.00 mL	SW8260B	BZJ0788	SZJ0851	AJ60143
16J0614-02	5.00 mL / 5.00 mL	SW8260B	BZJ0788	SZJ0851	AJ60143
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by E	EPA 200 Series Methods	Preparation Method:	SW7470A		
16J0614-01	20.0 mL / 20.0 mL	EPA245.1 R3.0	BZJ0839	SZK0012	AK60003



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

11/2/2016 15:45

RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gas Works

Purchase Order:

Source

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZJ0739 - EPA200.2/R2.8										
Blank (BZJ0739-BLK1)				Prepared	l: 10/26/201	6 Analyze	d: 10/28/2	016		
Beryllium	<0.0040 mg/L	0.0040	mg/L			-				
Cadmium	<0.0040 mg/L	0.0040	mg/L							
Chromium	<0.0100 mg/L	0.0100	mg/L							
Copper	<0.0100 mg/L	0.0100	mg/L							
Lead	<0.0100 mg/L	0.0100	mg/L							
Nickel	<0.0100 mg/L	0.0100	mg/L							
Silver	<0.0100 mg/L	0.0100	mg/L							
Zinc	<0.0100 mg/L	0.0100	mg/L							
LCS (BZJ0739-BS1)				Prepared	l: 10/26/201	6 Analyze	d: 10/28/2	016		
Beryllium	0.545 mg/L	0.0040	mg/L	0.500	mg/L	109	80-120			
Cadmium	0.552 mg/L	0.0040	mg/L	0.500	mg/L	110	80-120			
Chromium	0.540 mg/L	0.0100	mg/L	0.500	mg/L	108	80-120			
Copper	0.550 mg/L	0.0100	mg/L	0.500	mg/L	110	80-120			
Lead	0.547 mg/L	0.0100	mg/L	0.500	mg/L	109	80-120			
Nickel	0.546 mg/L	0.0100	mg/L	0.500	mg/L	109	80-120			
Silver	0.112 mg/L	0.0100	mg/L	0.100	mg/L	112	80-120			E
Zinc	0.533 mg/L	0.0100	mg/L	0.500	mg/L	107	80-120			
LCS Dup (BZJ0739-BSD1)				Prepared	l: 10/26/201	6 Analyze	d: 10/28/2	016		
Beryllium	0.544 mg/L	0.0040	mg/L	0.500	mg/L	109	80-120	0.153	20	
Cadmium	0.549 mg/L	0.0040	mg/L	0.500	mg/L	110	80-120	0.374	20	
Chromium	0.545 mg/L	0.0100	mg/L	0.500	mg/L	109	80-120	0.824	20	
Copper	0.549 mg/L	0.0100	mg/L	0.500	mg/L	110	80-120	0.159	20	
Lead	0.554 mg/L	0.0100	mg/L	0.500	mg/L	111	80-120	1.31	20	
Nickel	0.547 mg/L	0.0100	mg/L	0.500	mg/L	109	80-120	0.285	20	
Silver	0.113 mg/L	0.0100	mg/L	0.100	mg/L	113	80-120	1.02	20	E
Zinc	0.540 mg/L	0.0100	mg/L	0.500	mg/L	108	80-120	1.34	20	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/

11/2/2016 15:45

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZJ0739 - EPA200.2/R2.8										
					10/00/00			0.4.0		

Matrix Spike (BZJ0739-MS1)	Source: 16J0611-06			Prepared: 10/26/2016					
Beryllium	0.552 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	110	75-125			
Cadmium	0.555 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	111	75-125			
Chromium	0.552 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	109	75-125			
Copper	0.573 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	114	75-125			
Lead	0.553 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	111	75-125			
Nickel	0.559 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	110	75-125			
Silver	0.112 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	112	75-125			E
Zinc	0.542 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	108	75-125			
Matrix Spike (BZJ0739-MS2)	Sourc	e: 16J0611-1	2	Prepared: 10/26/2016	Analyze	ed: 10/28/2	016		
Beryllium	0.571 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	114	75-125			
Cadmium	0.574 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	115	75-125			
Chromium	0.560 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	112	75-125			
Copper	0.575 mg/L	0.0100	mg/L	0.500 < 0.0100 mg/L	115	75-125			
Lead	0.567 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	113	75-125			
Nickel	0.567 mg/L	0.0100	mg/L	0.500 < 0.0100 mg/L	113	75-125			
Silver	0.118 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	118	75-125			E
Zinc	0.559 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	112	75-125			
Matrix Spike Dup (BZJ0739-MSD1)	Sourc	e: 16J0611-0)6	Prepared: 10/26/2016	Analyze	ed: 10/28/2	016		
Beryllium	0.561 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	112	75-125	1.74	20	
Cadmium	0.562 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	112	75-125	1.19	20	
Chromium	0.562 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	111	75-125	1.72	20	
Copper	0.582 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	116	75-125	1.67	20	
Lead	0.561 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	112	75-125	1.43	20	
Nickel	0.565 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	111	75-125	1.00	20	
Silver	0.113 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	113	75-125	1.37	20	E
Zinc	0.549 mg/L	0.0100	mg/L	0.500 < 0.0100 mg/L	110	75-125	1.33	20	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZJ0739 - EPA200.2/R2.8										
Matrix Spike Dup (BZJ0739-MSD2)	Sour	rce: 16J0611	-12	Prepared	I: 10/26/2016	Analyze	d: 10/28/2	016		
Beryllium	0.552 mg/L	0.0040	mg/L	0.500	<0.0040 mg/L	110	75-125	3.35	20	
Cadmium	0.554 mg/L	0.0040	mg/L	0.500	<0.0040 mg/L	111	75-125	3.42	20	
Chromium	0.548 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	110	75-125	2.21	20	
Copper	0.554 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	111	75-125	3.68	20	
Lead	0.556 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	111	75-125	1.91	20	
Nickel	0.552 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	110	75-125	2.66	20	
Silver	0.113 mg/L	0.0100	mg/L		<0.0100 mg/L	113	75-125	3.78	20	E
Zinc	0.547 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	109	75-125	2.09	20	
Batch BZJ0741 - EPA200.8 R5.4										
Blank (BZJ0741-BLK1)				Prepared	I: 10/26/2016	Analyze	d: 10/27/2	016		
Antimony	<1.00 ug/L	1.00	ug/L							
Arsenic	<1.00 ug/L	1.00	ug/L							
Selenium	<1.00 ug/L	1.00	ug/L							
Thallium	<1.00 ug/L	1.00	ug/L							
LCS (BZJ0741-BS1)				Prepared	I: 10/26/2016	Analyze	d: 10/27/2	016		
Antimony	49.1 ug/L	1.00	ug/L	50.0	ug/L	98.3	85-115			
Arsenic	50.8 ug/L	1.00	ug/L	50.0	ug/L	102	85-115			
Selenium	52.6 ug/L	1.00	ug/L	50.0	ug/L	105	85-115			
Thallium	48.6 ug/L	1.00	ug/L	50.0	ug/L	97.1	85-115			
LCS Dup (BZJ0741-BSD1)				Prepared	I: 10/26/2016	Analyze	d: 10/27/2	016		
Antimony	48.7 ug/L	1.00	ug/L	50.0	ug/L	97.4	85-115	0.944	20	
Arsenic	49.7 ug/L	1.00	ug/L	50.0	ug/L	99.4	85-115	2.22	20	
Selenium	50.2 ug/L	1.00	ug/L	50.0	ug/L	100	85-115	4.68	20	
Thallium	48.2 ug/L	1.00	ug/L	50.0	ug/L	96.4	85-115	0.744	20	
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Certificate of Analysis

Final Report

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

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36156.015

RPD

%REC

Client Site I.D.: Fulton Gas Works

Purchase Order:

Source

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Allalyte	Result	LIIIII	Ullis	Level	Resuit	70REC	LIIIIIIS		LIIIII	Quai
Batch BZJ0741 - EPA200.8 R5.4										
Matrix Spike (BZJ0741-MS1)	Sour	ce: 16J0611	I - 06	Prepare	d: 10/26/201	l6 Analyze	d: 10/27/2	2016		
Antimony	51.1 ug/L	1.00	ug/L	50.0	<1.00 ug/L	102	70-130			
Arsenic	54.5 ug/L	1.00	ug/L	50.0	<1.00 ug/L	109	70-130			
Selenium	56.6 ug/L	1.00	ug/L	50.0	<1.00 ug/L	113	70-130			
hallium	45.9 ug/L	1.00	ug/L	50.0	<1.00 ug/L	91.7	70-130			
Matrix Spike (BZJ0741-MS2)	Sour	Source: 16J0611-12			d: 10/26/201	I6 Analyze	d: 10/27/2	2016		
Antimony	48.5 ug/L	1.00	ug/L	50.0	<1.00 ug/L	97.1	70-130			
Arsenic	50.0 ug/L	1.00	ug/L	50.0	<1.00 ug/L	100	70-130			
Selenium	52.9 ug/L	1.00	ug/L	50.0	<1.00 ug/L	106	70-130			
hallium	46.6 ug/L	1.00	ug/L	50.0	<1.00 ug/L	93.3	70-130			
Matrix Spike Dup (BZJ0741-MSD1)	Sour	ce: 16J0611	I - 06	Prepare						
Antimony	50.2 ug/L	1.00	ug/L	50.0	<1.00 ug/L	100	70-130	1.77	20	
rsenic	54.2 ug/L	1.00	ug/L	50.0	<1.00 ug/L	108	70-130	0.659	20	
Selenium	57.2 ug/L	1.00	ug/L	50.0	<1.00 ug/L	114	70-130	1.10	20	
hallium	46.4 ug/L	1.00	ug/L	50.0	<1.00 ug/L	92.9	70-130	1.27	20	
Matrix Spike Dup (BZJ0741-MSD2)	Sour	ce: 16J0611	l -12	Prepare	d: 10/26/201	l6 Analyze	d: 10/27/2	2016		
Antimony	48.4 ug/L	1.00	ug/L	50.0	<1.00 ug/L	96.7	70-130	0.331	20	
Arsenic	51.5 ug/L	1.00	ug/L	50.0	<1.00 ug/L	103	70-130	2.87	20	
Selenium	52.6 ug/L	1.00	ug/L	50.0	<1.00 ug/L	105	70-130	0.634	20	
hallium	48.2 ug/L	1.00	ug/L	50.0	<1.00 ug/L	96.4	70-130	3.29	20	
Batch BZJ0839 - SW7470A										
Blank (BZJ0839-BLK1)			Prepared: 10/28/2016 Analyzed: 10/31/2016							
Mercury	<0.0002 mg/L	0.0002	ma/l	- iepaie	u. 10/20/201	io AllalyZe	u. 10/31/2	2010		
nercury	~0.0002 mg/L	0.0002	mg/L							



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Client Site I.D.: Fulton Gas Works

Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual	
Batch BZJ0839 - SW7470A											
LCS (BZJ0839-BS1)				Prepared: 10/28/2016 Analyzed: 10/31/2016							
Mercury	0.0025 mg/L	0.0002	mg/L	0.00250 r	mg/L	99.1	85-115				
LCS Dup (BZJ0839-BSD1)				Prepared:	10/28/2016	6 Analyze	d: 10/31/2	016			
Mercury	0.0026 mg/L	0.0002	mg/L	0.00250 r	mg/L	102	85-115	2.90	20		
Matrix Spike (BZJ0839-MS1)	Source: 16J0540-01			Prepared:							
ment of the (Decore in Ci)			<u> </u>	i icpaica.	10/LO/LO I	37 thaiy 20	u. 10/01/2	010			
Mercury	0.0024 mg/L	0.0002	mg/L	•	0.0002 mg/L		70-130	010			
	0.0024 mg/L		mg/L	0.00250 <		95.1	70-130				
Mercury	0.0024 mg/L	0.0002	mg/L	0.00250 < Prepared:	0.0002 mg/L	95.1 6 Analyze	70-130				
Mercury Matrix Spike (BZJ0839-MS2)	0.0024 mg/L Source 0.0023 mg/L	0.0002 ce: 16J0614	mg/L - 01 mg/L	0.00250 < Prepared: 0.00250 <	0.0002 mg/L 10/28/2016	95.1 6 Analyze 90.2	70-130 <u>d: 10/31/2</u> 70-130	016			
Mercury Matrix Spike (BZJ0839-MS2) Mercury	0.0024 mg/L Source 0.0023 mg/L	0.0002 ce: 16J0614 0.0002	mg/L - 01 mg/L	0.00250 < Prepared: 0.00250 < Prepared:	0.0002 mg/L 10/28/2016 0.0002 mg/L	95.1 6 Analyze 90.2 6 Analyze	70-130 <u>d: 10/31/2</u> 70-130	016	20		
Matrix Spike (BZJ0839-MS2) Mercury Matrix Spike Dup (BZJ0839-MSD1)	0.0024 mg/L Source 0.0023 mg/L Source 0.0027 mg/L	0.0002 ce: 16J0614 0.0002 ce: 16J0540	mg/L -01 mg/L -01 mg/L	0.00250 < Prepared: 0.00250 < Prepared: 0.00250 <	0.0002 mg/L 10/28/2016 0.0002 mg/L 10/28/2016	95.1 6 Analyze 90.2 6 Analyze 108	70-130 d: 10/31/2 70-130 d: 10/31/2 70-130	016 016 12.3	20		



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36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZJ0788-BLK1)			Prepared & Analyzed: 10/26/2016
1,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L
1,2,3-Trichlorobenzene	<1.00 ug/L	1.00	ug/L
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L
1,2,4-Trimethylbenzene	<1.00 ug/L	1.00	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	<4.00 ug/L	4.00	ug/L
1,2-Dibromoethane (EDB)	<1.00 ug/L	1.00	ug/L
1,2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L
1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L
1,2-Dichloropropane	<1.00 ug/L	1.00	ug/L
1,3,5-Trimethylbenzene	<1.00 ug/L	1.00	ug/L
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L
2,2-Dichloropropane	<2.00 ug/L	2.00	ug/L
2-Butanone (MEK)	<10.0 ug/L	10.0	ug/L
2-Chlorotoluene	<1.00 ug/L	1.00	ug/L
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L
4-Chlorotoluene	<1.00 ug/L	1.00	ug/L
4-Isopropyltoluene	<1.00 ug/L	1.00	ug/L
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L
Acetone	<10.0 ug/L	10.0	ug/L
Benzene	<1.00 ug/L	1.00	ug/L
Bromobenzene	<1.00 ug/L	1.00	ug/L
Bromochloromethane	<1.00 ug/L	1.00	ug/L



Certificate of Analysis

Final Report

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZJ0788-BLK1)				Prepared & Analyzed: 10/26/2016
Bromodichloromethane	<0.50 ug/L	0.50	ug/L	
Bromoform	<1.00 ug/L	1.00	ug/L	
Bromomethane	<1.00 ug/L	1.00	ug/L	
Carbon disulfide	<10.0 ug/L	10.0	ug/L	
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L	
Chlorobenzene	<1.00 ug/L	1.00	ug/L	
Chloroethane	<1.00 ug/L	1.00	ug/L	
Chloroform	<0.50 ug/L	0.50	ug/L	
Chloromethane	<1.00 ug/L	1.00	ug/L	
cis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L	
cis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L	
Dibromochloromethane	<1.00 ug/L	1.00	ug/L	
Dibromomethane	<1.00 ug/L	1.00	ug/L	
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L	
Di-isopropyl ether (DIPE)	<5.00 ug/L	5.00	ug/L	
Ethylbenzene	<1.00 ug/L	1.00	ug/L	
Hexachlorobutadiene	<1.00 ug/L	1.00	ug/L	
odomethane	<10.0 ug/L	10.0	ug/L	
sopropylbenzene	<1.00 ug/L	1.00	ug/L	
n+p-Xylenes	<2.00 ug/L	2.00	ug/L	
Methylene chloride	<4.00 ug/L	4.00	ug/L	
Methyl-t-butyl ether (MTBE)	<1.00 ug/L	1.00	ug/L	
Naphthalene	<1.00 ug/L	1.00	ug/L	
n-Butylbenzene	<1.00 ug/L	1.00	ug/L	
n-Propylbenzene	<1.00 ug/L	1.00	ug/L	
o-Xylene	<1.00 ug/L	1.00	ug/L	
sec-Butylbenzene	<1.00 ug/L	1.00	ug/L	
Styrene	<1.00 ug/L	1.00	ug/L	
ert-Butylbenzene	<1.00 ug/L	1.00	ug/L	
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L	
Toluene	<1.00 ug/L	1.00	ug/L	



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RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

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Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gas Works

Purchase Order:

Source

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZJ0788 - SW5030B										
Blank (BZJ0788-BLK1)				Prepared	d & Analyze	d: 10/26/20	016			
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L							
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L							
Trichloroethylene	<1.00 ug/L	1.00	ug/L							
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L							
Vinyl acetate	<10.0 ug/L	10.0	ug/L							
Vinyl chloride	<0.50 ug/L	0.50	ug/L							
Xylenes, Total	<3.00 ug/L	3.00	ug/L							
Surr: 1,2-Dichloroethane-d4	51.2		ug/L	50.0		102	70-120			
Surr: 4-Bromofluorobenzene	49.4		ug/L	50.0		98.8	75-120			
Surr: Dibromofluoromethane	50.4		ug/L	50.0		101	80-119			
Surr: Toluene-d8	50.7		ug/L	50.0		101	85-120			
LCS (BZJ0788-BS1)				Prepared	d & Analyze	d: 10/26/20	016			
1,1,1,2-Tetrachloroethane	48.4 ug/L	0.4	ug/L	50.0	ug/L	96.7	80-130			
1,1,1-Trichloroethane	52.6 ug/L	1	ug/L	50.0	ug/L	105	65-130			
1,1,2,2-Tetrachloroethane	50.0 ug/L	0.4	ug/L	50.0	ug/L	99.9	65-130			
1,1,2-Trichloroethane	51.4 ug/L	1	ug/L	50.0	ug/L	103	75-125			
1,1-Dichloroethane	50.2 ug/L	1	ug/L	50.0	ug/L	100	70-135			
1,1-Dichloroethylene	49.0 ug/L	1	ug/L	50.0	ug/L	98.1	70-130			
1,1-Dichloropropene	49.3 ug/L	1	ug/L	50.0	ug/L	98.5	75-135			
1,2,3-Trichlorobenzene	53.5 ug/L	1	ug/L	50.0	ug/L	107	55-140			
1,2,3-Trichloropropane	47.6 ug/L	1	ug/L	50.0	ug/L	95.1	75-125			
1,2,4-Trichlorobenzene	51.9 ug/L	1	ug/L	50.0	ug/L	104	65-135			
1,2,4-Trimethylbenzene	52.3 ug/L	1	ug/L	50.0	ug/L	105	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	47.9 ug/L	4	ug/L	50.0	ug/L	95.9	50-130			
1,2-Dibromoethane (EDB)	53.0 ug/L	1	ug/L	50.0	ug/L	106	80-120			
1,2-Dichlorobenzene	52.8 ug/L	1	ug/L	50.0	ug/L	106	70-120			
1,2-Dichloroethane	50.2 ug/L	1	ug/L	50.0	ug/L	100	70-130			
1,2-Dichloropropane	50.3 ug/L	1	ug/L	50.0	ug/L	101	75-125			
1,3,5-Trimethylbenzene	52.2 ug/L	1	ug/L	50.0	ug/L	104	75-125			
1,3-Dichlorobenzene	51.3 ug/L	1	ug/L	50.0	ug/L	103	75-125			



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Client Site I.D.: Fulton Gas Works

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZJ0788 - SW5030B LCS (BZJ0788-BS1) Prepared & Analyzed: 10/26/2016 1,3-Dichloropropane 50.1 ug/L 1 ug/L 50.0 ug/L 100 75-125 1,4-Dichlorobenzene 53.6 ug/L 75-125 1 ug/L 50.0 ug/L 107 2 50.0 104 70-135 2,2-Dichloropropane 51.9 ug/L ug/L ug/L 2-Butanone (MEK) 51.0 ug/L 10 102 30-150 ug/L 50.0 ug/L 2-Chlorotoluene 53.8 ug/L 108 75-125 1 ug/L 50.0 ug/L 2-Hexanone (MBK) 56.4 ug/L 5 ug/L 50.0 ug/L 113 55-130 4-Chlorotoluene 51.6 ug/L ug/L 50.0 ug/L 103 75-130 1 4-Isopropyltoluene 52.4 ug/L 1 ug/L 50.0 ug/L 105 75-130 4-Methyl-2-pentanone (MIBK) 54.2 ug/L 5 ug/L 50.0 ug/L 108 60-135 Acetone 51.2 ug/L 10 ug/L 50.0 ug/L 102 40-140 80-120 Benzene 52.2 ug/L 1 ug/L 50.0 ug/L 104 75-125 Bromobenzene 52.6 ug/L 1 ug/L 50.0 105 ug/L 107 65-130 Bromochloromethane 53.4 ug/L 1 ug/L 50.0 ug/L Bromodichloromethane 54.2 ug/L 0.5 ug/L 50.0 ug/L 108 75-120 Bromoform 49.3 ug/L 1 ug/L 50.0 98.6 70-130 ug/L 50.0 93.0 Bromomethane 46.5 ug/L 30-145 1 ug/L ug/L Carbon disulfide 35.3 ug/L 10 ug/L 50.0 ug/L 70.7 35-160 Carbon tetrachloride 51.3 ug/L ug/L 50.0 103 65-140 1 ug/L Chlorobenzene 51.1 ug/L 1 ug/L 50.0 ug/L 102 80-120 Chloroethane 50.5 ug/L 1 ug/L 50.0 ug/L 101 60-135 Chloroform 49.8 ug/L 0.5 ug/L 50.0 ug/L 99.6 65-135 Chloromethane 48.3 ug/L 1 ug/L 50.0 ug/L 96.7 40-125 70-125 cis-1,2-Dichloroethylene 52.0 ug/L ug/L 50.0 ug/L 104 1 cis-1,3-Dichloropropene 46.7 ug/L ug/L 50.0 ug/L 93.4 70-130 Dibromochloromethane 50.0 113 60-135 56.7 ug/L ug/L ug/L Dibromomethane 53.0 ug/L ug/L 50.0 ug/L 106 75-125 Dichlorodifluoromethane 48.4 ug/L ug/L 96.7 30-155 50.0 ug/L Ethylbenzene 52.5 ug/L ug/L 50.0 ug/L 105 75-125 Hexachlorobutadiene 50.3 ug/L 1 ug/L 50.0 ug/L 101 50-140 49.6 ug/L 99.3 75-125 Isopropylbenzene ug/L 50.0 ug/L m+p-Xylenes 102 ug/L 2 ug/L 100 ug/L 102 75-130



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Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gas Works

Purchase Order:

Source

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZJ0788 - SW5030B										
LCS (BZJ0788-BS1)				Prepare	d & Analyze	d: 10/26/20	016			
Methylene chloride	53.4 ug/L	4	ug/L	50.0	ug/L	107	55-140			
Methyl-t-butyl ether (MTBE)	50.8 ug/L	1	ug/L	50.0	ug/L	102	65-125			
Naphthalene	53.1 ug/L	1	ug/L	50.0	ug/L	106	55-140			
n-Butylbenzene	54.1 ug/L	1	ug/L	50.0	ug/L	108	70-135			
n-Propylbenzene	52.3 ug/L	1	ug/L	50.0	ug/L	105	70-130			
o-Xylene	52.2 ug/L	1	ug/L	50.0	ug/L	104	80-120			
sec-Butylbenzene	52.7 ug/L	1	ug/L	50.0	ug/L	105	70-125			
Styrene	53.5 ug/L	1	ug/L	50.0	ug/L	107	65-135			
tert-Butylbenzene	51.9 ug/L	1	ug/L	50.0	ug/L	104	70-130			
Tetrachloroethylene (PCE)	48.3 ug/L	1	ug/L	50.0	ug/L	96.6	45-150			
Toluene	53.3 ug/L	1	ug/L	50.0	ug/L	107	75-120			
trans-1,2-Dichloroethylene	52.6 ug/L	1	ug/L	50.0	ug/L	105	60-140			
trans-1,3-Dichloropropene	49.6 ug/L	1	ug/L	50.0	ug/L	99.2	55-140			
Trichloroethylene	48.4 ug/L	1	ug/L	50.0	ug/L	96.9	70-125			
Trichlorofluoromethane	46.9 ug/L	1	ug/L	50.0	ug/L	93.8	60-145			
Vinyl chloride	49.0 ug/L	0.5	ug/L	50.0	ug/L	97.9	50-145			
Surr: 1,2-Dichloroethane-d4	53.2		ug/L	50.0	ug/L	106	70-120			
Surr: 4-Bromofluorobenzene	50.1		ug/L	50.0	ug/L	100	75-120			
Surr: Dibromofluoromethane	50.6		ug/L	50.0	ug/L	101	80-119			
Surr: Toluene-d8	50.2		ug/L	50.0	ug/L	100	85-120			
Matrix Spike (BZJ0788-MS1)	Sour	ce: 16J0614	I-01	Prepare	d & Analyze	d: 10/26/2	016			
1,1,1,2-Tetrachloroethane	48.7 ug/L	0.4	ug/L	50.0	<0.4 ug/L	97.5	80-130			
1,1,1-Trichloroethane	53.1 ug/L	1	ug/L	50.0	<1 ug/L	106	65-130			
1,1,2,2-Tetrachloroethane	53.1 ug/L	0.4	ug/L	50.0	<0.4 ug/L	106	65-130			
1,1,2-Trichloroethane	53.0 ug/L	1	ug/L	50.0	<1 ug/L	106	75-125			
1,1-Dichloroethane	52.0 ug/L	1	ug/L	50.0	<1 ug/L	104	70-135			
1,1-Dichloroethylene	47.3 ug/L	1	ug/L	50.0	<1 ug/L	94.6	70-130			
1,1-Dichloropropene	48.4 ug/L	1	ug/L	50.0	<1 ug/L	96.8	75-135			
1,2,3-Trichlorobenzene	54.7 ug/L	1	ug/L	50.0	<1 ug/L	109	55-140			
1,2,3-Trichloropropane	51.4 ug/L	1	ug/L	50.0	<1 ug/L	103	75-125			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD		l
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	l

Matrix Spike (BZJ0788-MS1)	Source:	16J0614-	-01	Prepare	d & Analyze	d: 10/26/2	016	
1,2,4-Trichlorobenzene	52.1 ug/L	1	ug/L	50.0	<1 ug/L	104	65-135	
1,2,4-Trimethylbenzene	53.1 ug/L	1	ug/L	50.0	<1 ug/L	106	75-130	
1,2-Dibromo-3-chloropropane (DBCP)	50.5 ug/L	4	ug/L	50.0	<4 ug/L	101	50-130	
1,2-Dibromoethane (EDB)	54.9 ug/L	1	ug/L	50.0	<1 ug/L	110	80-120	
1,2-Dichlorobenzene	54.3 ug/L	1	ug/L	50.0	<1 ug/L	109	70-120	
1,2-Dichloroethane	52.7 ug/L	1	ug/L	50.0	<1 ug/L	105	70-130	
1,2-Dichloropropane	51.4 ug/L	1	ug/L	50.0	<1 ug/L	103	75-125	
1,3,5-Trimethylbenzene	53.1 ug/L	1	ug/L	50.0	<1 ug/L	106	75-125	
1,3-Dichlorobenzene	51.3 ug/L	1	ug/L	50.0	<1 ug/L	103	75-125	
1,3-Dichloropropane	51.5 ug/L	1	ug/L	50.0	<1 ug/L	103	75-125	
1,4-Dichlorobenzene	52.6 ug/L	1	ug/L	50.0	<1 ug/L	105	75-125	
2,2-Dichloropropane	52.2 ug/L	2	ug/L	50.0	<2 ug/L	104	70-135	
2-Butanone (MEK)	52.0 ug/L	10	ug/L	50.0	<10 ug/L	104	30-150	
2-Chlorotoluene	53.5 ug/L	1	ug/L	50.0	<1 ug/L	107	75-125	
2-Hexanone (MBK)	60.2 ug/L	5	ug/L	50.0	<5 ug/L	120	55-130	
4-Chlorotoluene	51.0 ug/L	1	ug/L	50.0	<1 ug/L	102	75-130	
4-Isopropyltoluene	52.5 ug/L	1	ug/L	50.0	<1 ug/L	105	75-130	
4-Methyl-2-pentanone (MIBK)	56.0 ug/L	5	ug/L	50.0	<5 ug/L	112	60-135	
Acetone	52.3 ug/L	10	ug/L	50.0	<10 ug/L	102	40-140	
Benzene	51.9 ug/L	1	ug/L	50.0	<1 ug/L	104	80-120	
Bromobenzene	52.9 ug/L	1	ug/L	50.0	<1 ug/L	106	75-125	
Bromochloromethane	55.9 ug/L	1	ug/L	50.0	<1 ug/L	112	65-130	
Bromodichloromethane	57.3 ug/L	0.5	ug/L	50.0	<0.5 ug/L	115	75-120	
Bromoform	52.4 ug/L	1	ug/L	50.0	<1 ug/L	105	70-130	
Bromomethane	43.4 ug/L	1	ug/L	50.0	<1 ug/L	86.7	30-145	
Carbon disulfide	33.1 ug/L	10	ug/L	50.0	<10 ug/L	66.2	35-160	
Carbon tetrachloride	51.5 ug/L	1	ug/L	50.0	<1 ug/L	103	65-140	
Chlorobenzene	51.6 ug/L	1	ug/L	50.0	<1 ug/L	103	80-120	
Chloroethane	48.3 ug/L	1	ug/L	50.0	<1 ug/L	96.6	60-135	
Chloroform	51.0 ug/L	0.5	ug/L	50.0	<0.5 ug/L	102	65-135	
Chloromethane	44.9 ug/L	1	ug/L	50.0	<1 ug/L	89.8	40-125	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike (BZJ0788-MS1)	Source:	16J0614-	01	Prepare	d & Analyze	d: 10/26/2	016	
cis-1,2-Dichloroethylene	51.8 ug/L	1	ug/L	50.0	<1 ug/L	104	70-125	
cis-1,3-Dichloropropene	47.8 ug/L	1	ug/L	50.0	<1 ug/L	95.6	70-130	
Dibromochloromethane	58.1 ug/L	1	ug/L	50.0	<1 ug/L	116	60-135	
Dibromomethane	54.4 ug/L	1	ug/L	50.0	<1 ug/L	109	75-125	
Dichlorodifluoromethane	48.1 ug/L	1	ug/L	50.0	<1 ug/L	96.2	30-155	
Ethylbenzene	52.3 ug/L	1	ug/L	50.0	<1 ug/L	105	75-125	
Hexachlorobutadiene	49.5 ug/L	1	ug/L	50.0	<1 ug/L	99.1	50-140	
Isopropylbenzene	49.4 ug/L	1	ug/L	50.0	<1 ug/L	98.9	75-125	
m+p-Xylenes	102 ug/L	2	ug/L	100	<2 ug/L	102	75-130	
Methylene chloride	54.8 ug/L	4	ug/L	50.0	<4 ug/L	108	55-140	
Methyl-t-butyl ether (MTBE)	53.3 ug/L	1	ug/L	50.0	<1 ug/L	106	65-125	
Naphthalene	56.5 ug/L	1	ug/L	50.0	<1 ug/L	113	55-140	
n-Butylbenzene	53.8 ug/L	1	ug/L	50.0	<1 ug/L	108	70-135	
n-Propylbenzene	52.3 ug/L	1	ug/L	50.0	<1 ug/L	105	70-130	
o-Xylene	53.1 ug/L	1	ug/L	50.0	<1 ug/L	106	80-120	
sec-Butylbenzene	52.7 ug/L	1	ug/L	50.0	<1 ug/L	105	70-125	
Styrene	53.6 ug/L	1	ug/L	50.0	<1 ug/L	107	65-135	
tert-Butylbenzene	52.9 ug/L	1	ug/L	50.0	<1 ug/L	106	70-130	
Tetrachloroethylene (PCE)	48.5 ug/L	1	ug/L	50.0	<1 ug/L	96.9	45-150	
Toluene	52.6 ug/L	1	ug/L	50.0	<1 ug/L	105	75-120	
trans-1,2-Dichloroethylene	53.1 ug/L	1	ug/L	50.0	<1 ug/L	106	60-140	
trans-1,3-Dichloropropene	51.4 ug/L	1	ug/L	50.0	<1 ug/L	103	55-140	
Trichloroethylene	47.8 ug/L	1	ug/L	50.0	<1 ug/L	95.7	70-125	
Trichlorofluoromethane	46.8 ug/L	1	ug/L	50.0	<1 ug/L	93.6	60-145	
Vinyl chloride	46.4 ug/L	0.5	ug/L	50.0	<0.5 ug/L	92.8	50-145	
Surr: 1,2-Dichloroethane-d4	51.9		ug/L	50.0	ug/L	104	70-120	
Surr: 4-Bromofluorobenzene	51.1		ug/L	50.0	ug/L	102	75-120	
Surr: Dibromofluoromethane	50.8		ug/L	50.0	ug/L	102	80-119	
Surr: Toluene-d8	50.5		ug/L	50.0	ug/L	101	85-120	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZJ0788-MSD1)	Source	: 16J0614	-01	Prepare	ed & Analyzed	d: 10/26/2	016			
1,1,1,2-Tetrachloroethane	54.4 ug/L	0.4	ug/L	50.0	<0.4 ug/L	109	80-130	11.0	30	
1,1,1-Trichloroethane	57.2 ug/L	1	ug/L	50.0	<1 ug/L	114	65-130	7.46	30	
1,1,2,2-Tetrachloroethane	57.6 ug/L	0.4	ug/L	50.0	<0.4 ug/L	115	65-130	8.09	30	
1,1,2-Trichloroethane	56.7 ug/L	1	ug/L	50.0	<1 ug/L	113	75-125	6.84	30	
1,1-Dichloroethane	56.4 ug/L	1	ug/L	50.0	<1 ug/L	113	70-135	8.17	30	
1,1-Dichloroethylene	52.8 ug/L	1	ug/L	50.0	<1 ug/L	106	70-130	11.0	30	
1,1-Dichloropropene	53.1 ug/L	1	ug/L	50.0	<1 ug/L	106	75-135	9.30	30	
1,2,3-Trichlorobenzene	59.8 ug/L	1	ug/L	50.0	<1 ug/L	119	55-140	8.96	30	
1,2,3-Trichloropropane	55.2 ug/L	1	ug/L	50.0	<1 ug/L	110	75-125	7.05	30	
1,2,4-Trichlorobenzene	56.4 ug/L	1	ug/L	50.0	<1 ug/L	112	65-135	7.91	30	
1,2,4-Trimethylbenzene	57.2 ug/L	1	ug/L	50.0	<1 ug/L	114	75-130	7.49	30	
1,2-Dibromo-3-chloropropane (DBCP)	54.6 ug/L	4	ug/L	50.0	<4 ug/L	109	50-130	7.79	30	
1,2-Dibromoethane (EDB)	60.3 ug/L	1	ug/L	50.0	<1 ug/L	121	80-120	9.36	30	С
1,2-Dichlorobenzene	57.9 ug/L	1	ug/L	50.0	<1 ug/L	116	70-120	6.43	30	
1,2-Dichloroethane	56.8 ug/L	1	ug/L	50.0	<1 ug/L	114	70-130	7.45	30	
1,2-Dichloropropane	54.9 ug/L	1	ug/L	50.0	<1 ug/L	110	75-125	6.70	30	
1,3,5-Trimethylbenzene	57.6 ug/L	1	ug/L	50.0	<1 ug/L	115	75-125	8.11	30	
1,3-Dichlorobenzene	56.4 ug/L	1	ug/L	50.0	<1 ug/L	113	75-125	9.46	30	
1,3-Dichloropropane	56.1 ug/L	1	ug/L	50.0	<1 ug/L	112	75-125	8.55	30	
1,4-Dichlorobenzene	57.6 ug/L	1	ug/L	50.0	<1 ug/L	115	75-125	9.12	30	
2,2-Dichloropropane	57.2 ug/L	2	ug/L	50.0	<2 ug/L	114	70-135	9.13	30	
2-Butanone (MEK)	50.9 ug/L	10	ug/L	50.0	<10 ug/L	102	30-150	2.25	30	
2-Chlorotoluene	58.5 ug/L	1	ug/L	50.0	<1 ug/L	117	75-125	8.80	30	
2-Hexanone (MBK)	58.0 ug/L	5	ug/L	50.0	<5 ug/L	116	55-130	3.84	30	
4-Chlorotoluene	55.4 ug/L	1	ug/L	50.0	<1 ug/L	111	75-130	8.30	30	
4-Isopropyltoluene	57.2 ug/L	1	ug/L	50.0	<1 ug/L	114	75-130	8.44	30	
4-Methyl-2-pentanone (MIBK)	54.4 ug/L	5	ug/L	50.0	<5 ug/L	109	60-135	2.90	30	
Acetone	50.2 ug/L	10	ug/L	50.0	<10 ug/L	97.9	40-140	4.08	30	
Benzene	57.4 ug/L	1	ug/L	50.0	<1 ug/L	115	80-120	10.0	30	
Bromobenzene	58.0 ug/L	1	ug/L	50.0	<1 ug/L	116	75-125	9.23	30	
Bromochloromethane	60.9 ug/L	1	ug/L	50.0	<1 ug/L	122	65-130	8.50	30	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2

11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZJ0788-MSD1)	Source:	16J0614	-01	Prepare	ed & Analyzed	d: 10/26/2	016			
Bromodichloromethane	61.0 ug/L	0.5	ug/L	50.0	<0.5 ug/L	122	75-120	6.19	30	С
Bromoform	56.3 ug/L	1	ug/L	50.0	<1 ug/L	113	70-130	7.10	30	
Bromomethane	51.4 ug/L	1	ug/L	50.0	<1 ug/L	103	30-145	16.9	30	
Carbon disulfide	32.6 ug/L	10	ug/L	50.0	<10 ug/L	65.1	35-160	1.65	30	
Carbon tetrachloride	56.7 ug/L	1	ug/L	50.0	<1 ug/L	113	65-140	9.61	30	
Chlorobenzene	57.6 ug/L	1	ug/L	50.0	<1 ug/L	115	80-120	10.9	30	
Chloroethane	55.4 ug/L	1	ug/L	50.0	<1 ug/L	111	60-135	13.7	30	
Chloroform	55.2 ug/L	0.5	ug/L	50.0	<0.5 ug/L	110	65-135	7.85	30	
Chloromethane	51.6 ug/L	1	ug/L	50.0	<1 ug/L	103	40-125	13.9	30	
cis-1,2-Dichloroethylene	57.6 ug/L	1	ug/L	50.0	<1 ug/L	115	70-125	10.5	30	
cis-1,3-Dichloropropene	51.4 ug/L	1	ug/L	50.0	<1 ug/L	103	70-130	7.28	30	
Dibromochloromethane	61.7 ug/L	1	ug/L	50.0	<1 ug/L	123	60-135	5.95	30	
Dibromomethane	59.4 ug/L	1	ug/L	50.0	<1 ug/L	119	75-125	8.80	30	
Dichlorodifluoromethane	54.2 ug/L	1	ug/L	50.0	<1 ug/L	108	30-155	11.9	30	
Ethylbenzene	58.5 ug/L	1	ug/L	50.0	<1 ug/L	117	75-125	11.2	30	
Hexachlorobutadiene	55.2 ug/L	1	ug/L	50.0	<1 ug/L	110	50-140	10.8	30	
Isopropylbenzene	55.9 ug/L	1	ug/L	50.0	<1 ug/L	112	75-125	12.2	30	
m+p-Xylenes	114 ug/L	2	ug/L	100	<2 ug/L	114	75-130	11.2	30	
Methylene chloride	59.5 ug/L	4	ug/L	50.0	<4 ug/L	117	55-140	8.13	30	
Methyl-t-butyl ether (MTBE)	57.2 ug/L	1	ug/L	50.0	<1 ug/L	114	65-125	7.02	30	
Naphthalene	61.1 ug/L	1	ug/L	50.0	<1 ug/L	122	55-140	7.83	30	
n-Butylbenzene	59.2 ug/L	1	ug/L	50.0	<1 ug/L	118	70-135	9.53	30	
n-Propylbenzene	56.9 ug/L	1	ug/L	50.0	<1 ug/L	114	70-130	8.39	30	
o-Xylene	59.1 ug/L	1	ug/L	50.0	<1 ug/L	118	80-120	10.7	30	
sec-Butylbenzene	57.3 ug/L	1	ug/L	50.0	<1 ug/L	115	70-125	8.38	30	
Styrene	60.2 ug/L	1	ug/L	50.0	<1 ug/L	120	65-135	11.7	30	
tert-Butylbenzene	58.2 ug/L	1	ug/L	50.0	<1 ug/L	116	70-130	9.59	30	
Tetrachloroethylene (PCE)	54.2 ug/L	1	ug/L	50.0	<1 ug/L	108	45-150	11.3	30	
Toluene	57.2 ug/L	1	ug/L	50.0	<1 ug/L	114	75-120	8.43	30	
trans-1,2-Dichloroethylene	57.1 ug/L	1	ug/L	50.0	<1 ug/L	114	60-140	7.24	30	
trans-1,3-Dichloropropene	54.8 ug/L	1	ug/L	50.0	<1 ug/L	110	55-140	6.54	30	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZJ0788-MSD1)	Source:	Source: 16J0614-01				d: 10/26/2				
Trichloroethylene	53.3 ug/L	1	ug/L	50.0	<1 ug/L	107	70-125	10.8	30	
Trichlorofluoromethane	51.7 ug/L	1	ug/L	50.0	<1 ug/L	103	60-145	10.0	30	
Vinyl chloride	53.8 ug/L	0.5	ug/L	50.0	<0.5 ug/L	108	50-145	14.7	30	
Surr: 1,2-Dichloroethane-d4	51.0		ug/L	50.0	ug/L	102	70-120			
Surr: 4-Bromofluorobenzene	51.5		ug/L	50.0	ug/L	103	75-120			
Surr: Dibromofluoromethane	49.4		ug/L	50.0	ug/L	98.9	80-119			
Surr: Toluene-d8	50.6		ug/L	50.0	ug/L	101	85-120			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZJ0826 - SW3510C

Prepared: 10/28/2016 Analyzed: 11/01/2016	Batch B230020 - 3W3310C				
1,2,4-Trichlorobenzene <10.0 ug/L 10.0 ug/L 1,2-Dichlorobenzene <10.0 ug/L 10.0 ug/L 1,2-Diphenylhydrazine <10.0 ug/L 10.0 ug/L 1,3-Dichlorobenzene <10.0 ug/L 10.0 ug/L 1,3-Dinitrobenzene <2.50 ug/L 2.50 ug/L 1,4-Dichlorobenzene <10.0 ug/L 10.0 ug/L 1,4-Dichlorophenol <10.0 ug/L 10.0 ug/L 2,4,5-Trichlorophenol <10.0 ug/L 10.0 ug/L 2,4,5-Trichlorophenol <10.0 ug/L 10.0 ug/L 2,4-Dirichlorophenol <10.0 ug/L 10.0 ug/L 2,4-Dinitrophenol <50.0 ug/L 0.50 ug/L 2,4-Dinitrophenol <50.0 ug/L 0.50 ug/L 2,4-Dinitrobluene <10.0 ug/L 10.0 ug/L 2,6-Dichlorophenol <10.0 ug/L 10.0 ug/L 2,6-Dinitrobluene <10.0 ug/L 10.0 ug/L 2,C-Diorophenol <10.0 ug/L 10.0 ug/L 2,C-Diorophenol <10.0 ug/L 10.0 ug/L	•				Prepared: 10/28/2016 Analyzed: 11/01/2016
1,2-Dichlorobenzene <10.0 ug/L	1,2,4,5-Tetrachlorobenzene	<10.0 ug/L	10.0	ug/L	
1,2-Diphenylhydrazine <10.0 ug/L	1,2,4-Trichlorobenzene	<10.0 ug/L	10.0	ug/L	
1,3-Dichlorobenzene <10.0 ug/L	1,2-Dichlorobenzene	<10.0 ug/L	10.0	ug/L	
1,3-Dinitrobenzene <2.50 ug/L	1,2-Diphenylhydrazine	<10.0 ug/L	10.0	ug/L	
1,4-Dichlorobenzene <10.0 ug/L	1,3-Dichlorobenzene	<10.0 ug/L	10.0	ug/L	
1-Naphthylamine <10.0 ug/L	1,3-Dinitrobenzene	<2.50 ug/L	2.50	ug/L	
2,3,4,6-Tetrachlorophenol <10.0 ug/L	1,4-Dichlorobenzene	<10.0 ug/L	10.0	ug/L	
2.4,5-Trichlorophenol <10.0 ug/L	1-Naphthylamine	<10.0 ug/L	10.0	ug/L	
2.4,6-Trichlorophenol <10.0 ug/L	2,3,4,6-Tetrachlorophenol	<10.0 ug/L	10.0	ug/L	
2,4-Dichlorophenol <10.0 ug/L	2,4,5-Trichlorophenol	<10.0 ug/L	10.0	ug/L	
2,4-Dimethylphenol <0.50 ug/L	2,4,6-Trichlorophenol	<10.0 ug/L	10.0	ug/L	
2,4-Dinitrophenol <50.0 ug/L	2,4-Dichlorophenol	<10.0 ug/L	10.0	ug/L	
2,4-Dinitrotoluene <10.0 ug/L	2,4-Dimethylphenol	<0.50 ug/L	0.50	ug/L	
2,6-Dichlorophenol <10.0 ug/L	2,4-Dinitrophenol	<50.0 ug/L	50.0	ug/L	
2,6-Dinitrotoluene <10.0 ug/L	2,4-Dinitrotoluene	<10.0 ug/L	10.0	ug/L	
2-Chloronaphthalene <10.0 ug/L	2,6-Dichlorophenol	<10.0 ug/L	10.0	ug/L	
2-Chlorophenol <10.0 ug/L	2,6-Dinitrotoluene	<10.0 ug/L	10.0	ug/L	
2-Methylnaphthalene <10.0 ug/L	2-Chloronaphthalene	<10.0 ug/L	10.0	ug/L	
2-Naphthylamine <10.0 ug/L	2-Chlorophenol	<10.0 ug/L	10.0	ug/L	
2-Nitroaniline <20.0 ug/L	2-Methylnaphthalene	<10.0 ug/L	10.0	ug/L	
2-Nitrophenol <10.0 ug/L	2-Naphthylamine	<10.0 ug/L	10.0	ug/L	
3,3'-Dichlorobenzidine <10.0 ug/L	2-Nitroaniline	<20.0 ug/L	20.0	ug/L	
3-Methylcholanthrene <10.0 ug/L	2-Nitrophenol	<10.0 ug/L	10.0	ug/L	
3-Nitroaniline <20.0 ug/L	3,3'-Dichlorobenzidine	<10.0 ug/L	10.0	ug/L	
4,6-Dinitro-2-methylphenol <50.0 ug/L	3-Methylcholanthrene	<10.0 ug/L	10.0	ug/L	
4-Aminobiphenyl <10.0 ug/L	3-Nitroaniline	<20.0 ug/L	20.0	ug/L	
4-Bromophenyl phenyl ether <10.0 ug/L	4,6-Dinitro-2-methylphenol	<50.0 ug/L	50.0	ug/L	
4-Chloroaniline <10.0 ug/L 10.0 ug/L	4-Aminobiphenyl	<10.0 ug/L	10.0	ug/L	
	4-Bromophenyl phenyl ether	<10.0 ug/L	10.0	ug/L	
4-Chlorophenyl phenyl ether <10.0 ug/L 10.0 ug/L	4-Chloroaniline	<10.0 ug/L	10.0	ug/L	
	4-Chlorophenyl phenyl ether	<10.0 ug/L	10.0	ug/L	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZJ0826 - SW3510C

Blank (BZJ0826-BLK1)				Prepared: 10/28/2016 Analyzed: 11/01/2016
4-Nitroaniline	<20.0 ug/L	20.0	ug/L	
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	
7,12-Dimethylbenz (a) anthracene	<10.0 ug/L	10.0	ug/L	
Acenaphthene	<10.0 ug/L	10.0	ug/L	
Acenaphthylene	<10.0 ug/L	10.0	ug/L	
Acetophenone	<20.0 ug/L	20.0	ug/L	
Aniline	<50.0 ug/L	50.0	ug/L	
Anthracene	<10.0 ug/L	10.0	ug/L	
Benzidine	<50.0 ug/L	50.0	ug/L	
Benzo (a) anthracene	<0.05 ug/L	0.05	ug/L	
Benzo (a) pyrene	<10.0 ug/L	10.0	ug/L	
Benzo (b) fluoranthene	<10.0 ug/L	10.0	ug/L	
Benzo (g,h,i) perylene	<10.0 ug/L	10.0	ug/L	
Benzo (k) fluoranthene	<10.0 ug/L	10.0	ug/L	
Benzoic acid	<50.0 ug/L	50.0	ug/L	
Benzyl alcohol	<20.0 ug/L	20.0	ug/L	
bis (2-Chloroethoxy) methane	<10.0 ug/L	10.0	ug/L	
bis (2-Chloroethyl) ether	<10.0 ug/L	10.0	ug/L	
bis (2-Chloroisopropyl) ether	<10.0 ug/L	10.0	ug/L	
bis (2-Ethylhexyl) phthalate	<10.0 ug/L	10.0	ug/L	
Butyl benzyl phthalate	<10.0 ug/L	10.0	ug/L	
Chrysene	<10.0 ug/L	10.0	ug/L	
Dibenz (a,h) anthracene	<10.0 ug/L	10.0	ug/L	
Dibenz (a,j) acridine	<10.0 ug/L	10.0	ug/L	
Dibenzofuran	<5.00 ug/L	5.00	ug/L	
Diethyl phthalate	<10.0 ug/L	10.0	ug/L	
Dimethyl phthalate	<10.0 ug/L	10.0	ug/L	
Di-n-butyl phthalate	<10.0 ug/L	10.0	ug/L	
Di-n-octyl phthalate	<10.0 ug/L	10.0	ug/L	
Diphenylamine	<10.0 ug/L	10.0	ug/L	
Ethyl methanesulfonate	<20.0 ug/L	20.0	ug/L	



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Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZJ0826 - SW3510C

Blank (BZJ0826-BLK1)				Prepared: 10/28/2016 Analyzed: 11/01/2016
Fluoranthene	<10.0 ug/L	10.0	ug/L	
Fluorene	<10.0 ug/L	10.0	ug/L	
Hexachlorobenzene	<1.00 ug/L	1.00	ug/L	
Hexachlorobutadiene	<10.0 ug/L	10.0	ug/L	
Hexachlorocyclopentadiene	<10.0 ug/L	10.0	ug/L	
Hexachloroethane	<10.0 ug/L	10.0	ug/L	
Indeno (1,2,3-cd) pyrene	<10.0 ug/L	10.0	ug/L	
Isophorone	<10.0 ug/L	10.0	ug/L	
m+p-Cresols	<10.0 ug/L	10.0	ug/L	
Methyl methanesulfonate	<10.0 ug/L	10.0	ug/L	
Naphthalene	<5.00 ug/L	5.00	ug/L	
Nitrobenzene	<10.0 ug/L	10.0	ug/L	
n-Nitrosodimethylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosodi-n-butylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosodi-n-propylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosodiphenylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosopiperidine	<10.0 ug/L	10.0	ug/L	
o+m+p-Cresols	<10.0 ug/L	10.0	ug/L	
o-Cresol	<10.0 ug/L	10.0	ug/L	
p-(Dimethylamino) azobenzene	<2.50 ug/L	2.50	ug/L	
p-Chloro-m-cresol	<10.0 ug/L	10.0	ug/L	
Pentachloronitrobenzene (quintozene)	<10.0 ug/L	10.0	ug/L	
Pentachlorophenol	<20.0 ug/L	20.0	ug/L	
Phenacetin	<10.0 ug/L	10.0	ug/L	
Phenanthrene	<10.0 ug/L	10.0	ug/L	
Phenol	<10.0 ug/L	10.0	ug/L	
Pronamide	<10.0 ug/L	10.0	ug/L	
Pyrene	<10.0 ug/L	10.0	ug/L	
Pyridine	<10.0 ug/L	10.0	ug/L	
Surr: 2,4,6-Tribromophenol	90.5		ug/L	100 90.5 40-125
Surr: 2-Fluorobiphenyl	47.4		ug/L	50.0 94.8 23-87 S



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Final Report

Client Name: Timmons Group Date Issued:

11/2/2016 15:45

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: **Fulton Gas Works**

Purchase Order:

Source

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZJ0826 - SW3510C										
Blank (BZJ0826-BLK1)				Prepare	d: 10/28/201	6 Analyz	ed: 11/01/20	016		
Surr: 2-Fluorophenol	64.0		ug/L	100		64.0	14-52			S
Surr: Nitrobenzene-d5	46.0		ug/L	50.0		92.0	40-110			
Surr: Phenol-d5	40.1		ug/L	100		40.1	5-33			S
Surr: p-Terphenyl-d14	59.3		ug/L	50.0		119	27-133			
LCS (BZJ0826-BS1)				Prepare	d: 10/28/201	6 Analyz	ed: 11/01/20	016		
1,2,4-Trichlorobenzene	37.2 ug/L	10.0	ug/L	49.7	ug/L	74.9	21.8-66.7			L
1,4-Dichlorobenzene	36.2 ug/L	10.0	ug/L	50.0	ug/L	72.4	20-124			
2,4-Dinitrotoluene	35.8 ug/L	10.0	ug/L	50.0	ug/L	71.5	39-139			
2-Chlorophenol	71.1 ug/L	10.0	ug/L	99.0	ug/L	71.8	35-105			
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	ug/L	36.1	0-125			J
Acenaphthene	36.6 ug/L	10.0	ug/L	49.8	ug/L	73.7	45-110			
n-Nitrosodi-n-propylamine	38.4 ug/L	10.0	ug/L	49.8	ug/L	77.1	35-130			
p-Chloro-m-cresol	73.5 ug/L	10.0	ug/L	100	ug/L	73.5	45-110			
Pentachlorophenol	83.4 ug/L	20.0	ug/L	99.0	ug/L	84.2	40-115			
Phenol	34.5 ug/L	10.0	ug/L	100	ug/L	34.5	0-115			
Pyrene	41.9 ug/L	10.0	ug/L	50.0	ug/L	83.9	50-130			
Surr: 2,4,6-Tribromophenol	88.3		ug/L	100	ug/L	88.3	40-125			
Surr: 2-Fluorobiphenyl	41.1		ug/L	50.0	ug/L	82.3	23-87			
Surr: 2-Fluorophenol	57.2		ug/L	100	ug/L	57.2	14-52			S
Surr: Nitrobenzene-d5	43.1		ug/L	50.0	ug/L	86.1	40-110			
Surr: Phenol-d5	39.3		ug/L	100	ug/L	39.3	5-33			S
Surr: p-Terphenyl-d14	48.5		ug/L	50.0	ug/L	97.1	27-133			
Matrix Spike (BZJ0826-MS1)	Soul	rce: 16J0652	2-03	Prepare	d: 10/28/201	6 Analyz	ed: 11/02/20	016		
1,2,4-Trichlorobenzene	43.1 ug/L	10.4	ug/L	51.8	<10.4 ug/L	83.2	44-142			
1,4-Dichlorobenzene	43.2 ug/L	10.4	ug/L	52.1	<10.4 ug/L	83.0	20-124			
2,4-Dinitrotoluene	41.0 ug/L	10.4	ug/L	52.1	<10.4 ug/L	78.8	39-139			
2-Chlorophenol	76.9 ug/L	10.4	ug/L	103	<10.4 ug/L	74.5	35-105			
4-Nitrophenol	<52.1 ug/L	52.1	ug/L	104	<52.1 ug/L	35.8	0-125			J
Acenaphthene	42.5 ug/L	10.4	ug/L	51.8	<10.4 ug/L	82.1	4-98			
n-Nitrosodi-n-propylamine	44.0 ug/L	10.4	ug/L	51.9	<10.4 ug/L	84.9	35-130			



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Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Surr: p-Terphenyl-d14

Project Number:

36156.015

27-133

90.7

Client Site I.D.: Fulton Gas Works

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZJ0826 - SW3510C Matrix Spike (BZJ0826-MS1) Source: 16J0652-03 Prepared: 10/28/2016 Analyzed: 11/02/2016 p-Chloro-m-cresol 77.9 ug/L 10.4 ug/L 10.4 vg/L 74.8 45-110

46.3

F			3							
Pentachlorophenol	92.4 ug/L	20.8	ug/L	103	<20.8 ug/L	89.6	40-115			
Phenol	36.2 ug/L	10.4	ug/L	104	<10.4 ug/L	34.8	0-115			
Pyrene	46.0 ug/L	10.4	ug/L	52.1	<10.4 ug/L	88.3	50-130			
Surr: 2,4,6-Tribromophenol	90.1		ug/L	104	ug/L	86.5	40-125			
Surr: 2-Fluorobiphenyl	45.2		ug/L	52.1	ug/L	86.8	23-87			
Surr: 2-Fluorophenol	59.4		ug/L	104	ug/L	57.0	14-52			S
Surr: Nitrobenzene-d5	45.8		ug/L	52.1	ug/L	88.0	40-110			
Surr: Phenol-d5	38.5		ug/L	104	ug/L	36.9	5-33			S
Surr: p-Terphenyl-d14	42.0		ug/L	52.1	ug/L	80.7	27-133			
Matrix Spike Dup (BZJ0826-MSD1)	Source	: 16J0652-	-03	Prepare	ed: 10/28/201	6 Analyze	ed: 11/02/2	016		
1,2,4-Trichlorobenzene	41.6 ug/L	10.2	ug/L	50.7	<10.2 ug/L	82.1	44-142	3.42	20	
1,4-Dichlorobenzene	40.7 ug/L	10.2	ug/L	51.0	<10.2 ug/L	79.7	20-124	6.04	20	
2,4-Dinitrotoluene	38.3 ug/L	10.2	ug/L	51.0	<10.2 ug/L	75.1	39-139	6.83	20	
2-Chlorophenol	73.6 ug/L	10.2	ug/L	101	<10.2 ug/L	72.9	35-105	4.27	20	
4-Nitrophenol	<51.0 ug/L	51.0	ug/L	102	<51.0 ug/L	32.2	0-125	12.5	20	J
Acenaphthene	40.6 ug/L	10.2	ug/L	50.8	<10.2 ug/L	80.0	4-98	4.69	20	
n-Nitrosodi-n-propylamine	40.7 ug/L	10.2	ug/L	50.8	<10.2 ug/L	80.0	35-130	7.95	20	
p-Chloro-m-cresol	74.5 ug/L	10.2	ug/L	102	<10.2 ug/L	73.0	45-110	4.41	20	
Pentachlorophenol	90.5 ug/L	20.4	ug/L	101	<20.4 ug/L	89.6	40-115	2.11	20	
Phenol	30.7 ug/L	10.2	ug/L	102	<10.2 ug/L	30.1	0-115	16.4	20	
Pyrene	44.9 ug/L	10.2	ug/L	51.0	<10.2 ug/L	87.9	50-130	2.47	20	
Surr: 2,4,6-Tribromophenol	89.3		ug/L	102	ug/L	87.5	40-125			
Surr: 2-Fluorobiphenyl	43.4		ug/L	51.0	ug/L	85.1	23-87			
Surr: 2-Fluorophenol	51.0		ug/L	102	ug/L	50.0	14-52			
Surr: Nitrobenzene-d5	44.1		ug/L	51.0	ug/L	86.5	40-110			
Surr: Phenol-d5	33.1		ug/L	102	ug/L	32.5	5-33			

ug/L

51.0 ug/L



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZJ0750 - SW3510C

Blank (BZJ0750-BLK1)				Prepared: 10/26/2016 Analyzed: 10/27/2016
PCB as Aroclor 1016	<0.200 ug/L	0.200	ug/L	·
4,4'-DDD	<0.050 ug/L	0.050	ug/L	
PCB as Aroclor 1221	<0.200 ug/L	0.200	ug/L	
PCB as Aroclor 1232	<0.200 ug/L	0.200	ug/L	
4,4'-DDE	<0.050 ug/L	0.050	ug/L	
PCB as Aroclor 1242	<0.200 ug/L	0.200	ug/L	
PCB as Aroclor 1248	<0.200 ug/L	0.200	ug/L	
4,4'-DDT	<0.050 ug/L	0.050	ug/L	
PCB as Aroclor 1254	<0.200 ug/L	0.200	ug/L	
PCB as Aroclor 1260	<0.200 ug/L	0.200	ug/L	
Aldrin	<0.050 ug/L	0.050	ug/L	
alpha-BHC	<0.050 ug/L	0.050	ug/L	
beta-BHC	<0.050 ug/L	0.050	ug/L	
Chlordane	<0.200 ug/L	0.200	ug/L	
delta-BHC	<0.050 ug/L	0.050	ug/L	
Dieldrin	<0.050 ug/L	0.050	ug/L	
Endosulfan I	<0.050 ug/L	0.050	ug/L	
Endosulfan II	<0.050 ug/L	0.050	ug/L	
Endosulfan sulfate	<0.050 ug/L	0.050	ug/L	
Endrin	<0.050 ug/L	0.050	ug/L	
Endrin aldehyde	<0.050 ug/L	0.050	ug/L	
gamma-BHC (Lindane)	<0.050 ug/L	0.050	ug/L	
Heptachlor	<0.050 ug/L	0.050	ug/L	
Heptachlor epoxide	<0.050 ug/L	0.050	ug/L	
Methoxychlor	<0.050 ug/L	0.050	ug/L	
Toxaphene	<1.00 ug/L	1.00	ug/L	
Surr: DCB	0.0800		ug/L	0.200 40.0 30-105
Surr: TCMX	0.120		ug/L	0.200 60.0 18-112
Surr: TCMX	0.150		ug/L	0.200 75.0 30-105
Surr: DCB	0.120		ug/L	0.200 60.0 27-131



Certificate of Analysis

Final Report

Client Name: Timmons Group

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

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Project Number:

36156.015

Client Site I.D.:

Fulton Gas Works

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZJ0750 - SW3510C										

Batch BZJ0750 - SW3510C				_			
LCS (BZJ0750-BS1)							d: 10/27/2016
4,4'-DDD	0.080 ug/L	0.050	ug/L	0.100	•	80.0	23-134
4,4'-DDE	0.090 ug/L	0.050	ug/L	0.100	•	90.0	23-134
4,4'-DDT	0.080 ug/L	0.050	ug/L	0.100		80.0	23-134
Aldrin	0.060 ug/L	0.050	ug/L	0.100	U	60.0	23-134
alpha-BHC	0.050 ug/L	0.050	ug/L	0.100	ug/L	50.0	23-134
beta-BHC	0.070 ug/L	0.050	ug/L	0.100	ug/L	70.0	23-134
delta-BHC	0.070 ug/L	0.050	ug/L	0.100	ug/L	70.0	23-134
Dieldrin	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134
Endosulfan I	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134
Endosulfan II	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134
Endosulfan sulfate	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134
Endrin	0.070 ug/L	0.050	ug/L	0.100	ug/L	70.0	23-134
Endrin aldehyde	0.070 ug/L	0.050	ug/L	0.100	ug/L	70.0	23-134
gamma-BHC (Lindane)	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134
Heptachlor	0.050 ug/L	0.050	ug/L	0.100	ug/L	50.0	23-134
Heptachlor epoxide	0.070 ug/L	0.050	ug/L	0.100	ug/L	70.0	23-134
Methoxychlor	0.090 ug/L	0.050	ug/L	0.100	ug/L	90.0	23-134
Mirex	0.090 ug/L	0.050	ug/L	0.100	ug/L	90.0	23-134
Surr: TCMX	0.110		ug/L	0.200	ug/L	55.0	18-112
Surr: DCB	0.130		ug/L	0.200	ug/L	65.0	27-131
.CS (BZJ0750-BS2)				Prepared	d: 10/26/2	016 Analyze	d: 10/27/2016
PCB as Aroclor 1016	0.740 ug/L	0.200	ug/L		ug/L		40-120
PCB as Aroclor 1260	0.680 ug/L	0.200	ug/L		ug/L		40-120
Toxaphene	1.53 ug/L	1.00	ug/L	2.50	ug/L	61.2	23-134
Surr: DCB	0.110		ug/L	0.200	ug/L	55.0	30-105
Surr: TCMX	0.120		ug/L	0.200	ug/L	60.0	30-105



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

11/2/2016 15:45

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gas Works

Purchase Order:

Source

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZJ0750 - SW3510C										
LCS (BZJ0750-BS3)				Prepared	d: 10/26/201	6 Analyze	d: 10/27/2	016		
Chlordane	1.53 ug/L	0.200	ug/L	2.50	ug/L	61.2	23-134			
Matrix Spike (BZJ0750-MS1)	Sour	ce: 16J054	0-01	Prepared	d: 10/26/201	6 Analyze	d: 10/27/2	016		N
4,4'-DDD	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
4,4'-DDE	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
4,4'-DDT	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Aldrin	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
alpha-BHC	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
beta-BHC	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
delta-BHC	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Dieldrin	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Endosulfan I	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Endosulfan II	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Endosulfan sulfate	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Endrin	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Endrin aldehyde	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
gamma-BHC (Lindane)	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Heptachlor	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Heptachlor epoxide	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Methoxychlor	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Mirex	<0.054 ug/L	0.054	ug/L	0.108	<0.054 ug/L		23-134			
Surr: TCMX	0.129		ug/L	0.215	ug/L	60.0	18-112			
Surr: DCB	0.215		ug/L	0.215	ug/L	100	27-131			
Matrix Spike Dup (BZJ0750-MSD1)	Sour	ce: 16J054	0-01	Prepared	d: 10/26/201	6 Analyze	d: 10/27/2	016		N
4,4'-DDD	<0.053 ug/L	0.053	ug/L	0.105	<0.053 ug/L		23-134		20	
4,4'-DDE	<0.053 ug/L	0.053	ug/L	0.105	<0.053 ug/L		23-134		20	
4,4'-DDT	<0.053 ug/L	0.053	ug/L	0.105	<0.053 ug/L		23-134		20	
Aldrin	<0.053 ug/L	0.053	ug/L	0.105	<0.053 ug/L		23-134		20	
alpha-BHC	<0.053 ug/L	0.053	ug/L	0.105	<0.053 ug/L		23-134		20	
beta-BHC	<0.053 ug/L	0.053	ug/L	0.105	<0.053 ug/L		23-134		20	
delta-BHC	<0.053 ug/L	0.053	ug/L	0.105	<0.053 ug/L		23-134		20	



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Client Name: Timmons Group

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZJ0750 - SW3510C

Matrix Spike Dup (BZJ0750-MSD1)	Source	e: 16J0540	-01	Prepared: 10/26/2016	S Analyze	ed: 10/27/2016		N
Dieldrin	<0.053 ug/L	0.053	ug/L	0.105 <0.053 ug/L		23-134	20	
Endosulfan I	<0.053 ug/L	0.053	ug/L	0.105 <0.053 ug/L		23-134	20	
Endosulfan II	<0.053 ug/L	0.053	ug/L	0.105 <0.053 ug/L		23-134	20	
Endosulfan sulfate	<0.053 ug/L	0.053	ug/L	0.105 <0.053 ug/L		23-134	20	
Endrin	<0.053 ug/L	0.053	ug/L	0.105 <0.053 ug/L		23-134	20	
Endrin aldehyde	<0.053 ug/L	0.053	ug/L	0.105 <0.053 ug/L		23-134	20	
gamma-BHC (Lindane)	<0.053 ug/L	0.053	ug/L	0.105 <0.053 ug/L		23-134	20	
Heptachlor	<0.053 ug/L	0.053	ug/L	0.105 <0.053 ug/L		23-134	20	
Heptachlor epoxide	<0.053 ug/L	0.053	ug/L	0.105 <0.053 ug/L		23-134	20	
Methoxychlor	<0.053 ug/L	0.053	ug/L	0.105 <0.053 ug/L		23-134	20	
Mirex	<0.053 ug/L	0.053	ug/L	0.105 <0.053 ug/L		23-134	20	
Surr: TCMX	0.105		ug/L	0.211 ug/L	50.0	18-112		
Surr: DCB	0.179		ug/L	0.211 ug/L	85.0	27-131		



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Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gas Works

Purchase Order:

Source

Organochlorine Herbicides by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZJ0760 - SW3510C										
Blank (BZJ0760-BLK1)				Prepared	d: 10/26/201	6 Analyze	d: 10/28/2	016		
2,4,5-T	<0.500 ug/L	0.500	ug/L							
2,4,5-TP (Silvex)	<0.500 ug/L	0.500	ug/L							
2,4-D	<0.500 ug/L	0.500	ug/L							
Dinoseb	<0.500 ug/L	0.500	ug/L							
Pentachlorophenol	<0.500 ug/L	0.500	ug/L							
Surr: DCAA	0.722		ug/L	1.11		65.0	60-112			
LCS (BZJ0760-BS1)				Prepared	d: 10/26/201	6 Analyze	d: 10/28/2	016		
2,4,5-T	0.556 ug/L	0.500	ug/L	0.556	ug/L	100	53-144			
2,4,5-TP (Silvex)	0.611 ug/L	0.500	ug/L	0.556	ug/L	110	52-129			
2,4-D	<0.500 ug/L	0.500	ug/L	0.556	ug/L	80.0	53-126			J
Dinoseb	0.667 ug/L	0.500	ug/L	0.556	ug/L	120	60-137			
Pentachlorophenol	<0.500 ug/L	0.500	ug/L	0.556	ug/L	80.0	52-124			J
Surr: DCAA	0.667		ug/L	1.11	ug/L	60.0	60-112			
Matrix Spike (BZJ0760-MS1)	Sour	ce: 16J061	1-01	Prepared	d: 10/26/201	6 Analyze	d: 10/28/2	016		
2,4,5-T	0.611 ug/L	0.500	ug/L	0.556	<0.500 ug/L	110	53-144			
2,4,5-TP (Silvex)	0.611 ug/L	0.500	ug/L	0.556	<0.500 ug/L	110	52-129			
2,4-D	0.611 ug/L	0.500	ug/L	0.556	<0.500 ug/L	110	53-126			
Dinoseb	0.778 ug/L	0.500	ug/L	0.556	<0.500 ug/L	140	60-137			M
Pentachlorophenol	<0.500 ug/L	0.500	ug/L	0.556	<0.500 ug/L	80.0	52-124			J
Surr: DCAA	1.11		ug/L	1.11	ug/L	100	60-112			
Matrix Spike Dup (BZJ0760-MSD1)	Sour	ce: 16J061	1-01	Prepared	d: 10/26/201	6 Analyze	d: 10/28/2	016		
2,4,5-T	0.556 ug/L	0.500	ug/L	0.556	<0.500 ug/L	100	53-144	9.52	20	
2,4,5-TP (Silvex)	0.556 ug/L	0.500	ug/L	0.556	<0.500 ug/L	100	52-129	9.52	20	
2,4-D	0.556 ug/L	0.500	ug/L	0.556	<0.500 ug/L	100	53-126	9.52	20	
Dinoseb	0.611 ug/L	0.500	ug/L	0.556	<0.500 ug/L	110	60-137	24.0	20	Р
Pentachlorophenol	<0.500 ug/L	0.500	ug/L	0.556	<0.500 ug/L	80.0	52-124	0.00	20	J
Surr: DCAA	0.778		ug/L	1.11	ug/L	70.0	60-112			



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Client Name: Timmons Group

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZJ0729 - No Prep Wet Chem										
Blank (BZJ0729-BLK1)				Prepared	& Analyzed	I: 10/26/2	016			
Cyanide	<0.01 mg/L	0.01	mg/L							
LCS (BZJ0729-BS1)				Prepared	& Analyzed	l: 10/26/2	016			
Cyanide	0.24 mg/L	0.01	mg/L	0.250	mg/L	95.2	80-120			
LCS Dup (BZJ0729-BSD1)				Prepared	& Analyzed	l: 10/26/2	016			
Cyanide	0.24 mg/L	0.01	mg/L	0.250	mg/L	97.9	80-120	2.77	20	
Matrix Spike (BZJ0729-MS1)	Sour	ce: 16J0475	-09	Prepared	& Analyzed	l: 10/26/2	016			
Cyanide	0.23 mg/L	0.01	mg/L	0.250 <	0.01 mg/L	90.2	80-120			
Matrix Spike (BZJ0729-MS2)	Sour	ce: 16J0618	-04	Prepared	& Analyzed	I: 10/26/2	016			
Cyanide	0.17 mg/L	0.01	mg/L	0.250 <	0.01 mg/L	66.6	80-120			CI, M
Matrix Spike Dup (BZJ0729-MSD1)	Sour	ce: 16J0475	-09	Prepared	& Analyzed	l: 10/26/2	016			
Cyanide	0.24 mg/L	0.01	mg/L	0.250 <	0.01 mg/L	96.7	80-120	6.93	20	
Matrix Spike Dup (BZJ0729-MSD2)	Sour	ce: 16J0618	-04	Prepared	& Analyzed	I: 10/26/2	016			
Cyanide	0.16 mg/L	0.01	mg/L	0.250 <	0.01 mg/L	64.3	80-120	3.61	20	CI, M
Batch BZJ0771 - No Prep Wet Chem										
Blank (BZJ0771-BLK1)				Prepared	& Analyzed	l: 10/26/2	016			
Chromium, Hexavalent	<0.005 mg/L	0.005	mg/L							
LCS (BZJ0771-BS1)				Prepared & Analyzed: 10/26/2016						
Chromium, Hexavalent	0.100 mg/L	0.005	mg/L	0.100 i	mg/L	100	80-120			



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Client Name: Timmons Group

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZJ0771 - No Prep Wet Chem

Matrix Spike (BZJ0771-MS1)	Source	: 16J0614	-01	Prepared & Analyzed:	10/26/2	016			
Chromium, Hexavalent	0.097 mg/L	0.005	mg/L	0.100 <0.005 mg/L	97.0	80-120			
Matrix Spike Dup (BZJ0771-MSD1)	Source	: 16J0614	-01	Prepared & Analyzed:	10/26/2	016			
Chromium, Hexavalent	0.099 mg/L	0.005	mg/L	0.100 <0.005 mg/L	99.0	80-120	2.04	20	



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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

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Client Site I.D.: Fulton Gas Works Purchase Order:

Analyte	Certifications
EPA200.7 Rev 4.4 in Non-Potable Water	
Beryllium	VELAP,NC,WVDEP
Cadmium	VELAP,NC,WVDEP
Chromium	VELAP,NC,WVDEP
Copper	VELAP,NC,WVDEP
Lead	VELAP,NC,WVDEP
Nickel	VELAP,NC,WVDEP
Silver	VELAP,NC,WVDEP
Zinc	VELAP,NC,WVDEP
EPA200.8 R5.4 in Non-Potable Water	
Arsenic	VELAP,WVDEP
Selenium	VELAP,WVDEP
Thallium	VELAP,WVDEP
EPA245.1 R3.0 in Non-Potable Water	
Mercury	VELAP,NC,WVDEP
SW7196A in Non-Potable Water	
Chromium, Hexavalent	VELAP
SW8081B in Non-Potable Water	
4,4'-DDD	NC,VELAP,WVDEP
4,4'-DDE	NC,VELAP,WVDEP
4,4'-DDT	NC,VELAP,WVDEP
Aldrin	NC,VELAP,WVDEP
alpha-BHC	NC,VELAP,WVDEP
beta-BHC	NC,VELAP,WVDEP
Chlordane	NC,VELAP,WVDEP
delta-BHC	NC,VELAP,WVDEP
Dieldrin	NC,VELAP,WVDEP
Endosulfan I	NC,VELAP,WVDEP
Endosulfan II	NC,VELAP,WVDEP
Endosulfan sulfate	NC,VELAP,WVDEP
Endrin	NC,VELAP,WVDEP
Endrin aldehyde	NC,VELAP,WVDEP
gamma-BHC (Lindane)	NC,VELAP,WVDEP
Heptachlor	NC,VELAP,WVDEP
Heptachlor epoxide	NC,VELAP,WVDEP
Methoxychlor	NC,VELAP,WVDEP



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Richmond VA, 23225

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Client Site I.D.: Fulton Gas Works Purchase Order:

Analyte	Certifications
Toxaphene	NC,VELAP,WVDEP
SW8082A in Non-Potable Water	
PCB as Aroclor 1016	VELAP,NC,WVDEP
PCB as Aroclor 1221	VELAP,NC,WVDEP
PCB as Aroclor 1232	VELAP,NC,WVDEP
PCB as Aroclor 1242	VELAP,NC,WVDEP
PCB as Aroclor 1248	VELAP,NC,WVDEP
PCB as Aroclor 1254	VELAP,NC,WVDEP
PCB as Aroclor 1260	VELAP,NC,WVDEP
SW8151A in Non-Potable Water	
2,4,5-T	VELAP,NC
2,4,5-TP (Silvex)	VELAP,NC
2,4-D	VELAP,NC
Dinoseb	VELAP,NC
Pentachlorophenol	VELAP,NC
SW8260B in Non-Potable Water	
1,1,1,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1,1-Trichloroethane	NC,VELAP,WVDEP
1,1,2,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1,2-Trichloroethane	NC,VELAP,WVDEP
1,1-Dichloroethane	NC,VELAP,WVDEP
1,1-Dichloroethylene	NC,VELAP,WVDEP
1,1-Dichloropropene	NC,VELAP,WVDEP
1,2,3-Trichlorobenzene	NC,VELAP,WVDEP
1,2,3-Trichloropropane	NC,VELAP,WVDEP
1,2,4-Trichlorobenzene	NC,VELAP,WVDEP
1,2,4-Trimethylbenzene	NC,VELAP,WVDEP
1,2-Dibromo-3-chloropropane (DBCP)	NC,VELAP,WVDEP
1,2-Dibromoethane (EDB)	NC,VELAP,WVDEP
1,2-Dichlorobenzene	NC,VELAP,WVDEP
1,2-Dichloroethane	NC,VELAP,WVDEP
1,2-Dichloropropane	NC,VELAP,WVDEP
1,3,5-Trimethylbenzene	NC,WVDEP
1,3-Dichlorobenzene	NC,VELAP,WVDEP
1,3-Dichloropropane	NC,VELAP,WVDEP
1,4-Dichlorobenzene	NC,VELAP,WVDEP
2,2-Dichloropropane	NC,VELAP,WVDEP



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Richmond VA, 23225

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Client Site I.D.: Fulton Gas Works Purchase Order:

Analyte				
2-Butanone (MEK)				
2-Chlorotoluene	NC,VELAP,WVDEP			
2-Hexanone (MBK)	NC,VELAP,WVDEP			
4-Chlorotoluene	NC,VELAP,WVDEP			
4-Isopropyltoluene	NC,VELAP,WVDEP			
4-Methyl-2-pentanone (MIBK)	NC,VELAP,WVDEP			
Acetone	NC,VELAP,WVDEP			
Benzene	NC,VELAP,WVDEP			
Bromobenzene	NC,VELAP,WVDEP			
Bromochloromethane	NC,VELAP,WVDEP			
Bromodichloromethane	NC,VELAP,WVDEP			
Bromoform	NC,VELAP,WVDEP			
Bromomethane	NC,VELAP,WVDEP			
Carbon disulfide	NC,VELAP,WVDEP			
Carbon tetrachloride	NC,VELAP,WVDEP			
Chlorobenzene	NC,VELAP,WVDEP			
Chloroethane	NC,VELAP,WVDEP			
Chloroform	NC,VELAP,WVDEP			
Chloromethane	NC,VELAP,WVDEP			
cis-1,2-Dichloroethylene	NC,VELAP,WVDEP			
cis-1,3-Dichloropropene	NC,VELAP,WVDEP			
Dibromochloromethane	NC,VELAP,WVDEP			
Dibromomethane	NC,VELAP,WVDEP			
Dichlorodifluoromethane	NC,VELAP,WVDEP			
Di-isopropyl ether (DIPE)	NC,VELAP,WVDEP			
Ethylbenzene	NC,VELAP,WVDEP			
Hexachlorobutadiene	NC,VELAP,WVDEP			
lodomethane	NC,VELAP,WVDEP	NC,VELAP,WVDEP		
Isopropylbenzene	NC,VELAP,WVDEP	NC,VELAP,WVDEP		
m+p-Xylenes	NC,VELAP,WVDEP			
Methylene chloride	NC,VELAP,WVDEP			
Methyl-t-butyl ether (MTBE)	NC,VELAP,WVDEP			
Naphthalene	NC,VELAP,WVDEP			
n-Butylbenzene	NC,VELAP,WVDEP			
n-Propylbenzene	NC,VELAP,WVDEP			
o-Xylene	NC,VELAP,WVDEP			
sec-Butylbenzene	NC,VELAP,WVDEP			
Styrene	NC,VELAP,WVDEP			



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Client Site I.D.: Fulton Gas Works Purchase Order:

Analyte	Certifications		
tert-Butylbenzene	NC,VELAP,WVDEP		
Tetrachloroethylene (PCE)	NC,VELAP,WVDEP		
Toluene	NC,VELAP,WVDEP		
trans-1,2-Dichloroethylene	NC,VELAP,WVDEP		
trans-1,3-Dichloropropene	NC,VELAP,WVDEP		
Trichloroethylene	NC,VELAP,WVDEP		
Trichlorofluoromethane	NC,VELAP,WVDEP		
Vinyl acetate	NC,VELAP,WVDEP		
Vinyl chloride	NC,VELAP,WVDEP		
Xylenes, Total	NC,VELAP,WVDEP		
SW8270D in Non-Potable Water			
1,2,4,5-Tetrachlorobenzene	VELAP,WVDEP,NC		
1,2,4-Trichlorobenzene	VELAP,WVDEP,NC		
1,2-Dichlorobenzene	VELAP,WVDEP,NC		
1,2-Diphenylhydrazine	VELAP,WVDEP,NC		
1,3-Dichlorobenzene	VELAP,WVDEP,NC		
1,3-Dinitrobenzene	VELAP,WVDEP,NC		
1,4-Dichlorobenzene	VELAP,WVDEP,NC		
1-Naphthylamine	VELAP,WVDEP,NC		
2,3,4,6-Tetrachlorophenol	VELAP,WVDEP,NC		
2,4,5-Trichlorophenol	VELAP,WVDEP,NC		
2,4,6-Trichlorophenol	VELAP,WVDEP,NC		
2,4-Dichlorophenol	VELAP,WVDEP,NC		
2,4-Dimethylphenol	VELAP,WVDEP,NC		
2,4-Dinitrophenol	VELAP,WVDEP,NC		
2,4-Dinitrotoluene	VELAP,WVDEP,NC		
2,6-Dichlorophenol	VELAP,WVDEP,NC		
2,6-Dinitrotoluene	VELAP,WVDEP,NC		
2-Chloronaphthalene	VELAP,WVDEP,NC		
2-Chlorophenol	VELAP,WVDEP,NC		
2-Methylnaphthalene	VELAP,WVDEP,NC		
2-Naphthylamine	VELAP,WVDEP,NC		
2-Nitroaniline	VELAP,WVDEP,NC		
2-Nitrophenol	VELAP,WVDEP,NC		
3,3'-Dichlorobenzidine	VELAP,WVDEP,NC		
3-Methylcholanthrene	VELAP,WVDEP,NC		
3-Nitroaniline	VELAP,WVDEP,NC		



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Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Analyte	Certifications		
4,6-Dinitro-2-methylphenol	VELAP,WVDEP,NC		
4-Aminobiphenyl	VELAP,WVDEP,NC		
4-Bromophenyl phenyl ether	VELAP,WVDEP,NC		
4-Chloroaniline	VELAP,WVDEP,NC		
4-Chlorophenyl phenyl ether	VELAP,WVDEP,NC		
4-Nitroaniline	VELAP,WVDEP,NC		
4-Nitrophenol	VELAP,WVDEP,NC		
7,12-Dimethylbenz (a) anthracene	VELAP,WVDEP,NC		
Acenaphthene	VELAP,WVDEP,NC		
Acenaphthylene	VELAP,WVDEP,NC		
Acetophenone	VELAP,WVDEP,NC		
Aniline	VELAP,WVDEP,NC		
Anthracene	VELAP,WVDEP,NC		
Benzidine	VELAP,WVDEP,NC		
Benzo (a) anthracene	VELAP,WVDEP,NC		
Benzo (a) pyrene	VELAP,WVDEP,NC		
Benzo (b) fluoranthene	VELAP,WVDEP,NC		
Benzo (g,h,i) perylene	VELAP,WVDEP,NC		
Benzo (k) fluoranthene	VELAP,WVDEP,NC		
Benzoic acid	VELAP,WVDEP,NC		
Benzyl alcohol	VELAP,WVDEP,NC		
bis (2-Chloroethoxy) methane	VELAP,WVDEP,NC		
bis (2-Chloroethyl) ether	VELAP,WVDEP,NC		
bis (2-Chloroisopropyl) ether	VELAP,WVDEP,NC		
bis (2-Ethylhexyl) phthalate	VELAP,WVDEP,NC		
Butyl benzyl phthalate	VELAP,WVDEP,NC		
Chrysene	VELAP,WVDEP,NC		
Dibenz (a,h) anthracene	VELAP,WVDEP,NC		
Dibenz (a,j) acridine	VELAP,WVDEP,NC		
Dibenzofuran	VELAP,WVDEP,NC		
Diethyl phthalate	VELAP,WVDEP,NC		
Dimethyl phthalate	VELAP,WVDEP,NC		
Di-n-butyl phthalate	VELAP,WVDEP,NC		
Di-n-octyl phthalate	VELAP,WVDEP,NC		
Diphenylamine	VELAP,WVDEP,NC		
Ethyl methanesulfonate	VELAP,WVDEP,NC		
Fluoranthene	VELAP,WVDEP,NC		
Fluorene	VELAP,WVDEP,NC		



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Analyte	Certificati		ns		
Hexachlorobenzene		VELAP,WVDEP,	VELAP,WVDEP,NC		
Hexachlorobutadiene		VELAP,WVDEP,NC			
Hexachlorocyclopentadiene		VELAP,WVDEP,	NC		
Hexachloroethane		VELAP,WVDEP,	NC		
Indeno (1,2,3-cd) pyrene		VELAP,WVDEP,	NC		
Isophorone		VELAP,WVDEP,	NC		
m+p-Cresols		VELAP,WVDEP,	NC		
Methyl methanesulfonate		VELAP,WVDEP,	NC		
Naphthalene		VELAP,WVDEP,	NC		
Nitrobenzene		VELAP,WVDEP,	NC		
n-Nitrosodimethylamine		VELAP,WVDEP,	NC		
n-Nitrosodi-n-butylamine		VELAP,WVDEP,	NC		
n-Nitrosodi-n-propylamine		VELAP,WVDEP,NC			
n-Nitrosodiphenylamine		VELAP,WVDEP,NC			
n-Nitrosopiperidine		VELAP,WVDEP,NC			
o+m+p-Cresols		WVDEP,NC			
o-Cresol		VELAP,WVDEP,NC			
p-(Dimethylamino) azobenzene		VELAP,WVDEP,NC			
p-Chloro-m-cresol		VELAP,WVDEP,NC			
Pentachloronitrobenzene (quintozene)		VELAP,WVDEP,NC			
Pentachlorophenol		VELAP,WVDEP,NC			
Phenacetin		VELAP,WVDEP,NC			
Phenanthrene		VELAP,WVDEP,NC			
Phenol		VELAP,WVDEP,NC			
Pronamide		VELAP,WVDEP,NC			
Pyrene		VELAP,WVDEP,NC			
Pyridine		VELAP,WVDEP,NC			
SW9012 in Non-Potable Water					
Cyanide		VELAP			
Code	Description		Lab Number	Expires	
MdDOE	Maryland DE Drinking Water		341	12/31/2016	
NC	North Carolina DENR		495	12/31/2016	
PADEP	NELAC-Pennsylvania		001	10/31/2016	
VELAP	NELAC-Virginia Certificate #8886		460021	06/15/2017	
WVDEP	West Virginia DEP			11/30/2016	
			350		



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Works Purchase Order:

Summary of Data Qualifiers

C Continuing calibarion verification response for this analyte is outside specifications.

CI Residual Chlorine or other oxidizing agent was detected in the container used to analyze this sample.

E Estimated concentration, outside calibration range

L LCS recovery is outside of established acceptance limits

M Matrix spike recovery is outside established acceptance limits

M4 MS/MSD was not spiked

P Duplicate analysis does not meet the acceptance criteria for precision

S Surrogate recovery was outside acceptance criteria

RPD Relative Percent Difference

Qual Qualifers

-RE Denotes sample was re-analyzed

D.F. Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.

TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library .

A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated

and are calculated using an internal standard response factor of 1.

PCBs, Total Total PCBs are defined as the sum of detected Aroclors 1016, 1221, 1232, 1248, 1254, 1260, 1262, and 1268.



RELINQUISHED:

RELINQUISHED:

DATE / TIME

RECEIVED:

1941 REYMET ROAD **RICHMOND, VIRGINIA 23237** (804) 358-8295 PHONE

TG

Fulton Gasworks

Recd: 10/25/2016 Due: 11/01/2016

Chain of Custody Form #: D1331 Rev. 1.0

Effective: Feb 14, 2014 (804)358-8297 FAX **CHAIN OF CUSTODY PAGE** OF ABORATORIES. INC. COMPANY NAME: TIMM on (PROJECT NAME/Quote #: Fulton INVOICE TO: lohn CONTACT: INVOICE CONTACT: SITE NAME: IMM ! INVOICE ADDRESS: PROJECT NUMBER: ADDRESS: INVOICE PHONE #: PHONE #: P.O. #: lia.camons@timmon(com FAX #: EMAIL: Pretreatment Program: Is sample for compliance reporting? YES NO Is sample from a chlorinated supply? YES PWS I.D. #: "AMMON SAMPLER NAME (PRINT): SAMPLER SIGNATURE: **Turn Around Time:** Day(s) Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organ/c A=Air WP=Wipe OT=Other **COMMENTS** Preservative Codes: N=Nitric Acid ANALYSIS / (PRESERVATIVE) Field Filtered (Dissolved Metals) C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol Number of Containers Composite Start Date Composite Start Time Grab Date or Composite Stop Date Grab Time or Composite Stop Time Matrix (See Codes) CLIENT SAMPLE I.D. Time Preserved Composite Grab PLEASE NOTE PRESERVATIVE(S). INTERFERENCE CHECKS or PUMF RATE (L/min) 10/25 \overline{X} Main Well uw 3) 4) 5) 6) 7) 8) 9) 10) RELINQUISHED: DATE / TIME RECE/VED: DATE / TIME QC Data Package LAB USE ONLY **COOLER TEMP**

Level I

Level II

Level III

Level IV

DATE / TIME

16J0614



Sample Preservation Log

Sample Preservation Log Form #: F1301 Rev # 6.0 Effective: Aug 31, 2016

Page 1 of 1

Analyst Performing Check:

Date Performed:

P/A = Present/Absent

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THIS DOCUMENT IS UNCONTROLLED WHEN PRINTED F1301 Sample Preservation Log 6 0.xls

Page 52 of 53



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

11/2/2016 15:45

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas Works

Purchase Order:

Sample Conditions Checklist

Samples Received at:	9.10°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	Yes
Are all volatile organic and TOX containers free of headspace?	Yes
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	Yes
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes

As per Julia Campus TAT is 5 day. Trip blanks (10-21-16 0 15.45) were received and added to the work-order. STT 10-25-16 0 17:00



Certificate of Analysis

Final Report

Laboratory Order ID 16L0048

Client Name: Timmons Group

Date Received: Dec

December 1, 2016 16:07

1001 Boulders Parkway, Suite 300

Date Issued:

December 8, 2016 16:26

Richmond, VA 23225

Project Number:

36156.015

Submitted To:

Julia Campus

Purchase Order:

Client Site I.D.:

Fulton Gasworks

Enclosed are the results of analyses for samples received by the laboratory on 12/01/2016 16:07. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

Mandy Mishra

Quality Assurance Manager

m.mish-

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

This report shall not be reproduced except in full without the expressed and written approval of an authorized representative of Air Water & Soil Laboratories, Inc.









Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

ANALYTICAL REPORT FOR SAMPLES Laboratory Order ID 16L0048

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW 22	16L0048-01	Ground Water	12/01/2016 09:47	12/01/2016 16:07
MW 22	16L0048-02	Ground Water	12/01/2016 11:25	12/01/2016 16:07
MW 22	16L0048-03	Ground Water	12/01/2016 11:50	12/01/2016 16:07
MW 22	16L0048-04	Ground Water	12/01/2016 10:30	12/01/2016 16:07
MW-23	16L0048-05	Ground Water	12/01/2016 10:10	12/01/2016 16:07
MW-24	16L0048-06	Ground Water	12/01/2016 12:50	12/01/2016 16:07
MW-26	16L0048-07	Ground Water	12/01/2016 10:50	12/01/2016 16:07
MW-29	16L0048-08	Ground Water	12/01/2016 12:00	12/01/2016 16:07
MW-30	16L0048-09	Ground Water	12/01/2016 11:40	12/01/2016 16:07
Trip Blank	16L0048-10	Non-Potable Water	11/22/2016 14:25	12/01/2016 16:07
SB-22	16L0048-11	Soil	11/30/2016 10:30	12/01/2016 16:07
SB-23	16L0048-12	Soil	11/30/2016 11:00	12/01/2016 16:07
SB-24	16L0048-13	Soil	11/30/2016 16:45	12/01/2016 16:07
SB-25	16L0048-14	Soil	11/30/2016 15:30	12/01/2016 16:07
SB-26	16L0048-15	Soil	11/30/2016 11:30	12/01/2016 16:07
SB-27	16L0048-16	Soil	11/30/2016 12:30	12/01/2016 16:07
SB-28	16L0048-17	Soil	11/30/2016 13:00	12/01/2016 16:07
SB-29	16L0048-18	Soil	11/30/2016 14:15	12/01/2016 16:07
SB-30	16L0048-19	Soil	11/30/2016 16:45	12/01/2016 16:07

For PET ID analysis (sample #07), there are organic compounds in the diesel range present, but does not match diesel pattern, or any other common petroleum pattern.



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW 22 Laboratory Sample ID: 16L0048-01

Semivolatile Organic Compounds by GCMS 2,3,7,8-TCDD (SIM)	Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
2.3,7,8-TCDD (SIM) 01 EPA625 Not Detected 1 1 12/05/16 09:16 12/07/16 00:46 EWS 1,2,4,5-Tetrachlorobenzene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,2,4-Trichlorobenzene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,2-Diphenylhydrazine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,2-Diphenylhydrazine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,3-Dichlorobenzene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,3-Dinitrobenzene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,3-Dinitrobenzene 01 SW8270D <44.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-Dichlorobenzene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-Dichlorobenzene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,3-Dinitrobenzene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,3-G-Tetrachlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,3-G-Tetrachlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 1,4-G-Trichlorop		<u>'</u>	- Woulde	rtodak	Quai			Date/ Time	Date/ Time	
.2,4,5-Tetrachlorobenzene 01 SW8270D	Semivolatile Organic Compo	ounds by GC	MS							
2,4-Trichlorobenzene	2,3,7,8-TCDD (SIM)	01	EPA625	Not Detected			1	12/05/16 09:16	12/08/16 16:10	EWS
2.2-Dichlorobenzene	1,2,4,5-Tetrachlorobenzene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2.2-Diphenylhydrazine	1,2,4-Trichlorobenzene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
3-Dichlorobenzene	1,2-Dichlorobenzene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
1,3-Dinitrobenzene 01 SW8270D	1,2-Diphenylhydrazine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
1,4-Dichlorobenzene 01 SW8270D <24.4 ug/L	1,3-Dichlorobenzene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Naphthylamine	1,3-Dinitrobenzene	01	SW8270D	<6.10 ug/L		6.10	2	12/05/16 09:16	12/07/16 00:46	EWS
2,3,4,6-Tetrachlorophenol 01 SW8270D	1,4-Dichlorobenzene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2.4.5-Trichlorophenol 01 SW8270D	1-Naphthylamine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2,4,6-Trichlorophenol 01 SW8270D	2,3,4,6-Tetrachlorophenol	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2,4-Dichlorophenol 01 SW8270D	2,4,5-Trichlorophenol	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2,4-Dimethylphenol 01 SW8270D <1.22 ug/L	2,4,6-Trichlorophenol	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2,4-Dinitrophenol 01 SW8270D <122 ug/L C 122 2 12/05/16 09:16 12/07/16 00:46 EWS 2,4-Dinitrotoluene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrotoluene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrotoluene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrotoluene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <48.8 ug/L 48.8 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitropheno	2,4-Dichlorophenol	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2,4-Dinitrotoluene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrotoluene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Chloronaphthalene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Chlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Chlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nethylnaphthalene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Naphthylamine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitroaniline 01 SW8270D <48.8 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitropheno	2,4-Dimethylphenol	01	SW8270D	<1.22 ug/L		1.22	2	12/05/16 09:16	12/07/16 00:46	EWS
2,6-Dichlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2,6-Dinitrotoluene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Chloronaphthalene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Chlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Methylnaphthalene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Naphthylamine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitroaniline 01 SW8270D <48.8 ug/L 48.8 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <48.8 ug/L 48.8 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 S	2,4-Dinitrophenol	01	SW8270D	<122 ug/L	С	122	2	12/05/16 09:16	12/07/16 00:46	EWS
2,6-Dinitrotoluene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Chloronaphthalene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Chlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Methylnaphthalene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Naphthylamine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitroaniline 01 SW8270D <48.8 ug/L 48.8 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <48.8 ug/L 48.8 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS	2,4-Dinitrotoluene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2-Chloronaphthalene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Chlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Methylnaphthalene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Naphthylamine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitroaniline 01 SW8270D <48.8 ug/L 48.8 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24	2,6-Dichlorophenol	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2-Chlorophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Methylnaphthalene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Naphthylamine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitroaniline 01 SW8270D <48.8 ug/L 48.8 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 3-3'-Dichlorobenzidine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS	2,6-Dinitrotoluene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2-Methylnaphthalene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Naphthylamine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitroaniline 01 SW8270D <48.8 ug/L 48.8 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 3,3'-Dichlorobenzidine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS	2-Chloronaphthalene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2-Naphthylamine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitroaniline 01 SW8270D <48.8 ug/L 48.8 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 3,3'-Dichlorobenzidine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 3,3'-Dichlorobenzidine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS	2-Chlorophenol	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2-Nitrophinol 01 SW8270D <48.8 ug/L 48.8 2 12/05/16 09:16 12/07/16 00:46 EWS 2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 3,3'-Dichlorobenzidine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS	2-Methylnaphthalene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
2-Nitrophenol 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS 3,3'-Dichlorobenzidine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS	2-Naphthylamine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
3,3'-Dichlorobenzidine 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS	2-Nitroaniline	01	SW8270D	<48.8 ug/L		48.8	2	12/05/16 09:16	12/07/16 00:46	EWS
•	2-Nitrophenol	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
3-Methylcholanthrene 01 SW8270D <24.4 ug/L 24.4 2 12/05/16 09:16 12/07/16 00:46 EWS	3,3'-Dichlorobenzidine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
	3-Methylcholanthrene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW 22 Laboratory Sample ID: 16L0048-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
3-Nitroaniline	01	SW8270D	<48.8 ug/L	С	48.8	2	12/05/16 09:16	12/07/16 00:46	EWS
4,6-Dinitro-2-methylphenol	01	SW8270D	<122 ug/L	С	122	2	12/05/16 09:16	12/07/16 00:46	EWS
4-Aminobiphenyl	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
4-Bromophenyl phenyl ether	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
4-Chloroaniline	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
4-Chlorophenyl phenyl ether	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
4-Nitroaniline	01	SW8270D	<48.8 ug/L		48.8	2	12/05/16 09:16	12/07/16 00:46	EWS
4-Nitrophenol	01	SW8270D	<122 ug/L		122	2	12/05/16 09:16	12/07/16 00:46	EWS
7,12-Dimethylbenz (a) anthracene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Acenaphthene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Acenaphthylene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Acetophenone	01	SW8270D	<48.8 ug/L		48.8	2	12/05/16 09:16	12/07/16 00:46	EWS
Aniline	01	SW8270D	<122 ug/L	С	122	2	12/05/16 09:16	12/07/16 00:46	EWS
Anthracene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Benzidine	01	SW8270D	<122 ug/L		122	2	12/05/16 09:16	12/07/16 00:46	EWS
Benzo (a) anthracene	01	SW8270D	<0.12 ug/L		0.12	2	12/05/16 09:16	12/07/16 00:46	EWS
Benzo (a) pyrene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Benzo (b) fluoranthene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Benzo (g,h,i) perylene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Benzo (k) fluoranthene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Benzoic acid	01	SW8270D	<122 ug/L		122	2	12/05/16 09:16	12/07/16 00:46	EWS
Benzyl alcohol	01	SW8270D	<48.8 ug/L		48.8	2	12/05/16 09:16	12/07/16 00:46	EWS
bis (2-Chloroethoxy) methane	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
bis (2-Chloroethyl) ether	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
bis (2-Chloroisopropyl) ether	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
bis (2-Ethylhexyl) phthalate	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW 22 Laboratory Sample ID: 16L0048-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Butyl benzyl phthalate	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Chrysene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Dibenz (a,h) anthracene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Dibenz (a,j) acridine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Dibenzofuran	01	SW8270D	<12.2 ug/L		12.2	2	12/05/16 09:16	12/07/16 00:46	EWS
Diethyl phthalate	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Dimethyl phthalate	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Di-n-butyl phthalate	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Di-n-octyl phthalate	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Diphenylamine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Ethyl methanesulfonate	01	SW8270D	<48.8 ug/L		48.8	2	12/05/16 09:16	12/07/16 00:46	EWS
Fluoranthene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Fluorene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Hexachlorobenzene	01	SW8270D	<2.44 ug/L		2.44	2	12/05/16 09:16	12/07/16 00:46	EWS
Hexachlorobutadiene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Hexachlorocyclopentadiene	01	SW8270D	<24.4 ug/L	С	24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Hexachloroethane	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Indeno (1,2,3-cd) pyrene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Isophorone	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
m+p-Cresols	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Methyl methanesulfonate	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Naphthalene	01	SW8270D	16.6 ug/L		12.2	2	12/05/16 09:16	12/07/16 00:46	EWS
Nitrobenzene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
n-Nitrosodimethylamine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
n-Nitrosodi-n-butylamine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
n-Nitrosodi-n-propylamine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2

12/8/2016 16:26

16L0048-01

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW 22 Laboratory Sample ID:

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
n-Nitrosodiphenylamine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
n-Nitrosopiperidine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
o+m+p-Cresols	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
o-Cresol	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
p-(Dimethylamino) azobenzene	01	SW8270D	<6.10 ug/L	С	6.10	2	12/05/16 09:16	12/07/16 00:46	EWS
p-Chloro-m-cresol	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Pentachloronitrobenzene (quintozene)	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Pentachlorophenol	01	SW8270D	<48.8 ug/L		48.8	2	12/05/16 09:16	12/07/16 00:46	EWS
Phenacetin	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Phenanthrene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Phenol	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Pronamide	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Pyrene	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Pyridine	01	SW8270D	<24.4 ug/L		24.4	2	12/05/16 09:16	12/07/16 00:46	EWS
Surr: 2,4,6-Tribromophenol	01	SW8270D	35.5 %	DS	40-125		12/05/16 09:16	12/07/16 00:46	EWS
Surr: 2-Fluorobiphenyl	01	SW8270D	22.1 %	DS	23-87		12/05/16 09:16	12/07/16 00:46	EWS
Surr: 2-Fluorophenol	01	SW8270D	16.8 %		14-52		12/05/16 09:16	12/07/16 00:46	EWS
Surr: Nitrobenzene-d5	01	SW8270D	23.7 %	DS	40-110		12/05/16 09:16	12/07/16 00:46	EWS
Surr: Phenol-d5	01	SW8270D	10.0 %		5-33		12/05/16 09:16	12/07/16 00:46	EWS
Surr: p-Terphenyl-d14	01	SW8270D	31.3 %		27-133		12/05/16 09:16	12/07/16 00:46	EWS
Organochlorine Pesticides ar	nd PCBs by	GC/ECD							
PCB as Aroclor 1016	01	SW8082A	<0.250 ug/L		0.250	1	12/05/16 13:48	12/07/16 20:36	SKS
PCB as Aroclor 1221	01	SW8082A	<0.250 ug/L		0.250	1	12/05/16 13:48	12/07/16 20:36	SKS
PCB as Aroclor 1232	01	SW8082A	<0.250 ug/L		0.250	1	12/05/16 13:48	12/07/16 20:36	SKS
PCB as Aroclor 1242	01	SW8082A	<0.250 ug/L		0.250	1	12/05/16 13:48	12/07/16 20:36	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW 22 Laboratory Sample ID: 16L0048-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides	and PCBs by	GC/ECD							
PCB as Aroclor 1248	01	SW8082A	<0.250 ug/L		0.250	1	12/05/16 13:48	12/07/16 20:36	SKS
PCB as Aroclor 1254	01	SW8082A	<0.250 ug/L		0.250	1	12/05/16 13:48	12/07/16 20:36	SKS
PCB as Aroclor 1260	01	SW8082A	<0.250 ug/L		0.250	1	12/05/16 13:48	12/07/16 20:36	SKS
Surr: DCB	01	SW8082A	150 %	S	30-105		12/05/16 13:48	12/07/16 20:36	SKS
Surr: TCMX	01	SW8082A	100 %		30-105		12/05/16 13:48	12/07/16 20:36	SKS
4,4'-DDD	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
4,4'-DDE	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
4,4'-DDT	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Aldrin	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
alpha-BHC	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
beta-BHC	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Chlordane	01	SW8081B	<0.250 ug/L		0.250	1	12/05/16 13:48	12/07/16 20:36	SKS
delta-BHC	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Dieldrin	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Endosulfan I	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Endosulfan II	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Endosulfan sulfate	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Endrin	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Endrin aldehyde	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
gamma-BHC (Lindane)	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Heptachlor	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Heptachlor epoxide	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Methoxychlor	01	SW8081B	<0.062 ug/L		0.062	1	12/05/16 13:48	12/07/16 20:36	SKS
Toxaphene	01	SW8081B	<1.25 ug/L		1.25	1	12/05/16 13:48	12/07/16 20:36	SKS
Surr: TCMX	01	SW8081B	50.0 %		18-112		12/05/16 13:48	12/07/16 20:36	SKS
Surr: DCB	01	SW8081B	90.0 %		27-131		12/05/16 13:48	12/07/16 20:36	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Client Site I.D.:

16L0048-02 Sample I.D. MW 22 **Laboratory Sample ID:**

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Ser	ries Method	ls							
Silver	02	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:42	CWO
Beryllium	02RE1	EPA200.7 Rev 4.4	<0.0200 mg/L		0.0200	5	12/05/16 15:00	12/06/16 14:25	CWO
Cadmium	02	EPA200.7 Rev 4.4	0.0180 mg/L		0.0040	1	12/05/16 15:00	12/06/16 11:42	CWO
Chromium	02	EPA200.7 Rev 4.4	0.123 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:42	CWO
Copper	02	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:42	CWO
Mercury	02	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	12/06/16 13:59	12/07/16 12:43	RCV
Nickel	02	EPA200.7 Rev 4.4	0.0981 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:42	CWO
Lead	02	EPA200.7 Rev 4.4	0.0859 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:42	CWO
Zinc	02	EPA200.7 Rev 4.4	0.352 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:42	CWO
Metals (Total) by EPA 6000/70	000 Series I	Methods							
Arsenic	02	SW7010	0.0222 mg/L		0.0050	1	12/05/16 15:00	12/06/16 11:08	MWL
Antimony	02	SW7010	<0.0050 mg/L		0.0050	1	12/05/16 15:00	12/06/16 23:54	MWL
Selenium	02	SW7010	<0.0030 mg/L		0.0030	1	12/05/16 15:00	12/07/16 14:18	MWL
Thallium	02	SW7010	<0.0020 mg/L		0.0020	1	12/05/16 15:00	12/06/16 11:47	MWL



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Juli

Julia Campus

Project Number:

36156.015

Client Site I.D.:

Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW 22

Laboratory Sample ID:

16L0048-03

Date/Time Sampled:	12/01/2016 1	1:50							
Parameter	Samp ID	Method	Result Qu		Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Wet Chemistry Analysis									
Cyanide	03	SW9012	0.94 mg/L	I	0.05	5	12/06/16 15:33	12/06/16 15:33	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW 22 Laboratory Sample ID: 16L0048-04

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	04	SW8260B	<0.40 ug/L		0.40	1	12/02/16 13:20	12/02/16 13:20	KCS
1,1,1-Trichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,1,2,2-Tetrachloroethane	04	SW8260B	<0.40 ug/L		0.40	1	12/02/16 13:20	12/02/16 13:20	KCS
1,1,2-Trichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,1-Dichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,1-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,1-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,2,3-Trichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,2,3-Trichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,2,4-Trichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,2,4-Trimethylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,2-Dibromo-3-chloropropane (DBCP)	04	SW8260B	<4.00 ug/L		4.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,2-Dibromoethane (EDB)	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,2-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,2-Dichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,2-Dichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,3,5-Trimethylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,3-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,3-Dichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
1,4-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
2,2-Dichloropropane	04	SW8260B	<2.00 ug/L		2.00	1	12/02/16 13:20	12/02/16 13:20	KCS
2-Butanone (MEK)	04	SW8260B	<10.0 ug/L		10.0	1	12/02/16 13:20	12/02/16 13:20	KCS
2-Chlorotoluene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
2-Hexanone (MBK)	04	SW8260B	<5.00 ug/L		5.00	1	12/02/16 13:20	12/02/16 13:20	KCS
4-Chlorotoluene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
4-Isopropyltoluene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW 22 Laboratory Sample ID: 16L0048-04

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
4-Methyl-2-pentanone (MIBK)	04	SW8260B	<5.00 ug/L		5.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Acetone	04	SW8260B	10.3 ug/L		10.0	1	12/02/16 13:20	12/02/16 13:20	KCS
Benzene	04	SW8260B	11.7 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Bromobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Bromochloromethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Bromodichloromethane	04	SW8260B	<0.50 ug/L		0.50	1	12/02/16 13:20	12/02/16 13:20	KCS
Bromoform	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Bromomethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Carbon disulfide	04	SW8260B	<10.0 ug/L		10.0	1	12/02/16 13:20	12/02/16 13:20	KCS
Carbon tetrachloride	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Chlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Chloroethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Chloroform	04	SW8260B	<0.50 ug/L		0.50	1	12/02/16 13:20	12/02/16 13:20	KCS
Chloromethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
cis-1,2-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
cis-1,3-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Dibromochloromethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Dibromomethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Dichlorodifluoromethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Di-isopropyl ether (DIPE)	04	SW8260B	<5.00 ug/L		5.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Ethylbenzene	04	SW8260B	3.40 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Hexachlorobutadiene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
lodomethane	04	SW8260B	<10.0 ug/L		10.0	1	12/02/16 13:20	12/02/16 13:20	KCS
Isopropylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
m+p-Xylenes	04	SW8260B	<2.00 ug/L		2.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Methylene chloride	04	SW8260B	<4.00 ug/L		4.00	1	12/02/16 13:20	12/02/16 13:20	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW 22 Laboratory Sample ID: 16L0048-04

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Methyl-t-butyl ether (MTBE)	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Naphthalene	04	SW8260B	81.2 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
n-Butylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
n-Propylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
o-Xylene	04	SW8260B	1.60 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
sec-Butylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Styrene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
tert-Butylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Tetrachloroethylene (PCE)	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Toluene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
trans-1,2-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
trans-1,3-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Trichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Trichlorofluoromethane	04	SW8260B	<1.00 ug/L		1.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Vinyl acetate	04	SW8260B	<10.0 ug/L		10.0	1	12/02/16 13:20	12/02/16 13:20	KCS
Vinyl chloride	04	SW8260B	<0.50 ug/L		0.50	1	12/02/16 13:20	12/02/16 13:20	KCS
Xylenes, Total	04	SW8260B	<3.00 ug/L		3.00	1	12/02/16 13:20	12/02/16 13:20	KCS
Surr: 1,2-Dichloroethane-d4	04	SW8260B	101 %		70-120		12/02/16 13:20	12/02/16 13:20	KCS
Surr: 4-Bromofluorobenzene	04	SW8260B	100 %		75-120		12/02/16 13:20	12/02/16 13:20	KCS
Surr: Dibromofluoromethane	04	SW8260B	96.6 %		80-119		12/02/16 13:20	12/02/16 13:20	KCS
Surr: Toluene-d8	04	SW8260B	102 %		85-120		12/02/16 13:20	12/02/16 13:20	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-23 Laboratory Sample ID: 16L0048-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	ries Method	s							
Silver	05	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:44	CWO
Beryllium	05RE1	EPA200.7 Rev 4.4	<0.0200 mg/L		0.0200	5	12/05/16 15:00	12/06/16 14:27	CWO
Cadmium	05	EPA200.7 Rev 4.4	0.0285 mg/L		0.0040	1	12/05/16 15:00	12/06/16 11:44	CWO
Chromium	05	EPA200.7 Rev 4.4	0.147 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:44	CWO
Copper	05	EPA200.7 Rev 4.4	0.0103 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:44	CWO
Mercury	05	EPA245.1 R3.0	0.0003 mg/L		0.0002	1	12/06/16 13:59	12/07/16 12:45	RCV
Nickel	05	EPA200.7 Rev 4.4	0.0593 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:44	CWO
Lead	05	EPA200.7 Rev 4.4	0.186 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:44	CWO
Zinc	05	EPA200.7 Rev 4.4	0.759 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:44	CWO
Metals (Total) by EPA 6000/7	000 Series N	1ethods							
Arsenic	05	SW7010	0.0240 mg/L		0.0050	1	12/05/16 15:00	12/06/16 11:14	MWL
Antimony	05	SW7010	<0.0050 mg/L		0.0050	1	12/05/16 15:00	12/07/16 00:00	MWL
Selenium	05	SW7010	<0.0030 mg/L		0.0030	1	12/05/16 15:00	12/07/16 14:23	MWL
Thallium	05	SW7010	<0.0020 mg/L		0.0020	1	12/05/16 15:00	12/06/16 11:53	MWL
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	05	SW8260B	<2.00 ug/L		2.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,1,1-Trichloroethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,1,2,2-Tetrachloroethane	05	SW8260B	<2.00 ug/L		2.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,1,2-Trichloroethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,1-Dichloroethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,1-Dichloroethylene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,1-Dichloropropene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,2,3-Trichlorobenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,2,3-Trichloropropane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,2,4-Trichlorobenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gasworks

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Purchase Orde

Laboratory Order ID: 16L0048

Analytical Results

Client Site I.D.:

Sample I.D. MW-23 Laboratory Sample ID: 16L0048-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2,4-Trimethylbenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,2-Dibromo-3-chloropropane (DBCP)	05	SW8260B	<20.0 ug/L		20.0	5	12/02/16 13:43	12/02/16 13:43	KCS
1,2-Dibromoethane (EDB)	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,2-Dichlorobenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,2-Dichloroethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,2-Dichloropropane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,3,5-Trimethylbenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,3-Dichlorobenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,3-Dichloropropane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
1,4-Dichlorobenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
2,2-Dichloropropane	05	SW8260B	<10.0 ug/L		10.0	5	12/02/16 13:43	12/02/16 13:43	KCS
2-Butanone (MEK)	05	SW8260B	<50.0 ug/L		50.0	5	12/02/16 13:43	12/02/16 13:43	KCS
2-Chlorotoluene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
2-Hexanone (MBK)	05	SW8260B	<25.0 ug/L		25.0	5	12/02/16 13:43	12/02/16 13:43	KCS
4-Chlorotoluene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
4-Isopropyltoluene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
4-Methyl-2-pentanone (MIBK)	05	SW8260B	<25.0 ug/L		25.0	5	12/02/16 13:43	12/02/16 13:43	KCS
Acetone	05	SW8260B	<50.0 ug/L		50.0	5	12/02/16 13:43	12/02/16 13:43	KCS
Benzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Bromobenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Bromochloromethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Bromodichloromethane	05	SW8260B	<2.50 ug/L		2.50	5	12/02/16 13:43	12/02/16 13:43	KCS
Bromoform	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Bromomethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Carbon disulfide	05	SW8260B	<50.0 ug/L		50.0	5	12/02/16 13:43	12/02/16 13:43	KCS
Carbon tetrachloride	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-23 Laboratory Sample ID: 16L0048-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chlorobenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Chloroethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Chloroform	05	SW8260B	<2.50 ug/L		2.50	5	12/02/16 13:43	12/02/16 13:43	KCS
Chloromethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
cis-1,2-Dichloroethylene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
cis-1,3-Dichloropropene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Dibromochloromethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Dibromomethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Dichlorodifluoromethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Di-isopropyl ether (DIPE)	05	SW8260B	<25.0 ug/L		25.0	5	12/02/16 13:43	12/02/16 13:43	KCS
Ethylbenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Hexachlorobutadiene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
lodomethane	05	SW8260B	<50.0 ug/L		50.0	5	12/02/16 13:43	12/02/16 13:43	KCS
Isopropylbenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
m+p-Xylenes	05	SW8260B	<10.0 ug/L		10.0	5	12/02/16 13:43	12/02/16 13:43	KCS
Methylene chloride	05	SW8260B	<20.0 ug/L		20.0	5	12/02/16 13:43	12/02/16 13:43	KCS
Methyl-t-butyl ether (MTBE)	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Naphthalene	05RE1	SW8260B	<5.00 ug/L		5.00	5	12/05/16 14:33	12/05/16 14:33	KCS
n-Butylbenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
n-Propylbenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
o-Xylene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
sec-Butylbenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Styrene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
tert-Butylbenzene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Tetrachloroethylene (PCE)	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Toluene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-23

'

Laboratory Sample ID:

16L0048-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,2-Dichloroethylene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
trans-1,3-Dichloropropene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Trichloroethylene	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Trichlorofluoromethane	05	SW8260B	<5.00 ug/L		5.00	5	12/02/16 13:43	12/02/16 13:43	KCS
Vinyl acetate	05	SW8260B	<50.0 ug/L		50.0	5	12/02/16 13:43	12/02/16 13:43	KCS
Vinyl chloride	05	SW8260B	<2.50 ug/L		2.50	5	12/02/16 13:43	12/02/16 13:43	KCS
Xylenes, Total	05	SW8260B	<15.0 ug/L		15.0	5	12/02/16 13:43	12/02/16 13:43	KCS
Surr: 1,2-Dichloroethane-d4	05	SW8260B	93.8 %		70-120		12/02/16 13:43	12/02/16 13:43	KCS
Surr: 4-Bromofluorobenzene	05	SW8260B	101 %		75-120		12/02/16 13:43	12/02/16 13:43	KCS
Surr: Dibromofluoromethane	05	SW8260B	98.2 %		80-119		12/02/16 13:43	12/02/16 13:43	KCS
Surr: Toluene-d8	05	SW8260B	101 %		85-120		12/02/16 13:43	12/02/16 13:43	KCS
Surr: 1,2-Dichloroethane-d4	05RE1	SW8260B	97.4 %		70-120		12/05/16 14:33	12/05/16 14:33	KCS
Surr: 4-Bromofluorobenzene	05RE1	SW8260B	94.5 %		75-120		12/05/16 14:33	12/05/16 14:33	KCS
Surr: Dibromofluoromethane	05RE1	SW8260B	101 %		80-119		12/05/16 14:33	12/05/16 14:33	KCS
Surr: Toluene-d8	05RE1	SW8260B	99.1 %		85-120		12/05/16 14:33	12/05/16 14:33	KCS
Semivolatile Organic Compou	unds by GC	MS							
2,3,7,8-TCDD (SIM)	05	EPA625	Not Detected			1	12/05/16 09:16	12/08/16 16:10	EWS
1,2,4,5-Tetrachlorobenzene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
1,2,4-Trichlorobenzene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
1,2-Dichlorobenzene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
1,2-Diphenylhydrazine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
1,3-Dichlorobenzene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
1,3-Dinitrobenzene	05	SW8270D	<6.17 ug/L		6.17	2	12/05/16 09:16	12/07/16 01:23	EWS
1,4-Dichlorobenzene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
1-Naphthylamine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
2,3,4,6-Tetrachlorophenol	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D.

MW-23 Laboratory Sample ID: 16L0048-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,4,5-Trichlorophenol	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
2,4,6-Trichlorophenol	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
2,4-Dichlorophenol	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
2,4-Dimethylphenol	05	SW8270D	<1.23 ug/L		1.23	2	12/05/16 09:16	12/07/16 01:23	EWS
2,4-Dinitrophenol	05	SW8270D	<123 ug/L	С	123	2	12/05/16 09:16	12/07/16 01:23	EWS
2,4-Dinitrotoluene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
2,6-Dichlorophenol	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
2,6-Dinitrotoluene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
2-Chloronaphthalene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
2-Chlorophenol	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
2-Methylnaphthalene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
2-Naphthylamine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
2-Nitroaniline	05	SW8270D	<49.4 ug/L		49.4	2	12/05/16 09:16	12/07/16 01:23	EWS
2-Nitrophenol	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
3,3'-Dichlorobenzidine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
3-Methylcholanthrene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
3-Nitroaniline	05	SW8270D	<49.4 ug/L	С	49.4	2	12/05/16 09:16	12/07/16 01:23	EWS
4,6-Dinitro-2-methylphenol	05	SW8270D	<123 ug/L	С	123	2	12/05/16 09:16	12/07/16 01:23	EWS
4-Aminobiphenyl	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
4-Bromophenyl phenyl ether	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
4-Chloroaniline	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
4-Chlorophenyl phenyl ether	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
4-Nitroaniline	05	SW8270D	<49.4 ug/L		49.4	2	12/05/16 09:16	12/07/16 01:23	EWS
4-Nitrophenol	05	SW8270D	<123 ug/L		123	2	12/05/16 09:16	12/07/16 01:23	EWS
7,12-Dimethylbenz (a) anthracene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Acenaphthene	05	SW8270D	26.1 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-23 Laboratory Sample ID: 16L0048-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
Acenaphthylene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Acetophenone	05	SW8270D	<49.4 ug/L		49.4	2	12/05/16 09:16	12/07/16 01:23	EWS
Aniline	05	SW8270D	<123 ug/L	С	123	2	12/05/16 09:16	12/07/16 01:23	EWS
Anthracene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Benzidine	05	SW8270D	<123 ug/L		123	2	12/05/16 09:16	12/07/16 01:23	EWS
Benzo (a) anthracene	05	SW8270D	<0.12 ug/L		0.12	2	12/05/16 09:16	12/07/16 01:23	EWS
Benzo (a) pyrene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Benzo (b) fluoranthene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Benzo (g,h,i) perylene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Benzo (k) fluoranthene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Benzoic acid	05	SW8270D	<123 ug/L		123	2	12/05/16 09:16	12/07/16 01:23	EWS
Benzyl alcohol	05	SW8270D	<49.4 ug/L		49.4	2	12/05/16 09:16	12/07/16 01:23	EWS
bis (2-Chloroethoxy) methane	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
bis (2-Chloroethyl) ether	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
bis (2-Chloroisopropyl) ether	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
bis (2-Ethylhexyl) phthalate	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Butyl benzyl phthalate	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Chrysene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Dibenz (a,h) anthracene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Dibenz (a,j) acridine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Dibenzofuran	05	SW8270D	<12.3 ug/L		12.3	2	12/05/16 09:16	12/07/16 01:23	EWS
Diethyl phthalate	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Dimethyl phthalate	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Di-n-butyl phthalate	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Di-n-octyl phthalate	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Diphenylamine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-23 Laboratory Sample ID: 16L0048-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Ethyl methanesulfonate	05	SW8270D	<49.4 ug/L		49.4	2	12/05/16 09:16	12/07/16 01:23	EWS
Fluoranthene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Fluorene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Hexachlorobenzene	05	SW8270D	<2.47 ug/L		2.47	2	12/05/16 09:16	12/07/16 01:23	EWS
Hexachlorobutadiene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Hexachlorocyclopentadiene	05	SW8270D	<24.7 ug/L	С	24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Hexachloroethane	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Indeno (1,2,3-cd) pyrene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Isophorone	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
m+p-Cresols	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Methyl methanesulfonate	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Naphthalene	05	SW8270D	19.7 ug/L		12.3	2	12/05/16 09:16	12/07/16 01:23	EWS
Nitrobenzene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
n-Nitrosodimethylamine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
n-Nitrosodi-n-butylamine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
n-Nitrosodi-n-propylamine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
n-Nitrosodiphenylamine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
n-Nitrosopiperidine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
o+m+p-Cresols	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
o-Cresol	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
p-(Dimethylamino) azobenzene	05	SW8270D	<6.17 ug/L	С	6.17	2	12/05/16 09:16	12/07/16 01:23	EWS
p-Chloro-m-cresol	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Pentachloronitrobenzene (quintozene)	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Pentachlorophenol	05	SW8270D	<49.4 ug/L		49.4	2	12/05/16 09:16	12/07/16 01:23	EWS
Phenacetin	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-23 Laboratory Sample ID: 16L0048-05

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Phenanthrene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Phenol	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Pronamide	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Pyrene	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Pyridine	05	SW8270D	<24.7 ug/L		24.7	2	12/05/16 09:16	12/07/16 01:23	EWS
Surr: 2,4,6-Tribromophenol	05	SW8270D	30.9 %	DS	40-125		12/05/16 09:16	12/07/16 01:23	EWS
Surr: 2-Fluorobiphenyl	05	SW8270D	20.0 %	DS	23-87		12/05/16 09:16	12/07/16 01:23	<i>EWS</i>
Surr: 2-Fluorophenol	05	SW8270D	13.8 %	DS	14-52		12/05/16 09:16	12/07/16 01:23	EWS
Surr: Nitrobenzene-d5	05	SW8270D	21.4 %	DS	40-110		12/05/16 09:16	12/07/16 01:23	EWS
Surr: Phenol-d5	05	SW8270D	8.56 %		5-33		12/05/16 09:16	12/07/16 01:23	EWS
Surr: p-Terphenyl-d14	05	SW8270D	24.8 %	DS	27-133		12/05/16 09:16	12/07/16 01:23	EWS
Organochlorine Pesticides an	d PCBs by	GC/ECD							
PCB as Aroclor 1016	05	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 20:55	SKS
PCB as Aroclor 1221	05	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 20:55	SKS
PCB as Aroclor 1232	05	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 20:55	SKS
PCB as Aroclor 1242	05	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 20:55	SKS
PCB as Aroclor 1248	05	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 20:55	SKS
PCB as Aroclor 1254	05	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 20:55	SKS
PCB as Aroclor 1260	05	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 20:55	SKS
Surr: DCB	05	SW8082A	110 %	S	30-105		12/05/16 13:48	12/07/16 20:55	SKS
Surr: TCMX	05	SW8082A	110 %	S	30-105		12/05/16 13:48	12/07/16 20:55	SKS
4,4'-DDD	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
4,4'-DDE	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
4,4'-DDT	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Aldrin	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
alpha-BHC	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

36156.015

Project Number:

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-23 Laboratory Sample ID: 16L0048-05

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Organochlorine Pesticides ar	nd PCBs by	GC/ECD							
beta-BHC	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Chlordane	05	SW8081B	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 20:55	SKS
delta-BHC	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Dieldrin	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Endosulfan I	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Endosulfan II	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Endosulfan sulfate	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Endrin	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Endrin aldehyde	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
gamma-BHC (Lindane)	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Heptachlor	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Heptachlor epoxide	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Methoxychlor	05	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 20:55	SKS
Toxaphene	05	SW8081B	<1.27 ug/L		1.27	1	12/05/16 13:48	12/07/16 20:55	SKS
Surr: TCMX	05	SW8081B	75.0 %		18-112		12/05/16 13:48	12/07/16 20:55	SKS
Surr: DCB	05	SW8081B	75.0 %		27-131		12/05/16 13:48	12/07/16 20:55	SKS
Wet Chemistry Analysis									
Cyanide	05	SW9012	0.48 mg/L	CI	0.05	5	12/06/16 15:57	12/06/16 15:57	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-24 Laboratory Sample ID: 16L0048-06

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	eries Method	s							
Silver	06	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:46	CWO
Beryllium	06RE1	EPA200.7 Rev 4.4	<0.0200 mg/L		0.0200	5	12/05/16 15:00	12/06/16 14:28	CWO
Cadmium	06	EPA200.7 Rev 4.4	0.0075 mg/L		0.0040	1	12/05/16 15:00	12/06/16 11:46	CWO
Chromium	06	EPA200.7 Rev 4.4	0.120 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:46	CWO
Copper	06	EPA200.7 Rev 4.4	0.0622 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:46	CWO
Mercury	06	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	12/06/16 13:59	12/07/16 12:48	RCV
Nickel	06	EPA200.7 Rev 4.4	0.0588 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:46	CWO
Lead	06	EPA200.7 Rev 4.4	0.0618 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:46	CWO
Zinc	06	EPA200.7 Rev 4.4	0.209 mg/L		0.0100	1	12/05/16 15:00	12/06/16 11:46	CWO
Metals (Total) by EPA 6000/7	'000 Series N	1ethods							
Arsenic	06	SW7010	0.0284 mg/L		0.0050	1	12/05/16 15:00	12/06/16 11:20	MWL
Antimony	06	SW7010	<0.0050 mg/L		0.0050	1	12/05/16 15:00	12/07/16 00:05	MWL
Selenium	06	SW7010	0.0032 mg/L		0.0030	1	12/05/16 15:00	12/07/16 14:29	MWL
Thallium	06	SW7010	<0.0020 mg/L		0.0020	1	12/05/16 15:00	12/06/16 11:59	MWL
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	06	SW8260B	<0.40 ug/L		0.40	1	12/02/16 12:57	12/02/16 12:57	KCS
1,1,1-Trichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,1,2,2-Tetrachloroethane	06	SW8260B	<0.40 ug/L		0.40	1	12/02/16 12:57	12/02/16 12:57	KCS
1,1,2-Trichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,1-Dichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,1-Dichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,1-Dichloropropene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,2,3-Trichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,2,3-Trichloropropane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,2,4-Trichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-24 Laboratory Sample ID: 16L0048-06

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2,4-Trimethylbenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,2-Dibromo-3-chloropropane (DBCP)	06	SW8260B	<4.00 ug/L		4.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,2-Dibromoethane (EDB)	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,2-Dichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,2-Dichloroethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,2-Dichloropropane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,3,5-Trimethylbenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,3-Dichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,3-Dichloropropane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
1,4-Dichlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
2,2-Dichloropropane	06	SW8260B	<2.00 ug/L		2.00	1	12/02/16 12:57	12/02/16 12:57	KCS
2-Butanone (MEK)	06	SW8260B	<10.0 ug/L		10.0	1	12/02/16 12:57	12/02/16 12:57	KCS
2-Chlorotoluene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
2-Hexanone (MBK)	06	SW8260B	<5.00 ug/L		5.00	1	12/02/16 12:57	12/02/16 12:57	KCS
4-Chlorotoluene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
4-Isopropyltoluene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
4-Methyl-2-pentanone (MIBK)	06	SW8260B	<5.00 ug/L		5.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Acetone	06	SW8260B	<10.0 ug/L		10.0	1	12/02/16 12:57	12/02/16 12:57	KCS
Benzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Bromobenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Bromochloromethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Bromodichloromethane	06	SW8260B	<0.50 ug/L		0.50	1	12/02/16 12:57	12/02/16 12:57	KCS
Bromoform	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Bromomethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Carbon disulfide	06	SW8260B	<10.0 ug/L		10.0	1	12/02/16 12:57	12/02/16 12:57	KCS
Carbon tetrachloride	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-24 Laboratory Sample ID: 16L0048-06

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chlorobenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Chloroethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Chloroform	06	SW8260B	<0.50 ug/L		0.50	1	12/02/16 12:57	12/02/16 12:57	KCS
Chloromethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
cis-1,2-Dichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
cis-1,3-Dichloropropene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Dibromochloromethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Dibromomethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Dichlorodifluoromethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Di-isopropyl ether (DIPE)	06	SW8260B	<5.00 ug/L		5.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Ethylbenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Hexachlorobutadiene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
lodomethane	06	SW8260B	<10.0 ug/L		10.0	1	12/02/16 12:57	12/02/16 12:57	KCS
Isopropylbenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
m+p-Xylenes	06	SW8260B	<2.00 ug/L		2.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Methylene chloride	06	SW8260B	<4.00 ug/L		4.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Methyl-t-butyl ether (MTBE)	06	SW8260B	1.36 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Naphthalene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
n-Butylbenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
n-Propylbenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
o-Xylene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
sec-Butylbenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Styrene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
tert-Butylbenzene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Tetrachloroethylene (PCE)	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Toluene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-24 Laboratory Sample ID: 16L0048-06

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds b	y GCMS								
trans-1,2-Dichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
trans-1,3-Dichloropropene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Trichloroethylene	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Trichlorofluoromethane	06	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Vinyl acetate	06	SW8260B	<10.0 ug/L		10.0	1	12/02/16 12:57	12/02/16 12:57	KCS
Vinyl chloride	06	SW8260B	<0.50 ug/L		0.50	1	12/02/16 12:57	12/02/16 12:57	KCS
Xylenes, Total	06	SW8260B	<3.00 ug/L		3.00	1	12/02/16 12:57	12/02/16 12:57	KCS
Surr: 1,2-Dichloroethane-d4	06	SW8260B	95.4 %		70-120		12/02/16 12:57	12/02/16 12:57	KCS
Surr: 4-Bromofluorobenzene	06	SW8260B	99.3 %		75-120		12/02/16 12:57	12/02/16 12:57	KCS
Surr: Dibromofluoromethane	06	SW8260B	97.4 %		80-119		12/02/16 12:57	12/02/16 12:57	KCS
Surr: Toluene-d8	06	SW8260B	100 %		85-120		12/02/16 12:57	12/02/16 12:57	KCS
Semivolatile Organic Compound	nds by GC	MS							
2,3,7,8-TCDD (SIM)	06	EPA625	Not Detected			1	12/05/16 09:16	12/08/16 16:10	EWS
1,2,4,5-Tetrachlorobenzene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
1,2,4-Trichlorobenzene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
1,2-Dichlorobenzene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
1,2-Diphenylhydrazine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
1,3-Dichlorobenzene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
1,3-Dinitrobenzene	06	SW8270D	<6.58 ug/L		6.58	2	12/05/16 09:16	12/07/16 02:00	EWS
1,4-Dichlorobenzene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
1-Naphthylamine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2,3,4,6-Tetrachlorophenol	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2,4,5-Trichlorophenol	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2,4,6-Trichlorophenol	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2,4-Dichlorophenol	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2,4-Dimethylphenol	06	SW8270D	<1.32 ug/L		1.32	2	12/05/16 09:16	12/07/16 02:00	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-24 Laboratory Sample ID: 16L0048-06

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compou	unds by GC	MS							
2,4-Dinitrophenol	06	SW8270D	<132 ug/L	С	132	2	12/05/16 09:16	12/07/16 02:00	EWS
2,4-Dinitrotoluene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2,6-Dichlorophenol	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2,6-Dinitrotoluene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2-Chloronaphthalene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2-Chlorophenol	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2-Methylnaphthalene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2-Naphthylamine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
2-Nitroaniline	06	SW8270D	<52.6 ug/L		52.6	2	12/05/16 09:16	12/07/16 02:00	EWS
2-Nitrophenol	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
3,3'-Dichlorobenzidine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
3-Methylcholanthrene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
3-Nitroaniline	06	SW8270D	<52.6 ug/L	С	52.6	2	12/05/16 09:16	12/07/16 02:00	EWS
4,6-Dinitro-2-methylphenol	06	SW8270D	<132 ug/L	С	132	2	12/05/16 09:16	12/07/16 02:00	EWS
4-Aminobiphenyl	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
4-Bromophenyl phenyl ether	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
4-Chloroaniline	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
4-Chlorophenyl phenyl ether	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
4-Nitroaniline	06	SW8270D	<52.6 ug/L		52.6	2	12/05/16 09:16	12/07/16 02:00	EWS
4-Nitrophenol	06	SW8270D	<132 ug/L		132	2	12/05/16 09:16	12/07/16 02:00	EWS
7,12-Dimethylbenz (a)	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
anthracene	00	014/00700	*00.0!		00.0	0	40/05/40 00:40	40/07/40 00:00	EMO
Acenaphthene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Acenaphthylene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Acetophenone	06	SW8270D	<52.6 ug/L		52.6	2	12/05/16 09:16	12/07/16 02:00	EWS
Aniline	06	SW8270D	<132 ug/L	С	132	2	12/05/16 09:16	12/07/16 02:00	EWS
Anthracene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-24 Laboratory Sample ID: 16L0048-06

Parameter	Samp ID	Method	Result C	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
Benzidine	06	SW8270D	<132 ug/L		132	2	12/05/16 09:16	12/07/16 02:00	EWS
Benzo (a) anthracene	06	SW8270D	<0.13 ug/L		0.13	2	12/05/16 09:16	12/07/16 02:00	EWS
Benzo (a) pyrene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Benzo (b) fluoranthene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Benzo (g,h,i) perylene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Benzo (k) fluoranthene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Benzoic acid	06	SW8270D	<132 ug/L		132	2	12/05/16 09:16	12/07/16 02:00	EWS
Benzyl alcohol	06	SW8270D	<52.6 ug/L		52.6	2	12/05/16 09:16	12/07/16 02:00	EWS
bis (2-Chloroethoxy) methane	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
bis (2-Chloroethyl) ether	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
bis (2-Chloroisopropyl) ether	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
bis (2-Ethylhexyl) phthalate	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Butyl benzyl phthalate	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Chrysene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Dibenz (a,h) anthracene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Dibenz (a,j) acridine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Dibenzofuran	06	SW8270D	<13.2 ug/L		13.2	2	12/05/16 09:16	12/07/16 02:00	EWS
Diethyl phthalate	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Dimethyl phthalate	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Di-n-butyl phthalate	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Di-n-octyl phthalate	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Diphenylamine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Ethyl methanesulfonate	06	SW8270D	<52.6 ug/L		52.6	2	12/05/16 09:16	12/07/16 02:00	EWS
Fluoranthene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Fluorene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Hexachlorobenzene	06	SW8270D	<2.63 ug/L		2.63	2	12/05/16 09:16	12/07/16 02:00	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-24 Laboratory Sample ID: 16L0048-06

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Hexachlorobutadiene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Hexachlorocyclopentadiene	06	SW8270D	<26.3 ug/L	С	26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Hexachloroethane	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Indeno (1,2,3-cd) pyrene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Isophorone	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
m+p-Cresols	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Methyl methanesulfonate	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Naphthalene	06	SW8270D	<13.2 ug/L		13.2	2	12/05/16 09:16	12/07/16 02:00	EWS
Nitrobenzene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
n-Nitrosodimethylamine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
n-Nitrosodi-n-butylamine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
n-Nitrosodi-n-propylamine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
n-Nitrosodiphenylamine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
n-Nitrosopiperidine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
o+m+p-Cresols	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
o-Cresol	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
p-(Dimethylamino) azobenzene	06	SW8270D	<6.58 ug/L	С	6.58	2	12/05/16 09:16	12/07/16 02:00	EWS
p-Chloro-m-cresol	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Pentachloronitrobenzene (quintozene)	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Pentachlorophenol	06	SW8270D	<52.6 ug/L		52.6	2	12/05/16 09:16	12/07/16 02:00	EWS
Phenacetin	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Phenanthrene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Phenol	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Pronamide	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Pyrene	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-24 Laboratory Sample ID: 16L0048-06

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Pyridine	06	SW8270D	<26.3 ug/L		26.3	2	12/05/16 09:16	12/07/16 02:00	EWS
Surr: 2,4,6-Tribromophenol	06	SW8270D	8.91 %	DS	40-125		12/05/16 09:16	12/07/16 02:00	EWS
Surr: 2-Fluorobiphenyl	06	SW8270D	4.56 %	DS	23-87		12/05/16 09:16	12/07/16 02:00	EWS
Surr: 2-Fluorophenol	06	SW8270D	13.0 %	DS	14-52		12/05/16 09:16	12/07/16 02:00	EWS
Surr: Nitrobenzene-d5	06	SW8270D	8.69 %	DS	40-110		12/05/16 09:16	12/07/16 02:00	EWS
Surr: Phenol-d5	06	SW8270D	8.42 %		5-33		12/05/16 09:16	12/07/16 02:00	EWS
Surr: p-Terphenyl-d14	06	SW8270D	6.79 %	DS	27-133		12/05/16 09:16	12/07/16 02:00	EWS
Organochlorine Pesticides an	nd PCBs by (GC/ECD							
PCB as Aroclor 1016	06	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 21:14	SKS
PCB as Aroclor 1221	06	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 21:14	SKS
PCB as Aroclor 1232	06	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 21:14	SKS
PCB as Aroclor 1242	06	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 21:14	SKS
PCB as Aroclor 1248	06	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 21:14	SKS
PCB as Aroclor 1254	06	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 21:14	SKS
PCB as Aroclor 1260	06	SW8082A	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 21:14	SKS
Surr: DCB	06	SW8082A	50.0 %		30-105		12/05/16 13:48	12/07/16 21:14	SKS
Surr: TCMX	06	SW8082A	15.0 %	S	30-105		12/05/16 13:48	12/07/16 21:14	SKS
4,4'-DDD	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
4,4'-DDE	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
4,4'-DDT	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
Aldrin	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
alpha-BHC	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
beta-BHC	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
Chlordane	06	SW8081B	<0.253 ug/L		0.253	1	12/05/16 13:48	12/07/16 21:14	SKS
delta-BHC	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
Dieldrin	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

36156.015

Project Number:

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-24 Laboratory Sample ID: 16L0048-06

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides an	nd PCBs by	GC/ECD							
Endosulfan I	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
Endosulfan II	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
Endosulfan sulfate	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
Endrin	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
Endrin aldehyde	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
gamma-BHC (Lindane)	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
Heptachlor	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
Heptachlor epoxide	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
Methoxychlor	06	SW8081B	<0.063 ug/L		0.063	1	12/05/16 13:48	12/07/16 21:14	SKS
Toxaphene	06	SW8081B	<1.27 ug/L		1.27	1	12/05/16 13:48	12/07/16 21:14	SKS
Surr: TCMX	06	SW8081B	15.0 %	S	18-112		12/05/16 13:48	12/07/16 21:14	SKS
Surr: DCB	06	SW8081B	50.0 %		27-131		12/05/16 13:48	12/07/16 21:14	SKS
Wet Chemistry Analysis									
Cyanide	06	SW9012	0.03 mg/L	CI	0.01	1	12/06/16 17:21	12/06/16 17:21	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

12/8/2016 16:26

16L0048-07

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

Client Site I.D.: **Fulton Gasworks**

Purchase Order:

Laboratory Sample ID:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-26

Date/Time Sampled: 12/01/2016 10:50											
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst		
Semivolatile Hydrocarbons by	y GC										
TPH-Semi-Volatiles (DRO)	07	SW8015C	15.3 mg/L		1.25	4	12/06/16 09:45	12/08/16 12:09	EWS		
Surr: Pentacosane Petroleum Hydrocarbons by	07 G C	SW8015C	100 %		40-160		12/06/16 09:45	12/08/16 12:09	EWS		
Petroleum Identification	07	ASTM	The sample does not match petroleum pattern		0.0	1	12/06/16 09:45	12/08/16 12:09	EWS		



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-29 Laboratory Sample ID: 16L0048-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	eries Method	s							
Silver	08	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:05	CWO
Beryllium	08RE1	EPA200.7 Rev 4.4	<0.0200 mg/L		0.0200	5	12/05/16 15:00	12/06/16 14:30	CWO
Cadmium	80	EPA200.7 Rev 4.4	<0.0040 mg/L		0.0040	1	12/05/16 15:00	12/06/16 12:05	CWO
Chromium	80	EPA200.7 Rev 4.4	0.0167 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:05	CWO
Copper	80	EPA200.7 Rev 4.4	0.0234 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:05	CWO
Mercury	80	EPA245.1 R3.0	0.0007 mg/L		0.0002	1	12/06/16 13:59	12/07/16 12:50	RCV
Nickel	08	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:05	CWO
Lead	08	EPA200.7 Rev 4.4	0.150 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:05	CWO
Zinc	08	EPA200.7 Rev 4.4	0.0955 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:05	CWO
Metals (Total) by EPA 6000/7	'000 Series N	1ethods							
Arsenic	08	SW7010	0.0088 mg/L		0.0050	1	12/05/16 15:00	12/06/16 11:26	MWL
Antimony	80	SW7010	<0.0050 mg/L		0.0050	1	12/05/16 15:00	12/07/16 01:48	MWL
Selenium	80	SW7010	<0.0030 mg/L		0.0030	1	12/05/16 15:00	12/07/16 14:35	MWL
Thallium	80	SW7010	<0.0020 mg/L		0.0020	1	12/05/16 15:00	12/06/16 12:05	MWL
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	08	SW8260B	<0.40 ug/L		0.40	1	12/02/16 12:33	12/02/16 12:33	KCS
1,1,1-Trichloroethane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,1,2,2-Tetrachloroethane	80	SW8260B	<0.40 ug/L		0.40	1	12/02/16 12:33	12/02/16 12:33	KCS
1,1,2-Trichloroethane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,1-Dichloroethane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,1-Dichloroethylene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,1-Dichloropropene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,2,3-Trichlorobenzene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,2,3-Trichloropropane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,2,4-Trichlorobenzene	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-29 Laboratory Sample ID: 16L0048-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds b	y GCMS								
1,2,4-Trimethylbenzene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,2-Dibromo-3-chloropropane (DBCP)	80	SW8260B	<4.00 ug/L		4.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,2-Dibromoethane (EDB)	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,2-Dichlorobenzene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,2-Dichloroethane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,2-Dichloropropane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,3,5-Trimethylbenzene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,3-Dichlorobenzene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,3-Dichloropropane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
1,4-Dichlorobenzene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
2,2-Dichloropropane	80	SW8260B	<2.00 ug/L		2.00	1	12/02/16 12:33	12/02/16 12:33	KCS
2-Butanone (MEK)	80	SW8260B	<10.0 ug/L		10.0	1	12/02/16 12:33	12/02/16 12:33	KCS
2-Chlorotoluene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
2-Hexanone (MBK)	08	SW8260B	<5.00 ug/L		5.00	1	12/02/16 12:33	12/02/16 12:33	KCS
4-Chlorotoluene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
4-Isopropyltoluene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
4-Methyl-2-pentanone (MIBK)	08	SW8260B	<5.00 ug/L		5.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Acetone	80	SW8260B	12.1 ug/L		10.0	1	12/02/16 12:33	12/02/16 12:33	KCS
Benzene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Bromobenzene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Bromochloromethane	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Bromodichloromethane	08	SW8260B	<0.50 ug/L		0.50	1	12/02/16 12:33	12/02/16 12:33	KCS
Bromoform	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Bromomethane	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Carbon disulfide	08	SW8260B	<10.0 ug/L		10.0	1	12/02/16 12:33	12/02/16 12:33	KCS
Carbon tetrachloride	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS



Certificate of Analysis

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Client Name: Timmons Group

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Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-29 Laboratory Sample ID: 16L0048-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chlorobenzene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Chloroethane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Chloroform	80	SW8260B	<0.50 ug/L		0.50	1	12/02/16 12:33	12/02/16 12:33	KCS
Chloromethane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
cis-1,2-Dichloroethylene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
cis-1,3-Dichloropropene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Dibromochloromethane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Dibromomethane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Dichlorodifluoromethane	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Di-isopropyl ether (DIPE)	80	SW8260B	<5.00 ug/L		5.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Ethylbenzene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Hexachlorobutadiene	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
lodomethane	08	SW8260B	<10.0 ug/L		10.0	1	12/02/16 12:33	12/02/16 12:33	KCS
Isopropylbenzene	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
m+p-Xylenes	08	SW8260B	<2.00 ug/L		2.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Methylene chloride	08	SW8260B	<4.00 ug/L		4.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Methyl-t-butyl ether (MTBE)	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Naphthalene	08	SW8260B	1.12 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
n-Butylbenzene	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
n-Propylbenzene	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
o-Xylene	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
sec-Butylbenzene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Styrene	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
tert-Butylbenzene	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Tetrachloroethylene (PCE)	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Toluene	80	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D.

MW-29 Laboratory Sample ID: 16L0048-08

Parameter	Samp ID	Method	Result (Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds b	y GCMS								
trans-1,2-Dichloroethylene	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
trans-1,3-Dichloropropene	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Trichloroethylene	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Trichlorofluoromethane	08	SW8260B	<1.00 ug/L		1.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Vinyl acetate	08	SW8260B	<10.0 ug/L		10.0	1	12/02/16 12:33	12/02/16 12:33	KCS
Vinyl chloride	08	SW8260B	<0.50 ug/L		0.50	1	12/02/16 12:33	12/02/16 12:33	KCS
Xylenes, Total	80	SW8260B	<3.00 ug/L		3.00	1	12/02/16 12:33	12/02/16 12:33	KCS
Surr: 1,2-Dichloroethane-d4	08	SW8260B	96.2 %		70-120		12/02/16 12:33	12/02/16 12:33	KCS
Surr: 4-Bromofluorobenzene	08	SW8260B	99.6 %		75-120		12/02/16 12:33	12/02/16 12:33	KCS
Surr: Dibromofluoromethane	08	SW8260B	95.7 %		80-119		12/02/16 12:33	12/02/16 12:33	KCS
Surr: Toluene-d8	08	SW8260B	101 %		85-120		12/02/16 12:33	12/02/16 12:33	KCS
Semivolatile Organic Compound	nds by GC	MS							
2,3,7,8-TCDD (SIM)	08	EPA625	Not Detected			1	12/05/16 09:16	12/08/16 16:10	EWS
1,2,4,5-Tetrachlorobenzene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
1,2,4-Trichlorobenzene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
1,2-Dichlorobenzene	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
1,2-Diphenylhydrazine	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
1,3-Dichlorobenzene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
1,3-Dinitrobenzene	08	SW8270D	<5.62 ug/L		5.62	2	12/05/16 09:16	12/07/16 02:36	EWS
1,4-Dichlorobenzene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
1-Naphthylamine	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2,3,4,6-Tetrachlorophenol	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2,4,5-Trichlorophenol	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2,4,6-Trichlorophenol	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2,4-Dichlorophenol	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2,4-Dimethylphenol	80	SW8270D	<1.12 ug/L		1.12	2	12/05/16 09:16	12/07/16 02:36	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-29 Laboratory Sample ID: 16L0048-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	unds by GC	MS							
2,4-Dinitrophenol	08	SW8270D	<112 ug/L		112	2	12/05/16 09:16	12/07/16 02:36	EWS
2,4-Dinitrotoluene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2,6-Dichlorophenol	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2,6-Dinitrotoluene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2-Chloronaphthalene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2-Chlorophenol	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2-Methylnaphthalene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2-Naphthylamine	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
2-Nitroaniline	08	SW8270D	<44.9 ug/L		44.9	2	12/05/16 09:16	12/07/16 02:36	EWS
2-Nitrophenol	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
3,3'-Dichlorobenzidine	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
3-Methylcholanthrene	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
3-Nitroaniline	08	SW8270D	<44.9 ug/L		44.9	2	12/05/16 09:16	12/07/16 02:36	EWS
4,6-Dinitro-2-methylphenol	08	SW8270D	<112 ug/L		112	2	12/05/16 09:16	12/07/16 02:36	EWS
4-Aminobiphenyl	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
4-Bromophenyl phenyl ether	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
4-Chloroaniline	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
4-Chlorophenyl phenyl ether	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
4-Nitroaniline	80	SW8270D	<44.9 ug/L		44.9	2	12/05/16 09:16	12/07/16 02:36	EWS
4-Nitrophenol	80	SW8270D	<112 ug/L		112	2	12/05/16 09:16	12/07/16 02:36	EWS
7,12-Dimethylbenz (a) anthracene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Acenaphthene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Acenaphthylene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Acetophenone	80	SW8270D	<44.9 ug/L		44.9	2	12/05/16 09:16	12/07/16 02:36	EWS
Aniline	08	SW8270D	<112 ug/L		112	2	12/05/16 09:16	12/07/16 02:36	EWS
Anthracene	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-29 Laboratory Sample ID: 16L0048-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	nds by GC	MS							
Benzidine	08	SW8270D	<112 ug/L		112	2	12/05/16 09:16	12/07/16 02:36	EWS
Benzo (a) anthracene	80	SW8270D	<0.11 ug/L		0.11	2	12/05/16 09:16	12/07/16 02:36	EWS
Benzo (a) pyrene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Benzo (b) fluoranthene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Benzo (g,h,i) perylene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Benzo (k) fluoranthene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Benzoic acid	80	SW8270D	<112 ug/L		112	2	12/05/16 09:16	12/07/16 02:36	EWS
Benzyl alcohol	80	SW8270D	<44.9 ug/L		44.9	2	12/05/16 09:16	12/07/16 02:36	EWS
bis (2-Chloroethoxy) methane	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
bis (2-Chloroethyl) ether	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
bis (2-Chloroisopropyl) ether	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
bis (2-Ethylhexyl) phthalate	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Butyl benzyl phthalate	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Chrysene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Dibenz (a,h) anthracene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Dibenz (a,j) acridine	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Dibenzofuran	80	SW8270D	<11.2 ug/L		11.2	2	12/05/16 09:16	12/07/16 02:36	EWS
Diethyl phthalate	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Dimethyl phthalate	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Di-n-butyl phthalate	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Di-n-octyl phthalate	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Diphenylamine	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Ethyl methanesulfonate	80	SW8270D	<44.9 ug/L		44.9	2	12/05/16 09:16	12/07/16 02:36	EWS
Fluoranthene	80	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Fluorene	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Hexachlorobenzene	08	SW8270D	<2.25 ug/L		2.25	2	12/05/16 09:16	12/07/16 02:36	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-29 Laboratory Sample ID: 16L0048-08

Parameter	Samp ID	Method	Result	Reportino Qual Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS						
Hexachlorobutadiene	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Hexachlorocyclopentadiene	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Hexachloroethane	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Indeno (1,2,3-cd) pyrene	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Isophorone	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
m+p-Cresols	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Methyl methanesulfonate	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Naphthalene	08	SW8270D	<11.2 ug/L	11.2	2	12/05/16 09:16	12/07/16 02:36	EWS
Nitrobenzene	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
n-Nitrosodimethylamine	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
n-Nitrosodi-n-butylamine	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
n-Nitrosodi-n-propylamine	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
n-Nitrosodiphenylamine	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
n-Nitrosopiperidine	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
o+m+p-Cresols	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
o-Cresol	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
p-(Dimethylamino) azobenzene	08	SW8270D	<5.62 ug/L	5.62	2	12/05/16 09:16	12/07/16 02:36	EWS
p-Chloro-m-cresol	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Pentachloronitrobenzene (quintozene)	80	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Pentachlorophenol	08	SW8270D	<44.9 ug/L	44.9	2	12/05/16 09:16	12/07/16 02:36	EWS
Phenacetin	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Phenanthrene	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Phenol	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Pronamide	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Pyrene	08	SW8270D	<22.5 ug/L	22.5	2	12/05/16 09:16	12/07/16 02:36	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-29 Laboratory Sample ID: 16L0048-08

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Pyridine	08	SW8270D	<22.5 ug/L		22.5	2	12/05/16 09:16	12/07/16 02:36	EWS
Surr: 2,4,6-Tribromophenol	08	SW8270D	23.3 %	DS	40-125		12/05/16 09:16	12/07/16 02:36	EWS
Surr: 2-Fluorobiphenyl	08	SW8270D	14.5 %	DS	23-87		12/05/16 09:16	12/07/16 02:36	<i>EWS</i>
Surr: 2-Fluorophenol	08	SW8270D	11.4 %	DS	14-52		12/05/16 09:16	12/07/16 02:36	EWS
Surr: Nitrobenzene-d5	08	SW8270D	15.7 %	DS	40-110		12/05/16 09:16	12/07/16 02:36	EWS
Surr: Phenol-d5	08	SW8270D	7.28 %		5-33		12/05/16 09:16	12/07/16 02:36	<i>EWS</i>
Surr: p-Terphenyl-d14	08	SW8270D	26.2 %	DS	27-133		12/05/16 09:16	12/07/16 02:36	EWS
Organochlorine Pesticides ar	nd PCBs by (GC/ECD							
PCB as Aroclor 1016	08	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:11	SKS
PCB as Aroclor 1221	80	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:11	SKS
PCB as Aroclor 1232	08	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:11	SKS
PCB as Aroclor 1242	08	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:11	SKS
PCB as Aroclor 1248	08	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:11	SKS
PCB as Aroclor 1254	08	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:11	SKS
PCB as Aroclor 1260	08	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:11	SKS
Surr: DCB	08	SW8082A	50.0 %		30-105		12/05/16 13:48	12/07/16 22:11	SKS
Surr: TCMX	08	SW8082A	55.0 %		30-105		12/05/16 13:48	12/07/16 22:11	SKS
4,4'-DDD	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
4,4'-DDE	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
4,4'-DDT	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
Aldrin	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
alpha-BHC	08	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
beta-BHC	08	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
Chlordane	08	SW8081B	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:11	SKS
delta-BHC	08	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
Dieldrin	08	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-29 Laboratory Sample ID: 16L0048-08

<u> </u>									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides an	nd PCBs by	GC/ECD							
Endosulfan I	08	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
Endosulfan II	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
Endosulfan sulfate	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
Endrin	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
Endrin aldehyde	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
gamma-BHC (Lindane)	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
Heptachlor	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
Heptachlor epoxide	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
Methoxychlor	80	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:11	SKS
Toxaphene	08	SW8081B	<1.12 ug/L		1.12	1	12/05/16 13:48	12/07/16 22:11	SKS
Surr: TCMX	08	SW8081B	45.0 %		18-112		12/05/16 13:48	12/07/16 22:11	SKS
Surr: DCB	08	SW8081B	40.0 %		27-131		12/05/16 13:48	12/07/16 22:11	SKS
Wet Chemistry Analysis									
Cyanide	08	SW9012	0.06 mg/L	CI	0.01	1	12/06/16 17:15	12/06/16 17:15	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-30 Laboratory Sample ID: 16L0048-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 S	eries Method	s							
Silver	09	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:07	CWO
Beryllium	09RE1	EPA200.7 Rev 4.4	<0.0200 mg/L		0.0200	5	12/05/16 15:00	12/06/16 14:32	CWO
Cadmium	09	EPA200.7 Rev 4.4	0.0228 mg/L		0.0040	1	12/05/16 15:00	12/06/16 12:07	CWO
Chromium	09	EPA200.7 Rev 4.4	0.0265 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:07	CWO
Copper	09	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:07	CWO
Mercury	09	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	12/06/16 13:59	12/07/16 12:52	RCV
Nickel	09	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:07	CWO
Lead	09	EPA200.7 Rev 4.4	0.0256 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:07	CWO
Zinc	09	EPA200.7 Rev 4.4	0.102 mg/L		0.0100	1	12/05/16 15:00	12/06/16 12:07	CWO
Metals (Total) by EPA 6000/	7000 Series N	1ethods							
Arsenic	09	SW7010	<0.0050 mg/L		0.0050	1	12/05/16 15:00	12/06/16 11:31	MWL
Antimony	09	SW7010	<0.0050 mg/L		0.0050	1	12/05/16 15:00	12/07/16 01:54	MWL
Selenium	09	SW7010	<0.0030 mg/L		0.0030	1	12/05/16 15:00	12/07/16 14:41	MWL
Thallium	09	SW7010	<0.0020 mg/L		0.0020	1	12/05/16 15:00	12/06/16 12:11	MWL
Volatile Organic Compound	s by GCMS								
1,1,1,2-Tetrachloroethane	09	SW8260B	<2.00 ug/L		2.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,1,1-Trichloroethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,1,2,2-Tetrachloroethane	09	SW8260B	<2.00 ug/L		2.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,1,2-Trichloroethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,1-Dichloroethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,1-Dichloroethylene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,1-Dichloropropene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,2,3-Trichlorobenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,2,3-Trichloropropane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,2,4-Trichlorobenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-30 Laboratory Sample ID: 16L0048-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2,4-Trimethylbenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,2-Dibromo-3-chloropropane (DBCP)	09	SW8260B	<20.0 ug/L		20.0	5	12/02/16 14:07	12/02/16 14:07	KCS
1,2-Dibromoethane (EDB)	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,2-Dichlorobenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,2-Dichloroethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,2-Dichloropropane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,3,5-Trimethylbenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,3-Dichlorobenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,3-Dichloropropane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
1,4-Dichlorobenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
2,2-Dichloropropane	09	SW8260B	<10.0 ug/L		10.0	5	12/02/16 14:07	12/02/16 14:07	KCS
2-Butanone (MEK)	09	SW8260B	<50.0 ug/L		50.0	5	12/02/16 14:07	12/02/16 14:07	KCS
2-Chlorotoluene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
2-Hexanone (MBK)	09	SW8260B	<25.0 ug/L		25.0	5	12/02/16 14:07	12/02/16 14:07	KCS
4-Chlorotoluene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
4-Isopropyltoluene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
4-Methyl-2-pentanone (MIBK)	09	SW8260B	<25.0 ug/L		25.0	5	12/02/16 14:07	12/02/16 14:07	KCS
Acetone	09	SW8260B	<50.0 ug/L		50.0	5	12/02/16 14:07	12/02/16 14:07	KCS
Benzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Bromobenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Bromochloromethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Bromodichloromethane	09	SW8260B	<2.50 ug/L		2.50	5	12/02/16 14:07	12/02/16 14:07	KCS
Bromoform	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Bromomethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Carbon disulfide	09	SW8260B	<50.0 ug/L		50.0	5	12/02/16 14:07	12/02/16 14:07	KCS
Carbon tetrachloride	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-30 Laboratory Sample ID: 16L0048-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chlorobenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Chloroethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Chloroform	09	SW8260B	<2.50 ug/L		2.50	5	12/02/16 14:07	12/02/16 14:07	KCS
Chloromethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
cis-1,2-Dichloroethylene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
cis-1,3-Dichloropropene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Dibromochloromethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Dibromomethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Dichlorodifluoromethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Di-isopropyl ether (DIPE)	09	SW8260B	<25.0 ug/L		25.0	5	12/02/16 14:07	12/02/16 14:07	KCS
Ethylbenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Hexachlorobutadiene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
lodomethane	09	SW8260B	<50.0 ug/L		50.0	5	12/02/16 14:07	12/02/16 14:07	KCS
Isopropylbenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
m+p-Xylenes	09	SW8260B	<10.0 ug/L		10.0	5	12/02/16 14:07	12/02/16 14:07	KCS
Methylene chloride	09	SW8260B	<20.0 ug/L		20.0	5	12/02/16 14:07	12/02/16 14:07	KCS
Methyl-t-butyl ether (MTBE)	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Naphthalene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
n-Butylbenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
n-Propylbenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
o-Xylene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
sec-Butylbenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Styrene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
tert-Butylbenzene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Tetrachloroethylene (PCE)	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Toluene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-30 Laboratory Sample ID: 16L0048-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,2-Dichloroethylene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
trans-1,3-Dichloropropene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Trichloroethylene	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Trichlorofluoromethane	09	SW8260B	<5.00 ug/L		5.00	5	12/02/16 14:07	12/02/16 14:07	KCS
Vinyl acetate	09	SW8260B	<50.0 ug/L		50.0	5	12/02/16 14:07	12/02/16 14:07	KCS
Vinyl chloride	09	SW8260B	<2.50 ug/L		2.50	5	12/02/16 14:07	12/02/16 14:07	KCS
Xylenes, Total	09	SW8260B	<15.0 ug/L		15.0	5	12/02/16 14:07	12/02/16 14:07	KCS
Surr: 1,2-Dichloroethane-d4	09	SW8260B	95.5 %		70-120		12/02/16 14:07	12/02/16 14:07	KCS
Surr: 4-Bromofluorobenzene	09	SW8260B	101 %		75-120		12/02/16 14:07	12/02/16 14:07	KCS
Surr: Dibromofluoromethane	09	SW8260B	95.2 %		80-119		12/02/16 14:07	12/02/16 14:07	KCS
Surr: Toluene-d8	09	SW8260B	101 %		85-120		12/02/16 14:07	12/02/16 14:07	KCS
Semivolatile Organic Compo	unds by GC	MS							
2,3,7,8-TCDD (SIM)	09	EPA625	Not Detected			1	12/05/16 09:16	12/08/16 16:10	EWS
1,2,4,5-Tetrachlorobenzene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
1,2,4-Trichlorobenzene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
1,2-Dichlorobenzene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
1,2-Diphenylhydrazine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
1,3-Dichlorobenzene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
1,3-Dinitrobenzene	09	SW8270D	<10.5 ug/L		10.5	4	12/05/16 09:16	12/07/16 03:13	EWS
1,4-Dichlorobenzene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
1-Naphthylamine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2,3,4,6-Tetrachlorophenol	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2,4,5-Trichlorophenol	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2,4,6-Trichlorophenol	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2,4-Dichlorophenol	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2,4-Dimethylphenol	09	SW8270D	<2.11 ug/L		2.11	4	12/05/16 09:16	12/07/16 03:13	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-30

Laboratory Sample ID: 16L

16L0048-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	unds by GC	MS							
2,4-Dinitrophenol	09	SW8270D	<211 ug/L		211	4	12/05/16 09:16	12/07/16 03:13	EWS
2,4-Dinitrotoluene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2,6-Dichlorophenol	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2,6-Dinitrotoluene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2-Chloronaphthalene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2-Chlorophenol	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2-Methylnaphthalene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2-Naphthylamine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
2-Nitroaniline	09	SW8270D	<84.2 ug/L		84.2	4	12/05/16 09:16	12/07/16 03:13	EWS
2-Nitrophenol	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
3,3'-Dichlorobenzidine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
3-Methylcholanthrene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
3-Nitroaniline	09	SW8270D	<84.2 ug/L		84.2	4	12/05/16 09:16	12/07/16 03:13	EWS
4,6-Dinitro-2-methylphenol	09	SW8270D	<211 ug/L		211	4	12/05/16 09:16	12/07/16 03:13	EWS
4-Aminobiphenyl	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
4-Bromophenyl phenyl ether	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
4-Chloroaniline	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
4-Chlorophenyl phenyl ether	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
4-Nitroaniline	09	SW8270D	<84.2 ug/L		84.2	4	12/05/16 09:16	12/07/16 03:13	EWS
4-Nitrophenol	09	SW8270D	<211 ug/L		211	4	12/05/16 09:16	12/07/16 03:13	EWS
7,12-Dimethylbenz (a) anthracene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Acenaphthene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Acenaphthylene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Acetophenone	09	SW8270D	<84.2 ug/L		84.2	4	12/05/16 09:16	12/07/16 03:13	EWS
Aniline	09	SW8270D	<211 ug/L		211	4	12/05/16 09:16	12/07/16 03:13	EWS
Anthracene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-30 Laboratory Sample ID: 16L0048-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	inds by GC	MS							
Benzidine	09	SW8270D	<211 ug/L		211	4	12/05/16 09:16	12/07/16 03:13	EWS
Benzo (a) anthracene	09	SW8270D	<0.21 ug/L		0.21	4	12/05/16 09:16	12/07/16 03:13	EWS
Benzo (a) pyrene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Benzo (b) fluoranthene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Benzo (g,h,i) perylene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Benzo (k) fluoranthene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Benzoic acid	09	SW8270D	<211 ug/L		211	4	12/05/16 09:16	12/07/16 03:13	EWS
Benzyl alcohol	09	SW8270D	<84.2 ug/L		84.2	4	12/05/16 09:16	12/07/16 03:13	EWS
bis (2-Chloroethoxy) methane	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
bis (2-Chloroethyl) ether	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
bis (2-Chloroisopropyl) ether	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
bis (2-Ethylhexyl) phthalate	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Butyl benzyl phthalate	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Chrysene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Dibenz (a,h) anthracene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Dibenz (a,j) acridine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Dibenzofuran	09	SW8270D	<21.1 ug/L		21.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Diethyl phthalate	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Dimethyl phthalate	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Di-n-butyl phthalate	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Di-n-octyl phthalate	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Diphenylamine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Ethyl methanesulfonate	09	SW8270D	<84.2 ug/L		84.2	4	12/05/16 09:16	12/07/16 03:13	EWS
Fluoranthene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Fluorene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Hexachlorobenzene	09	SW8270D	<4.21 ug/L		4.21	4	12/05/16 09:16	12/07/16 03:13	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-30 Laboratory Sample ID: 16L0048-09

	0 10				Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Hexachlorobutadiene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Hexachlorocyclopentadiene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Hexachloroethane	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Indeno (1,2,3-cd) pyrene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Isophorone	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
m+p-Cresols	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Methyl methanesulfonate	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Naphthalene	09	SW8270D	<21.1 ug/L		21.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Nitrobenzene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
n-Nitrosodimethylamine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
n-Nitrosodi-n-butylamine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
n-Nitrosodi-n-propylamine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
n-Nitrosodiphenylamine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
n-Nitrosopiperidine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
o+m+p-Cresols	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
o-Cresol	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
p-(Dimethylamino) azobenzene	09	SW8270D	<10.5 ug/L		10.5	4	12/05/16 09:16	12/07/16 03:13	EWS
p-Chloro-m-cresol	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Pentachloronitrobenzene (quintozene)	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Pentachlorophenol	09	SW8270D	<84.2 ug/L		84.2	4	12/05/16 09:16	12/07/16 03:13	EWS
Phenacetin	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Phenanthrene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Phenol	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Pronamide	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Pyrene	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-30

Laboratory Sample ID:

16L0048-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Pyridine	09	SW8270D	<42.1 ug/L		42.1	4	12/05/16 09:16	12/07/16 03:13	EWS
Surr: 2,4,6-Tribromophenol	09	SW8270D	34.9 %	DS	40-125		12/05/16 09:16	12/07/16 03:13	EWS
Surr: 2-Fluorobiphenyl	09	SW8270D	16.5 %	DS	23-87		12/05/16 09:16	12/07/16 03:13	EWS
Surr: 2-Fluorophenol	09	SW8270D	14.0 %		14-52		12/05/16 09:16	12/07/16 03:13	<i>EWS</i>
Surr: Nitrobenzene-d5	09	SW8270D	21.3 %	DS	40-110		12/05/16 09:16	12/07/16 03:13	EWS
Surr: Phenol-d5	09	SW8270D	7.99 %		5-33		12/05/16 09:16	12/07/16 03:13	EWS
Surr: p-Terphenyl-d14	09	SW8270D	30.5 %		27-133		12/05/16 09:16	12/07/16 03:13	<i>EWS</i>
Organochlorine Pesticides an	nd PCBs by (GC/ECD							
PCB as Aroclor 1016	09	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:30	SKS
PCB as Aroclor 1221	09	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:30	SKS
PCB as Aroclor 1232	09	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:30	SKS
PCB as Aroclor 1242	09	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:30	SKS
PCB as Aroclor 1248	09	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:30	SKS
PCB as Aroclor 1254	09	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:30	SKS
PCB as Aroclor 1260	09	SW8082A	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:30	SKS
Surr: DCB	09	SW8082A	170 %	S	30-105		12/05/16 13:48	12/07/16 22:30	SKS
Surr: TCMX	09	SW8082A	90.0 %		30-105		12/05/16 13:48	12/07/16 22:30	SKS
4,4'-DDD	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
4,4'-DDE	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
4,4'-DDT	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
Aldrin	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
alpha-BHC	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
beta-BHC	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
Chlordane	09	SW8081B	<0.225 ug/L		0.225	1	12/05/16 13:48	12/07/16 22:30	SKS
delta-BHC	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
Dieldrin	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS



Certificate of Analysis

Final Report

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1001 Boulders Parkway, Suite 300

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Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. MW-30 Laboratory Sample ID: 16L0048-09

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides a	nd PCBs by	GC/ECD							
Endosulfan I	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
Endosulfan II	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
Endosulfan sulfate	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
Endrin	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
Endrin aldehyde	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
gamma-BHC (Lindane)	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
Heptachlor	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
Heptachlor epoxide	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
Methoxychlor	09	SW8081B	<0.056 ug/L		0.056	1	12/05/16 13:48	12/07/16 22:30	SKS
Toxaphene	09	SW8081B	<1.12 ug/L		1.12	1	12/05/16 13:48	12/07/16 22:30	SKS
Surr: TCMX	09	SW8081B	60.0 %		18-112		12/05/16 13:48	12/07/16 22:30	SKS
Surr: DCB	09	SW8081B	115 %		27-131		12/05/16 13:48	12/07/16 22:30	SKS
Wet Chemistry Analysis									
Cyanide	09	SW9012	0.48 mg/L		0.05	5	12/06/16 16:06	12/06/16 16:06	BBP



Certificate of Analysis

Final Report

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12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. Trip Blank Laboratory Sample ID: 16L0048-10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	10	SW8260B	<0.40 ug/L		0.40	1	12/02/16 11:44	12/02/16 11:44	KCS
1,1,1-Trichloroethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,1,2,2-Tetrachloroethane	10	SW8260B	<0.40 ug/L		0.40	1	12/02/16 11:44	12/02/16 11:44	KCS
1,1,2-Trichloroethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,1-Dichloroethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,1-Dichloroethylene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,1-Dichloropropene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,2,3-Trichlorobenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,2,3-Trichloropropane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,2,4-Trichlorobenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,2,4-Trimethylbenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,2-Dibromo-3-chloropropane (DBCP)	10	SW8260B	<4.00 ug/L		4.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,2-Dibromoethane (EDB)	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,2-Dichlorobenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,2-Dichloroethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,2-Dichloropropane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,3,5-Trimethylbenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,3-Dichlorobenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,3-Dichloropropane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
1,4-Dichlorobenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
2,2-Dichloropropane	10	SW8260B	<2.00 ug/L		2.00	1	12/02/16 11:44	12/02/16 11:44	KCS
2-Butanone (MEK)	10	SW8260B	<10.0 ug/L		10.0	1	12/02/16 11:44	12/02/16 11:44	KCS
2-Chlorotoluene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
2-Hexanone (MBK)	10	SW8260B	<5.00 ug/L		5.00	1	12/02/16 11:44	12/02/16 11:44	KCS
4-Chlorotoluene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
4-Isopropyltoluene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3615

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. Trip Blank Laboratory Sample ID: 16L0048-10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
4-Methyl-2-pentanone (MIBK)	10	SW8260B	<5.00 ug/L		5.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Acetone	10	SW8260B	<10.0 ug/L		10.0	1	12/02/16 11:44	12/02/16 11:44	KCS
Benzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Bromobenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Bromochloromethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Bromodichloromethane	10	SW8260B	<0.50 ug/L		0.50	1	12/02/16 11:44	12/02/16 11:44	KCS
Bromoform	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Bromomethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Carbon disulfide	10	SW8260B	<10.0 ug/L		10.0	1	12/02/16 11:44	12/02/16 11:44	KCS
Carbon tetrachloride	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Chlorobenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Chloroethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Chloroform	10	SW8260B	<0.50 ug/L		0.50	1	12/02/16 11:44	12/02/16 11:44	KCS
Chloromethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
cis-1,2-Dichloroethylene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
cis-1,3-Dichloropropene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Dibromochloromethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Dibromomethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Dichlorodifluoromethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Di-isopropyl ether (DIPE)	10	SW8260B	<5.00 ug/L		5.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Ethylbenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Hexachlorobutadiene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Iodomethane	10	SW8260B	<10.0 ug/L		10.0	1	12/02/16 11:44	12/02/16 11:44	KCS
Isopropylbenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
m+p-Xylenes	10	SW8260B	<2.00 ug/L		2.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Methylene chloride	10	SW8260B	<4.00 ug/L		4.00	1	12/02/16 11:44	12/02/16 11:44	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. Trip Blank Laboratory Sample ID: 16L0048-10

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Methyl-t-butyl ether (MTBE)	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Naphthalene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
n-Butylbenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
n-Propylbenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
o-Xylene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
sec-Butylbenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Styrene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
tert-Butylbenzene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Tetrachloroethylene (PCE)	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Toluene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
trans-1,2-Dichloroethylene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
trans-1,3-Dichloropropene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Trichloroethylene	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Trichlorofluoromethane	10	SW8260B	<1.00 ug/L		1.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Vinyl acetate	10	SW8260B	<10.0 ug/L		10.0	1	12/02/16 11:44	12/02/16 11:44	KCS
Vinyl chloride	10	SW8260B	<0.50 ug/L		0.50	1	12/02/16 11:44	12/02/16 11:44	KCS
Xylenes, Total	10	SW8260B	<3.00 ug/L		3.00	1	12/02/16 11:44	12/02/16 11:44	KCS
Surr: 1,2-Dichloroethane-d4	10	SW8260B	92.7 %		70-120		12/02/16 11:44	12/02/16 11:44	KCS
Surr: 4-Bromofluorobenzene	10	SW8260B	99.8 %		75-120		12/02/16 11:44	12/02/16 11:44	KCS
Surr: Dibromofluoromethane	10	SW8260B	93.7 %		80-119		12/02/16 11:44	12/02/16 11:44	KCS
Surr: Toluene-d8	10	SW8260B	100 %		85-120		12/02/16 11:44	12/02/16 11:44	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-22 Laboratory Sample ID: 16L0048-11

Parameter	Samp ID	Method	Result Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
						Date, Time	Bato, Timo	
Metals (Total) by EPA 6000/70	00 Series N	lethods						
Silver	11	SW6010C	<0.500 mg/kg	0.500	1	12/05/16 08:45	12/05/16 14:24	CWO
Arsenic	11	SW6010C	5.29 mg/kg	1.00	1	12/05/16 08:45	12/05/16 14:24	CWO
Beryllium	11RE1	SW6010C	<0.979 mg/kg	0.979	5	12/05/16 08:45	12/05/16 16:43	CWO
Cadmium	11	SW6010C	3.97 mg/kg	0.200	1	12/05/16 08:45	12/05/16 14:24	CWO
Chromium	11	SW6010C	7.79 mg/kg	0.500	1	12/05/16 08:45	12/05/16 14:24	CWO
Copper	11	SW6010C	5.00 mg/kg	2.50	1	12/05/16 08:45	12/05/16 14:24	CWO
Mercury	11	SW7471B	0.013 mg/kg	0.008	1	12/05/16 12:00	12/06/16 11:58	MWL
Nickel	11	SW6010C	5.86 mg/kg	0.500	1	12/05/16 08:45	12/05/16 14:24	CWO
Lead	11	SW6010C	9.49 mg/kg	0.500	1	12/05/16 08:45	12/05/16 14:24	CWO
Antimony	11	SW6010C	<5.00 mg/kg	5.00	1	12/05/16 08:45	12/05/16 14:24	CWO
Selenium	11RE1	SW6010C	<12.2 mg/kg	12.2	5	12/05/16 08:45	12/05/16 16:43	CWO
Thallium	11RE1	SW6010C	<12.2 mg/kg	12.2	5	12/05/16 08:45	12/05/16 16:43	CWO
Zinc	11	SW6010C	18.0 mg/kg	0.500	1	12/05/16 08:45	12/05/16 14:24	CWO



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-23 Laboratory Sample ID: 16L0048-12

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7	7000 Series N	1ethods							
Silver	12	SW6010C	<0.500 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:26	CWO
Arsenic	12	SW6010C	8.93 mg/kg		1.00	1	12/05/16 08:45	12/05/16 14:26	CWO
Beryllium	12RE1	SW6010C	<0.953 mg/kg		0.953	5	12/05/16 08:45	12/05/16 16:45	CWO
Cadmium	12	SW6010C	1.76 mg/kg		0.200	1	12/05/16 08:45	12/05/16 14:26	CWO
Chromium	12	SW6010C	16.5 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:26	CWO
Copper	12	SW6010C	36.8 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:26	CWO
Mercury	12	SW7471B	0.175 mg/kg		0.008	1	12/05/16 12:00	12/06/16 12:00	MWL
Nickel	12	SW6010C	10.1 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:26	CWO
Lead	12	SW6010C	126 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:26	CWO
Antimony	12	SW6010C	<5.00 mg/kg		5.00	1	12/05/16 08:45	12/05/16 14:26	CWO
Selenium	12RE1	SW6010C	<11.9 mg/kg		11.9	5	12/05/16 08:45	12/05/16 16:45	CWO
Thallium	12	SW6010C	<2.50 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:26	CWO
Zinc	12	SW6010C	70.8 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:26	CWO
Volatile Organic Compounds	s by GCMS								
1,1,1,2-Tetrachloroethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,1,1-Trichloroethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,1,2,2-Tetrachloroethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,1,2-Trichloroethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,1-Dichloroethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,1-Dichloroethylene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,1-Dichloropropene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,2,3-Trichlorobenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,2,3-Trichloropropane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,2,4-Trichlorobenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,2,4-Trimethylbenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-23 Laboratory Sample ID: 16L0048-12

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,2-Dibromoethane (EDB)	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,2-Dichlorobenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,2-Dichloroethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,2-Dichloropropane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,3,5-Trimethylbenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,3-Dichlorobenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,3-Dichloropropane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
1,4-Dichlorobenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
2,2-Dichloropropane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
2-Butanone (MEK)	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
2-Chlorotoluene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
2-Hexanone (MBK)	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
4-Chlorotoluene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
4-Isopropyltoluene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
4-Methyl-2-pentanone (MIBK)	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Acetone	12	SW8260B	<500 ug/kg		500	50	12/06/16 16:18	12/06/16 16:18	KCS
Benzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Bromobenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Bromochloromethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Bromodichloromethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Bromoform	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Bromomethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Carbon disulfide	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Carbon tetrachloride	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Chlorobenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-23 Laboratory Sample ID: 16L0048-12

	0 10				Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Chloroform	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Chloromethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
cis-1,2-Dichloroethylene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
cis-1,3-Dichloropropene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Dibromochloromethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Dibromomethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Dichlorodifluoromethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Di-isopropyl ether (DIPE)	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Ethylbenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Hexachlorobutadiene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
lodomethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Isopropylbenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
m+p-Xylenes	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Methylene chloride	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Methyl-t-butyl ether (MTBE)	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Naphthalene	12	SW8260B	2510 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
n-Butylbenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
n-Propylbenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
o-Xylene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
sec-Butylbenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Styrene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
tert-Butylbenzene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Tetrachloroethylene (PCE)	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Toluene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
trans-1,2-Dichloroethylene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

SB-23

Sample I.D.

Laboratory Sample ID: 16L0048-12

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Trichloroethylene	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Trichlorofluoromethane	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Vinyl acetate	12	SW8260B	<500 ug/kg		500	50	12/06/16 16:18	12/06/16 16:18	KCS
Vinyl chloride	12	SW8260B	<250 ug/kg		250	50	12/06/16 16:18	12/06/16 16:18	KCS
Xylenes, Total	12	SW8260B	<750 ug/kg		750	50	12/06/16 16:18	12/06/16 16:18	KCS
Surr: 1,2-Dichloroethane-d4	12	SW8260B	93.0 %		80-120		12/06/16 16:18	12/06/16 16:18	KCS
Surr: 4-Bromofluorobenzene	12	SW8260B	100 %		85-120		12/06/16 16:18	12/06/16 16:18	KCS
Surr: Dibromofluoromethane	12	SW8260B	91.0 %		80-119		12/06/16 16:18	12/06/16 16:18	KCS
Surr: Toluene-d8	12	SW8260B	98.3 %		85-115		12/06/16 16:18	12/06/16 16:18	KCS
Semivolatile Organic Compou	ınds by GC	MS							
1,2,4,5-Tetrachlorobenzene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
1,2,4-Trichlorobenzene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
1,2-Dichlorobenzene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
1,2-Diphenylhydrazine	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
1,3-Dichlorobenzene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
1,4-Dichlorobenzene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
1-Chloronaphthalene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
1-Naphthylamine	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2,3,4,6-Tetrachlorophenol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2,4,5-Trichlorophenol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2,4,6-Trichlorophenol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2,4-Dichlorophenol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2,4-Dimethylphenol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2,4-Dinitrophenol	12	SW8270D	<3720 ug/kg	С	3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2,4-Dinitrotoluene	12	SW8270D	<3720 ug/kg	С	3720	25	12/06/16 09:59	12/07/16 20:58	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-23 Laboratory Sample ID: 16L0048-12

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,6-Dichlorophenol	12	SW8270D	<3720 ug/kg	С	3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2,6-Dinitrotoluene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2-Chloronaphthalene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2-Chlorophenol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2-Methylnaphthalene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2-Naphthylamine	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2-Nitroaniline	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
2-Nitrophenol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
3,3'-Dichlorobenzidine	12	SW8270D	<3720 ug/kg	С	3720	25	12/06/16 09:59	12/07/16 20:58	EWS
3-Methylcholanthrene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
3-Nitroaniline	12	SW8270D	<3720 ug/kg	С	3720	25	12/06/16 09:59	12/07/16 20:58	EWS
4,6-Dinitro-2-methylphenol	12	SW8270D	<3720 ug/kg	С	3720	25	12/06/16 09:59	12/07/16 20:58	EWS
4-Aminobiphenyl	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
4-Bromophenyl phenyl ether	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
4-Chloroaniline	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
4-Chlorophenyl phenyl ether	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
4-Nitroaniline	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
4-Nitrophenol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
7,12-Dimethylbenz (a) anthracene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Acenaphthene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Acenaphthylene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Acetophenone	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Aniline	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Anthracene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Benzidine	12	SW8270D	<3720 ug/kg	С	3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Benzo (a) anthracene	12	SW8270D	12200 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-23 Laboratory Sample ID: 16L0048-12

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compou	inds by GC	MS							
Benzo (a) pyrene	12	SW8270D	9230 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Benzo (b) fluoranthene	12	SW8270D	19100 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Benzo (g,h,i) perylene	12	SW8270D	3770 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Benzo (k) fluoranthene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Benzoic acid	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Benzyl alcohol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
bis (2-Chloroethoxy) methane	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
bis (2-Chloroethyl) ether	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
bis (2-Chloroisopropyl) ether	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
bis (2-Ethylhexyl) phthalate	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Butyl benzyl phthalate	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Chrysene	12	SW8270D	12100 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Dibenz (a,h) anthracene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Dibenz (a,j) acridine	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Dibenzofuran	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Diethyl phthalate	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Dimethyl phthalate	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Di-n-butyl phthalate	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Di-n-octyl phthalate	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Diphenylamine	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Ethyl methanesulfonate	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Fluoranthene	12	SW8270D	15800 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Fluorene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Hexachlorobenzene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Hexachlorobutadiene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Hexachlorocyclopentadiene	12	SW8270D	<3720 ug/kg	С	3720	25	12/06/16 09:59	12/07/16 20:58	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-23 Laboratory Sample ID: 16L0048-12

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Hexachloroethane	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Indeno (1,2,3-cd) pyrene	12	SW8270D	3810 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Isophorone	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
m+p-Cresols	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Methyl methanesulfonate	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Naphthalene	12	SW8270D	3950 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Nitrobenzene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
n-Nitrosodimethylamine	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
n-Nitrosodi-n-butylamine	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
n-Nitrosodi-n-propylamine	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
n-Nitrosodiphenylamine	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
n-Nitrosopiperidine	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
o+m+p-Cresols	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
o-Cresol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
p-(Dimethylamino) azobenzene	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
p-Chloro-m-cresol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Pentachloronitrobenzene (quintozene)	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Pentachlorophenol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Phenacetin	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Phenanthrene	12	SW8270D	18600 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Phenol	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Pronamide	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Pyrene	12	SW8270D	30800 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Pyridine	12	SW8270D	<3720 ug/kg		3720	25	12/06/16 09:59	12/07/16 20:58	EWS
Surr: 2,4,6-Tribromophenol	12	SW8270D	71.6 %		35-125		12/06/16 09:59	12/07/16 20:58	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-23 Laboratory Sample ID: 16L0048-12

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Comp	ounds by GC	MS							
Surr: 2-Fluorobiphenyl	12	SW8270D	%	DS	45-105		12/06/16 09:59	12/07/16 20:58	EWS
Surr: 2-Fluorophenol	12	SW8270D	62.2 %		35-105		12/06/16 09:59	12/07/16 20:58	EWS
Surr: Nitrobenzene-d5	12	SW8270D	40.1 %		35-100		12/06/16 09:59	12/07/16 20:58	EWS
Surr: Phenol-d5	12	SW8270D	41.2 %		40-100		12/06/16 09:59	12/07/16 20:58	EWS
Surr: p-Terphenyl-d14	12	SW8270D	45.7 %		30-125		12/06/16 09:59	12/07/16 20:58	EWS
Organochlorine Pesticides a	and PCBs by (GC/ECD							
PCB as Aroclor 1016	12	SW8082A	<0.238 mg/kg dry		0.238	1	12/05/16 14:05	12/08/16 01:02	SKS
PCB as Aroclor 1221	12	SW8082A	<0.238 mg/kg dry		0.238	1	12/05/16 14:05	12/08/16 01:02	SKS
PCB as Aroclor 1232	12	SW8082A	<0.238 mg/kg dry		0.238	1	12/05/16 14:05	12/08/16 01:02	SKS
PCB as Aroclor 1242	12	SW8082A	<0.238 mg/kg dry		0.238	1	12/05/16 14:05	12/08/16 01:02	SKS
PCB as Aroclor 1248	12	SW8082A	<0.238 mg/kg dry		0.238	1	12/05/16 14:05	12/08/16 01:02	SKS
PCB as Aroclor 1254	12	SW8082A	<0.238 mg/kg dry		0.238	1	12/05/16 14:05	12/08/16 01:02	SKS
PCB as Aroclor 1260	12	SW8082A	<0.238 mg/kg dry		0.238	1	12/05/16 14:05	12/08/16 01:02	SKS
Surr: DCB	12	SW8082A	115 %	S	30-105		12/05/16 14:05	12/08/16 01:02	SKS
Surr: TCMX	12	SW8082A	40.0 %		30-105		12/05/16 14:05	12/08/16 01:02	SKS
4,4'-DDD	12	SW8081B	<11.9 ug/kg		11.9	1	12/05/16 14:05	12/08/16 01:02	SKS
4,4'-DDE	12	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 01:02	SKS
4,4'-DDT	12	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 01:02	SKS
Aldrin	12	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 01:02	SKS
alpha-BHC	12	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 01:02	SKS
beta-BHC	12	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 01:02	SKS
Chlordane	12	SW8081B	<83.4 ug/kg		83.4	1	12/05/16 14:05	12/08/16 01:02	SKS
delta-BHC	12	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 01:02	SKS
Dieldrin	12	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 01:02	SKS
Endosulfan I	12	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 01:02	SKS
Endosulfan II	12	SW8081B	<11.9 ug/kg		11.9	1	12/05/16 14:05	12/08/16 01:02	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number:

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-23 Laboratory Sample ID: 16L0048-12

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides ar	nd PCBs by	GC/ECD							
Endosulfan sulfate	12	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 01:02	SKS
Endrin	12	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 01:02	SKS
Endrin aldehyde	12	SW8081B	<15.9 ug/kg		15.9	1	12/05/16 14:05	12/08/16 01:02	SKS
Endrin ketone	12	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 01:02	SKS
gamma-BHC (Lindane)	12	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 01:02	SKS
Heptachlor	12	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 01:02	SKS
Heptachlor epoxide	12	SW8081B	<79.5 ug/kg		79.5	1	12/05/16 14:05	12/08/16 01:02	SKS
Methoxychlor	12	SW8081B	<79.5 ug/kg		79.5	1	12/05/16 14:05	12/08/16 01:02	SKS
Mirex	12	SW8081B	<11.9 ug/kg		11.9	1	12/05/16 14:05	12/08/16 01:02	SKS
Toxaphene	12	SW8081B	<83.4 ug/kg		83.4	1	12/05/16 14:05	12/08/16 01:02	SKS
Surr: TCMX	12	SW8081B	35.0 %		30-105		12/05/16 14:05	12/08/16 01:02	SKS
Surr: DCB	12	SW8081B	95.0 %		30-105		12/05/16 14:05	12/08/16 01:02	SKS
Wet Chemistry Analysis									
Cyanide	12	SW9012	15.8 mg/kg		0.99	1	12/06/16 17:03	12/06/16 17:03	BBP
Percent Solids	12	SM18 2540G	83.4 %		0.10	1	12/07/16 10:00	12/08/16 09:52	RCV
pH	12	SW9045D	7.25 SU		0.00	1	12/02/16 17:21	12/02/16 17:21	DLF



Certificate of Analysis

Final Report

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-24 Laboratory Sample ID: 16L0048-13

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7	7000 Series M	1ethods							
Silver	13	SW6010C	<0.500 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:31	CWO
Arsenic	13	SW6010C	3.16 mg/kg		1.00	1	12/05/16 08:45	12/05/16 14:31	CWO
Beryllium	13RE1	SW6010C	<0.926 mg/kg		0.926	5	12/05/16 08:45	12/05/16 16:46	CWO
Cadmium	13	SW6010C	1.03 mg/kg		0.200	1	12/05/16 08:45	12/05/16 14:31	CWO
Chromium	13	SW6010C	12.6 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:31	CWO
Copper	13	SW6010C	9.72 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:31	CWO
Mercury	13RE1	SW7471B	0.214 mg/kg		0.077	10	12/05/16 12:00	12/06/16 13:00	MWL
Nickel	13	SW6010C	8.49 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:31	CWO
Lead	13	SW6010C	22.6 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:31	CWO
Antimony	13	SW6010C	<5.00 mg/kg		5.00	1	12/05/16 08:45	12/05/16 14:31	CWO
Selenium	13RE1	SW6010C	<11.6 mg/kg		11.6	5	12/05/16 08:45	12/05/16 16:47	CWO
Thallium	13	SW6010C	<2.50 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:31	CWO
Zinc	13	SW6010C	44.1 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:31	CWO
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,1,1-Trichloroethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,1,2,2-Tetrachloroethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,1,2-Trichloroethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,1-Dichloroethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,1-Dichloroethylene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,1-Dichloropropene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,2,3-Trichlorobenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,2,3-Trichloropropane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,2,4-Trichlorobenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,2,4-Trimethylbenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS



Certificate of Analysis

Final Report

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-24 Laboratory Sample ID: 16L0048-13

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,2-Dibromoethane (EDB)	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,2-Dichlorobenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,2-Dichloroethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,2-Dichloropropane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,3,5-Trimethylbenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,3-Dichlorobenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,3-Dichloropropane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
1,4-Dichlorobenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
2,2-Dichloropropane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
2-Butanone (MEK)	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
2-Chlorotoluene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
2-Hexanone (MBK)	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
4-Chlorotoluene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
4-Isopropyltoluene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
4-Methyl-2-pentanone (MIBK)	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Acetone	13	SW8260B	<500 ug/kg		500	50	12/06/16 13:32	12/06/16 13:32	KCS
Benzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Bromobenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Bromochloromethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Bromodichloromethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Bromoform	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Bromomethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Carbon disulfide	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Carbon tetrachloride	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Chlorobenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-24 Laboratory Sample ID: 16L0048-13

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Chloroform	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Chloromethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
cis-1,2-Dichloroethylene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
cis-1,3-Dichloropropene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Dibromochloromethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Dibromomethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Dichlorodifluoromethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Di-isopropyl ether (DIPE)	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Ethylbenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Hexachlorobutadiene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
lodomethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Isopropylbenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
m+p-Xylenes	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Methylene chloride	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Methyl-t-butyl ether (MTBE)	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Naphthalene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
n-Butylbenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
n-Propylbenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
o-Xylene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
sec-Butylbenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Styrene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
tert-Butylbenzene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Tetrachloroethylene (PCE)	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Toluene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
trans-1,2-Dichloroethylene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-24 Laboratory Sample ID: 16L0048-13

Parameter	Samp ID	Method	Result (Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Trichloroethylene	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Trichlorofluoromethane	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Vinyl acetate	13	SW8260B	<500 ug/kg		500	50	12/06/16 13:32	12/06/16 13:32	KCS
Vinyl chloride	13	SW8260B	<250 ug/kg		250	50	12/06/16 13:32	12/06/16 13:32	KCS
Xylenes, Total	13	SW8260B	<749 ug/kg		749	50	12/06/16 13:32	12/06/16 13:32	KCS
Surr: 1,2-Dichloroethane-d4	13	SW8260B	92.2 %		80-120		12/06/16 13:32	12/06/16 13:32	KCS
Surr: 4-Bromofluorobenzene	13	SW8260B	98.7 %		85-120		12/06/16 13:32	12/06/16 13:32	KCS
Surr: Dibromofluoromethane	13	SW8260B	95.9 %		80-119		12/06/16 13:32	12/06/16 13:32	KCS
Surr: Toluene-d8	13	SW8260B	101 %		85-115		12/06/16 13:32	12/06/16 13:32	KCS
Semivolatile Organic Compou	inds by GC	MS							
1,2,4,5-Tetrachlorobenzene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
1,2,4-Trichlorobenzene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
1,2-Dichlorobenzene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
1,2-Diphenylhydrazine	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
1,3-Dichlorobenzene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
1,4-Dichlorobenzene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
1-Chloronaphthalene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
1-Naphthylamine	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2,3,4,6-Tetrachlorophenol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2,4,5-Trichlorophenol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2,4,6-Trichlorophenol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2,4-Dichlorophenol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2,4-Dimethylphenol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2,4-Dinitrophenol	13	SW8270D	<4060 ug/kg	С	4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2,4-Dinitrotoluene	13	SW8270D	<4060 ug/kg	С	4060	25	12/06/16 09:59	12/07/16 18:31	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-24 Laboratory Sample ID: 16L0048-13

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
- arameter		Wicthod	Nosuit	Quai		- D.I .	Date/Time	Date/ Time	7
Semivolatile Organic Compo	unds by GC	MS							
2,6-Dichlorophenol	13	SW8270D	<4060 ug/kg	С	4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2,6-Dinitrotoluene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2-Chloronaphthalene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2-Chlorophenol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2-Methylnaphthalene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2-Naphthylamine	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2-Nitroaniline	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
2-Nitrophenol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
3,3'-Dichlorobenzidine	13	SW8270D	<4060 ug/kg	С	4060	25	12/06/16 09:59	12/07/16 18:31	EWS
3-Methylcholanthrene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
3-Nitroaniline	13	SW8270D	<4060 ug/kg	С	4060	25	12/06/16 09:59	12/07/16 18:31	EWS
4,6-Dinitro-2-methylphenol	13	SW8270D	<4060 ug/kg	С	4060	25	12/06/16 09:59	12/07/16 18:31	EWS
4-Aminobiphenyl	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
4-Bromophenyl phenyl ether	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
4-Chloroaniline	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
4-Chlorophenyl phenyl ether	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
4-Nitroaniline	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
4-Nitrophenol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
7,12-Dimethylbenz (a) anthracene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Acenaphthene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Acenaphthylene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Acetophenone	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Aniline	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Anthracene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Benzidine	13	SW8270D	<4060 ug/kg	С	4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Benzo (a) anthracene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-24 Laboratory Sample ID: 16L0048-13

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
Benzo (a) pyrene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Benzo (b) fluoranthene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Benzo (g,h,i) perylene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Benzo (k) fluoranthene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Benzoic acid	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Benzyl alcohol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
bis (2-Chloroethoxy) methane	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
bis (2-Chloroethyl) ether	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
bis (2-Chloroisopropyl) ether	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
bis (2-Ethylhexyl) phthalate	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Butyl benzyl phthalate	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Chrysene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Dibenz (a,h) anthracene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Dibenz (a,j) acridine	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Dibenzofuran	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Diethyl phthalate	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Dimethyl phthalate	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Di-n-butyl phthalate	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Di-n-octyl phthalate	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Diphenylamine	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Ethyl methanesulfonate	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Fluoranthene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Fluorene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Hexachlorobenzene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Hexachlorobutadiene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Hexachlorocyclopentadiene	13	SW8270D	<4060 ug/kg	С	4060	25	12/06/16 09:59	12/07/16 18:31	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number:

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-24 Laboratory Sample ID: 16L0048-13

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Comp	ounds by GC	MS							
Hexachloroethane	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Indeno (1,2,3-cd) pyrene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Isophorone	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
m+p-Cresols	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Methyl methanesulfonate	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Naphthalene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Nitrobenzene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
n-Nitrosodimethylamine	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
n-Nitrosodi-n-butylamine	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
n-Nitrosodi-n-propylamine	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
n-Nitrosodiphenylamine	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
n-Nitrosopiperidine	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
o+m+p-Cresols	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
o-Cresol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
p-(Dimethylamino) azobenzene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
p-Chloro-m-cresol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Pentachloronitrobenzene (quintozene)	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Pentachlorophenol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Phenacetin	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Phenanthrene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Phenol	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Pronamide	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Pyrene	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Pyridine	13	SW8270D	<4060 ug/kg		4060	25	12/06/16 09:59	12/07/16 18:31	EWS
Surr: 2,4,6-Tribromophenol	13	SW8270D	73.6 %		35-125		12/06/16 09:59	12/07/16 18:31	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-24 Laboratory Sample ID: 16L0048-13

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Comp	oounds by GC	MS							
Surr: 2-Fluorobiphenyl	13	SW8270D	%	DS	45-105		12/06/16 09:59	12/07/16 18:31	EWS
Surr: 2-Fluorophenol	13	SW8270D	71.0 %		35-105		12/06/16 09:59	12/07/16 18:31	EWS
Surr: Nitrobenzene-d5	13	SW8270D	51.6 %		35-100		12/06/16 09:59	12/07/16 18:31	EWS
Surr: Phenol-d5	13	SW8270D	49.4 %		40-100		12/06/16 09:59	12/07/16 18:31	EWS
Surr: p-Terphenyl-d14	13	SW8270D	52.6 %		30-125		12/06/16 09:59	12/07/16 18:31	EWS
Organochlorine Pesticides	and PCBs by	GC/ECD							
PCB as Aroclor 1016	13	SW8082A	<0.229 mg/kg dry		0.229	1	12/05/16 14:05	12/08/16 01:21	SKS
PCB as Aroclor 1221	13	SW8082A	<0.229 mg/kg dry		0.229	1	12/05/16 14:05	12/08/16 01:21	SKS
PCB as Aroclor 1232	13	SW8082A	<0.229 mg/kg dry		0.229	1	12/05/16 14:05	12/08/16 01:21	SKS
PCB as Aroclor 1242	13	SW8082A	<0.229 mg/kg dry		0.229	1	12/05/16 14:05	12/08/16 01:21	SKS
PCB as Aroclor 1248	13	SW8082A	<0.229 mg/kg dry		0.229	1	12/05/16 14:05	12/08/16 01:21	SKS
PCB as Aroclor 1254	13	SW8082A	<0.229 mg/kg dry		0.229	1	12/05/16 14:05	12/08/16 01:21	SKS
PCB as Aroclor 1260	13	SW8082A	<0.229 mg/kg dry		0.229	1	12/05/16 14:05	12/08/16 01:21	SKS
Surr: DCB	13	SW8082A	145 %	S	30-105		12/05/16 14:05	12/08/16 01:21	SKS
Surr: TCMX	13	SW8082A	80.0 %		30-105		12/05/16 14:05	12/08/16 01:21	SKS
4,4'-DDD	13	SW8081B	<10.8 ug/kg		10.8	1	12/05/16 14:05	12/08/16 01:21	SKS
4,4'-DDE	13	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:21	SKS
4,4'-DDT	13	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:21	SKS
Aldrin	13	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:21	SKS
alpha-BHC	13	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:21	SKS
beta-BHC	13	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:21	SKS
Chlordane	13	SW8081B	<75.4 ug/kg		75.4	1	12/05/16 14:05	12/08/16 01:21	SKS
delta-BHC	13	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:21	SKS
Dieldrin	13	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:21	SKS
Endosulfan I	13	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:21	SKS
Endosulfan II	13	SW8081B	<10.8 ug/kg		10.8	1	12/05/16 14:05	12/08/16 01:21	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-24 Laboratory Sample ID: 16L0048-13

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Organochlorine Pesticides and	d PCBs by	GC/ECD							
Endosulfan sulfate	13	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:21	SKS
Endrin	13	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:21	SKS
Endrin aldehyde	13	SW8081B	<14.4 ug/kg		14.4	1	12/05/16 14:05	12/08/16 01:21	SKS
Endrin ketone	13	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:21	SKS
gamma-BHC (Lindane)	13	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:21	SKS
Heptachlor	13	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:21	SKS
Heptachlor epoxide	13	SW8081B	<71.9 ug/kg		71.9	1	12/05/16 14:05	12/08/16 01:21	SKS
Methoxychlor	13	SW8081B	<71.9 ug/kg		71.9	1	12/05/16 14:05	12/08/16 01:21	SKS
Mirex	13	SW8081B	<10.8 ug/kg		10.8	1	12/05/16 14:05	12/08/16 01:21	SKS
Toxaphene	13	SW8081B	<75.4 ug/kg		75.4	1	12/05/16 14:05	12/08/16 01:21	SKS
Surr: TCMX	13	SW8081B	75.0 %		30-105		12/05/16 14:05	12/08/16 01:21	SKS
Surr: DCB	13	SW8081B	135 %	S	30-105		12/05/16 14:05	12/08/16 01:21	SKS
Wet Chemistry Analysis									
Cyanide	13	SW9012	<0.99 mg/kg		0.99	1	12/06/16 16:42	12/06/16 16:42	BBP
Percent Solids	13	SM18 2540G	78.4 %		0.10	1	12/07/16 10:00	12/08/16 09:52	RCV
рН	13	SW9045D	7.41 SU		0.00	1	12/02/16 17:23	12/02/16 17:23	DLF



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-25 Laboratory Sample ID: 16L0048-14

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7	7000 Series N	1ethods							
Silver	14	SW6010C	<0.500 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:33	CWO
Arsenic	14	SW6010C	6.46 mg/kg		1.00	1	12/05/16 08:45	12/05/16 14:33	CWO
Beryllium	14RE1	SW6010C	<0.978 mg/kg		0.978	5	12/05/16 08:45	12/05/16 16:48	CWO
Cadmium	14	SW6010C	1.46 mg/kg		0.200	1	12/05/16 08:45	12/05/16 14:33	CWO
Chromium	14	SW6010C	15.1 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:33	CWO
Copper	14	SW6010C	23.5 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:33	CWO
Mercury	14RE1	SW7471B	0.387 mg/kg		0.147	20	12/05/16 12:00	12/06/16 13:03	MWL
Nickel	14	SW6010C	8.77 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:33	CWO
Lead	14	SW6010C	94.7 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:33	CWO
Antimony	14	SW6010C	<5.00 mg/kg		5.00	1	12/05/16 08:45	12/05/16 14:33	CWO
Selenium	14RE1	SW6010C	<12.2 mg/kg		12.2	5	12/05/16 08:45	12/05/16 16:48	CWO
Thallium	14	SW6010C	<2.50 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:33	CWO
Zinc	14	SW6010C	61.7 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:33	CWO
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,1,1-Trichloroethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,1,2,2-Tetrachloroethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,1,2-Trichloroethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,1-Dichloroethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,1-Dichloroethylene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,1-Dichloropropene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,2,3-Trichlorobenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,2,3-Trichloropropane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,2,4-Trichlorobenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,2,4-Trimethylbenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-25 Laboratory Sample ID: 16L0048-14

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,2-Dibromoethane (EDB)	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,2-Dichlorobenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,2-Dichloroethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,2-Dichloropropane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,3,5-Trimethylbenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,3-Dichlorobenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,3-Dichloropropane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
1,4-Dichlorobenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
2,2-Dichloropropane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
2-Butanone (MEK)	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
2-Chlorotoluene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
2-Hexanone (MBK)	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
4-Chlorotoluene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
4-Isopropyltoluene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
4-Methyl-2-pentanone (MIBK)	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Acetone	14	SW8260B	<491 ug/kg		491	50	12/06/16 13:56	12/06/16 13:56	KCS
Benzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Bromobenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Bromochloromethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Bromodichloromethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Bromoform	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Bromomethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Carbon disulfide	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Carbon tetrachloride	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Chlorobenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 361

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-25 Laboratory Sample ID: 16L0048-14

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Chloroform	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Chloromethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
cis-1,2-Dichloroethylene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
cis-1,3-Dichloropropene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Dibromochloromethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Dibromomethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Dichlorodifluoromethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Di-isopropyl ether (DIPE)	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Ethylbenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Hexachlorobutadiene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Iodomethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Isopropylbenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
m+p-Xylenes	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Methylene chloride	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Methyl-t-butyl ether (MTBE)	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Naphthalene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
n-Butylbenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
n-Propylbenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
o-Xylene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
sec-Butylbenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Styrene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
tert-Butylbenzene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Tetrachloroethylene (PCE)	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Toluene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
trans-1,2-Dichloroethylene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-25 Laboratory Sample ID: 16L0048-14

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Trichloroethylene	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Trichlorofluoromethane	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Vinyl acetate	14	SW8260B	<491 ug/kg		491	50	12/06/16 13:56	12/06/16 13:56	KCS
Vinyl chloride	14	SW8260B	<245 ug/kg		245	50	12/06/16 13:56	12/06/16 13:56	KCS
Xylenes, Total	14	SW8260B	<736 ug/kg		736	50	12/06/16 13:56	12/06/16 13:56	KCS
Surr: 1,2-Dichloroethane-d4	14	SW8260B	96.6 %		80-120		12/06/16 13:56	12/06/16 13:56	KCS
Surr: 4-Bromofluorobenzene	14	SW8260B	101 %		85-120		12/06/16 13:56	12/06/16 13:56	KCS
Surr: Dibromofluoromethane	14	SW8260B	93.2 %		80-119		12/06/16 13:56	12/06/16 13:56	KCS
Surr: Toluene-d8	14	SW8260B	99.2 %		85-115		12/06/16 13:56	12/06/16 13:56	KCS
Semivolatile Organic Compou	ınds by GC	MS							
1,2,4,5-Tetrachlorobenzene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
1,2,4-Trichlorobenzene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
1,2-Dichlorobenzene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
1,2-Diphenylhydrazine	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
1,3-Dichlorobenzene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
1,4-Dichlorobenzene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
1-Chloronaphthalene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
1-Naphthylamine	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2,3,4,6-Tetrachlorophenol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2,4,5-Trichlorophenol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2,4,6-Trichlorophenol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2,4-Dichlorophenol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2,4-Dimethylphenol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2,4-Dinitrophenol	14	SW8270D	<4140 ug/kg	С	4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2,4-Dinitrotoluene	14	SW8270D	<4140 ug/kg	С	4140	25	12/06/16 09:59	12/07/16 19:44	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-25 Laboratory Sample ID: 16L0048-14

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
		Wethou	Nesuit	Quai		D.I .	Date/Time	Date/Time	- Tildiyot
Semivolatile Organic Compo	unds by GC	MS							
2,6-Dichlorophenol	14	SW8270D	<4140 ug/kg	С	4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2,6-Dinitrotoluene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2-Chloronaphthalene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2-Chlorophenol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2-Methylnaphthalene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2-Naphthylamine	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2-Nitroaniline	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
2-Nitrophenol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
3,3'-Dichlorobenzidine	14	SW8270D	<4140 ug/kg	С	4140	25	12/06/16 09:59	12/07/16 19:44	EWS
3-Methylcholanthrene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
3-Nitroaniline	14	SW8270D	<4140 ug/kg	С	4140	25	12/06/16 09:59	12/07/16 19:44	EWS
4,6-Dinitro-2-methylphenol	14	SW8270D	<4140 ug/kg	С	4140	25	12/06/16 09:59	12/07/16 19:44	EWS
4-Aminobiphenyl	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
4-Bromophenyl phenyl ether	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
4-Chloroaniline	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
4-Chlorophenyl phenyl ether	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
4-Nitroaniline	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
4-Nitrophenol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
7,12-Dimethylbenz (a) anthracene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Acenaphthene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Acenaphthylene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Acetophenone	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Aniline	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Anthracene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Benzidine	14	SW8270D	<4140 ug/kg	С	4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Benzo (a) anthracene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-25 Laboratory Sample ID: 16L0048-14

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
Benzo (a) pyrene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Benzo (b) fluoranthene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Benzo (g,h,i) perylene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Benzo (k) fluoranthene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Benzoic acid	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Benzyl alcohol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
bis (2-Chloroethoxy) methane	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
bis (2-Chloroethyl) ether	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
bis (2-Chloroisopropyl) ether	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
bis (2-Ethylhexyl) phthalate	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Butyl benzyl phthalate	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Chrysene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Dibenz (a,h) anthracene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Dibenz (a,j) acridine	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Dibenzofuran	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Diethyl phthalate	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Dimethyl phthalate	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Di-n-butyl phthalate	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Di-n-octyl phthalate	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Diphenylamine	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Ethyl methanesulfonate	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Fluoranthene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Fluorene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Hexachlorobenzene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Hexachlorobutadiene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Hexachlorocyclopentadiene	14	SW8270D	<4140 ug/kg	С	4140	25	12/06/16 09:59	12/07/16 19:44	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-25 Laboratory Sample ID: 16L0048-14

Parameter	Samp ID	Method	Result	F Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Hexachloroethane	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Indeno (1,2,3-cd) pyrene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Isophorone	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
m+p-Cresols	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Methyl methanesulfonate	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Naphthalene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Nitrobenzene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
n-Nitrosodimethylamine	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
n-Nitrosodi-n-butylamine	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
n-Nitrosodi-n-propylamine	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
n-Nitrosodiphenylamine	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
n-Nitrosopiperidine	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
o+m+p-Cresols	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
o-Cresol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
p-(Dimethylamino) azobenzene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
p-Chloro-m-cresol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Pentachloronitrobenzene (quintozene)	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Pentachlorophenol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Phenacetin	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Phenanthrene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Phenol	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Pronamide	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Pyrene	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Pyridine	14	SW8270D	<4140 ug/kg		4140	25	12/06/16 09:59	12/07/16 19:44	EWS
Surr: 2,4,6-Tribromophenol	14	SW8270D	67.0 %		35-125		12/06/16 09:59	12/07/16 19:44	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-25 Laboratory Sample ID: 16L0048-14

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Com	pounds by GC	MS							
Surr: 2-Fluorobiphenyl	14	SW8270D	%	DS	45-105		12/06/16 09:59	12/07/16 19:44	EWS
Surr: 2-Fluorophenol	14	SW8270D	63.7 %		35-105		12/06/16 09:59	12/07/16 19:44	EWS
Surr: Nitrobenzene-d5	14	SW8270D	38.9 %		35-100		12/06/16 09:59	12/07/16 19:44	EWS
Surr: Phenol-d5	14	SW8270D	40.9 %		40-100		12/06/16 09:59	12/07/16 19:44	EWS
Surr: p-Terphenyl-d14	14	SW8270D	43.4 %		30-125		12/06/16 09:59	12/07/16 19:44	EWS
Organochlorine Pesticides	and PCBs by	GC/ECD							
PCB as Aroclor 1016	14	SW8082A	<0.221 mg/kg dry		0.221	1	12/05/16 14:05	12/08/16 01:40	SKS
PCB as Aroclor 1221	14	SW8082A	<0.221 mg/kg dry		0.221	1	12/05/16 14:05	12/08/16 01:40	SKS
PCB as Aroclor 1232	14	SW8082A	<0.221 mg/kg dry		0.221	1	12/05/16 14:05	12/08/16 01:40	SKS
PCB as Aroclor 1242	14	SW8082A	<0.221 mg/kg dry		0.221	1	12/05/16 14:05	12/08/16 01:40	SKS
PCB as Aroclor 1248	14	SW8082A	<0.221 mg/kg dry		0.221	1	12/05/16 14:05	12/08/16 01:40	SKS
PCB as Aroclor 1254	14	SW8082A	<0.221 mg/kg dry		0.221	1	12/05/16 14:05	12/08/16 01:40	SKS
PCB as Aroclor 1260	14	SW8082A	<0.221 mg/kg dry		0.221	1	12/05/16 14:05	12/08/16 01:40	SKS
Surr: DCB	14	SW8082A	140 %	S	30-105		12/05/16 14:05	12/08/16 01:40	SKS
Surr: TCMX	14	SW8082A	130 %	S	30-105		12/05/16 14:05	12/08/16 01:40	SKS
4,4'-DDD	14	SW8081B	<10.8 ug/kg		10.8	1	12/05/16 14:05	12/08/16 01:40	SKS
4,4'-DDE	14	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:40	SKS
4,4'-DDT	14	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:40	SKS
Aldrin	14	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:40	SKS
alpha-BHC	14	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:40	SKS
beta-BHC	14	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:40	SKS
Chlordane	14	SW8081B	<75.4 ug/kg		75.4	1	12/05/16 14:05	12/08/16 01:40	SKS
delta-BHC	14	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:40	SKS
Dieldrin	14	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:40	SKS
Endosulfan I	14	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:40	SKS
Endosulfan II	14	SW8081B	<10.8 ug/kg		10.8	1	12/05/16 14:05	12/08/16 01:40	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-25 Laboratory Sample ID: 16L0048-14

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides a	and PCBs by	GC/ECD							
Endosulfan sulfate	14	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:40	SKS
Endrin	14	SW8081B	<7.19 ug/kg		7.19	1	12/05/16 14:05	12/08/16 01:40	SKS
Endrin aldehyde	14	SW8081B	<14.4 ug/kg		14.4	1	12/05/16 14:05	12/08/16 01:40	SKS
Endrin ketone	14	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:40	SKS
gamma-BHC (Lindane)	14	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:40	SKS
Heptachlor	14	SW8081B	<3.59 ug/kg		3.59	1	12/05/16 14:05	12/08/16 01:40	SKS
Heptachlor epoxide	14	SW8081B	<71.9 ug/kg		71.9	1	12/05/16 14:05	12/08/16 01:40	SKS
Methoxychlor	14	SW8081B	<71.9 ug/kg		71.9	1	12/05/16 14:05	12/08/16 01:40	SKS
Mirex	14	SW8081B	<10.8 ug/kg		10.8	1	12/05/16 14:05	12/08/16 01:40	SKS
Toxaphene	14	SW8081B	<75.4 ug/kg		75.4	1	12/05/16 14:05	12/08/16 01:40	SKS
Surr: TCMX	14	SW8081B	65.0 %		30-105		12/05/16 14:05	12/08/16 01:40	SKS
Surr: DCB	14	SW8081B	75.0 %		30-105		12/05/16 14:05	12/08/16 01:40	SKS
Wet Chemistry Analysis									
Cyanide	14	SW9012	<1.00 mg/kg		1.00	1	12/06/16 16:45	12/06/16 16:45	BBP
Percent Solids	14	SM18 2540G	81.2 %		0.10	1	12/07/16 10:00	12/08/16 09:52	RCV
рН	14	SW9045D	7.18 SU		0.00	1	12/02/16 17:25	12/02/16 17:25	DLF



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-26 Laboratory Sample ID: 16L0048-15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7	7000 Series M	Iethods							
Silver	15	SW6010C	<0.500 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:35	CWO
Arsenic	15	SW6010C	7.68 mg/kg		1.00	1	12/05/16 08:45	12/05/16 14:35	CWO
Beryllium	15RE1	SW6010C	<0.969 mg/kg		0.969	5	12/05/16 08:45	12/05/16 16:50	CWO
Cadmium	15	SW6010C	2.11 mg/kg		0.200	1	12/05/16 08:45	12/05/16 14:35	CWO
Chromium	15	SW6010C	17.5 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:35	CWO
Copper	15	SW6010C	25.7 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:35	CWO
Mercury	15	SW7471B	0.168 mg/kg		0.008	1	12/05/16 12:00	12/06/16 12:14	MWL
Nickel	15	SW6010C	8.97 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:35	CWO
Lead	15	SW6010C	56.6 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:35	CWO
Antimony	15	SW6010C	<5.00 mg/kg		5.00	1	12/05/16 08:45	12/05/16 14:35	CWO
Selenium	15RE1	SW6010C	<12.1 mg/kg		12.1	5	12/05/16 08:45	12/05/16 16:50	CWO
Thallium	15	SW6010C	<2.50 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:35	CWO
Zinc	15	SW6010C	282 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:35	CWO
Volatile Organic Compounds	s by GCMS								
1,1,1,2-Tetrachloroethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,1,1-Trichloroethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,1,2,2-Tetrachloroethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,1,2-Trichloroethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,1-Dichloroethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,1-Dichloroethylene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,1-Dichloropropene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,2,3-Trichlorobenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,2,3-Trichloropropane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,2,4-Trichlorobenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,2,4-Trimethylbenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gasworks**

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

16L0048-15 Sample I.D. SB-26 Laboratory Sample ID:

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,2-Dibromoethane (EDB)	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,2-Dichlorobenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,2-Dichloroethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,2-Dichloropropane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,3,5-Trimethylbenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,3-Dichlorobenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,3-Dichloropropane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
1,4-Dichlorobenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
2,2-Dichloropropane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
2-Butanone (MEK)	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
2-Chlorotoluene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
2-Hexanone (MBK)	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
4-Chlorotoluene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
4-Isopropyltoluene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
4-Methyl-2-pentanone (MIBK)	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Acetone	15	SW8260B	<494 ug/kg		494	50	12/06/16 14:19	12/06/16 14:19	KCS
Benzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Bromobenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Bromochloromethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Bromodichloromethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Bromoform	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Bromomethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Carbon disulfide	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Carbon tetrachloride	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Chlorobenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-26 Laboratory Sample ID: 16L0048-15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Chloroform	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Chloromethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
cis-1,2-Dichloroethylene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
cis-1,3-Dichloropropene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Dibromochloromethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Dibromomethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Dichlorodifluoromethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Di-isopropyl ether (DIPE)	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Ethylbenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Hexachlorobutadiene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Iodomethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Isopropylbenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
m+p-Xylenes	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Methylene chloride	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Methyl-t-butyl ether (MTBE)	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Naphthalene	15	SW8260B	1120 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
n-Butylbenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
n-Propylbenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
o-Xylene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
sec-Butylbenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Styrene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
tert-Butylbenzene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Tetrachloroethylene (PCE)	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Toluene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
trans-1,2-Dichloroethylene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number:

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-26 Laboratory Sample ID: 16L0048-15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Trichloroethylene	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Trichlorofluoromethane	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Vinyl acetate	15	SW8260B	<494 ug/kg		494	50	12/06/16 14:19	12/06/16 14:19	KCS
Vinyl chloride	15	SW8260B	<247 ug/kg		247	50	12/06/16 14:19	12/06/16 14:19	KCS
Xylenes, Total	15	SW8260B	<740 ug/kg		740	50	12/06/16 14:19	12/06/16 14:19	KCS
Surr: 1,2-Dichloroethane-d4	15	SW8260B	99.8 %		80-120		12/06/16 14:19	12/06/16 14:19	KCS
Surr: 4-Bromofluorobenzene	15	SW8260B	104 %		85-120		12/06/16 14:19	12/06/16 14:19	KCS
Surr: Dibromofluoromethane	15	SW8260B	94.5 %		80-119		12/06/16 14:19	12/06/16 14:19	KCS
Surr: Toluene-d8	15	SW8260B	101 %		85-115		12/06/16 14:19	12/06/16 14:19	KCS
Semivolatile Organic Compou	inds by GC	MS							
1,2,4,5-Tetrachlorobenzene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
1,2,4-Trichlorobenzene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
1,2-Dichlorobenzene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
1,2-Diphenylhydrazine	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
1,3-Dichlorobenzene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
1,4-Dichlorobenzene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
1-Chloronaphthalene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
1-Naphthylamine	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2,3,4,6-Tetrachlorophenol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2,4,5-Trichlorophenol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2,4,6-Trichlorophenol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2,4-Dichlorophenol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2,4-Dimethylphenol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2,4-Dinitrophenol	15	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2,4-Dinitrotoluene	15	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 21:34	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-26 Laboratory Sample ID: 16L0048-15

					Reporting		Cample Dren	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,6-Dichlorophenol	15	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2,6-Dinitrotoluene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2-Chloronaphthalene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2-Chlorophenol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2-Methylnaphthalene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2-Naphthylamine	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2-Nitroaniline	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
2-Nitrophenol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
3,3'-Dichlorobenzidine	15	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 21:34	EWS
3-Methylcholanthrene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
3-Nitroaniline	15	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 21:34	EWS
4,6-Dinitro-2-methylphenol	15	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 21:34	EWS
4-Aminobiphenyl	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
4-Bromophenyl phenyl ether	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
4-Chloroaniline	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
4-Chlorophenyl phenyl ether	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
4-Nitroaniline	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
4-Nitrophenol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
7,12-Dimethylbenz (a) anthracene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Acenaphthene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Acenaphthylene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Acetophenone	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Aniline	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Anthracene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Benzidine	15	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Benzo (a) anthracene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/

12/8/2016 16:26

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-26 Laboratory Sample ID: 16L0048-15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
Benzo (a) pyrene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Benzo (b) fluoranthene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Benzo (g,h,i) perylene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Benzo (k) fluoranthene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Benzoic acid	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Benzyl alcohol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
bis (2-Chloroethoxy) methane	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
bis (2-Chloroethyl) ether	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
bis (2-Chloroisopropyl) ether	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
bis (2-Ethylhexyl) phthalate	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Butyl benzyl phthalate	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Chrysene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Dibenz (a,h) anthracene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Dibenz (a,j) acridine	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Dibenzofuran	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Diethyl phthalate	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Dimethyl phthalate	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Di-n-butyl phthalate	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Di-n-octyl phthalate	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Diphenylamine	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Ethyl methanesulfonate	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Fluoranthene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Fluorene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Hexachlorobenzene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Hexachlorobutadiene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Hexachlorocyclopentadiene	15	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 21:34	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-26 Laboratory Sample ID: 16L0048-15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Hexachloroethane	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Indeno (1,2,3-cd) pyrene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Isophorone	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
m+p-Cresols	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Methyl methanesulfonate	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Naphthalene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Nitrobenzene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
n-Nitrosodimethylamine	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
n-Nitrosodi-n-butylamine	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
n-Nitrosodi-n-propylamine	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
n-Nitrosodiphenylamine	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
n-Nitrosopiperidine	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
o+m+p-Cresols	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
o-Cresol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
p-(Dimethylamino) azobenzene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
p-Chloro-m-cresol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Pentachloronitrobenzene (quintozene)	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Pentachlorophenol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Phenacetin	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Phenanthrene	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Phenol	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Pronamide	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Pyrene	15	SW8270D	6610 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Pyridine	15	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 21:34	EWS
Surr: 2,4,6-Tribromophenol	15	SW8270D	70.7 %		35-125		12/06/16 09:59	12/07/16 21:34	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

36156.015

Project Number:

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-26 Laboratory Sample ID: 16L0048-15

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Com	pounds by GC	MS							
Surr: 2-Fluorobiphenyl	15	SW8270D	%	DS	45-105		12/06/16 09:59	12/07/16 21:34	EWS
Surr: 2-Fluorophenol	15	SW8270D	56.5 %		35-105		12/06/16 09:59	12/07/16 21:34	EWS
Surr: Nitrobenzene-d5	15	SW8270D	33.6 %	DS	35-100		12/06/16 09:59	12/07/16 21:34	EWS
Surr: Phenol-d5	15	SW8270D	33.2 %	DS	40-100		12/06/16 09:59	12/07/16 21:34	EWS
Surr: p-Terphenyl-d14	15	SW8270D	46.7 %		30-125		12/06/16 09:59	12/07/16 21:34	EWS
Organochlorine Pesticides	and PCBs by	GC/ECD							
PCB as Aroclor 1016	15	SW8082A	<0.232 mg/kg dry		0.232	1	12/05/16 14:05	12/08/16 01:59	SKS
PCB as Aroclor 1221	15	SW8082A	<0.232 mg/kg dry		0.232	1	12/05/16 14:05	12/08/16 01:59	SKS
PCB as Aroclor 1232	15	SW8082A	<0.232 mg/kg dry		0.232	1	12/05/16 14:05	12/08/16 01:59	SKS
PCB as Aroclor 1242	15	SW8082A	<0.232 mg/kg dry		0.232	1	12/05/16 14:05	12/08/16 01:59	SKS
PCB as Aroclor 1248	15	SW8082A	<0.232 mg/kg dry		0.232	1	12/05/16 14:05	12/08/16 01:59	SKS
PCB as Aroclor 1254	15	SW8082A	<0.232 mg/kg dry		0.232	1	12/05/16 14:05	12/08/16 01:59	SKS
PCB as Aroclor 1260	15	SW8082A	<0.232 mg/kg dry		0.232	1	12/05/16 14:05	12/08/16 01:59	SKS
Surr: DCB	15	SW8082A	205 %	S	30-105		12/05/16 14:05	12/08/16 01:59	SKS
Surr: TCMX	15	SW8082A	220 %	S	30-105		12/05/16 14:05	12/08/16 01:59	SKS
4,4'-DDD	15	SW8081B	<11.4 ug/kg		11.4	1	12/05/16 14:05	12/08/16 01:59	SKS
4,4'-DDE	15	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 01:59	SKS
4,4'-DDT	15	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 01:59	SKS
Aldrin	15	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 01:59	SKS
alpha-BHC	15	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 01:59	SKS
beta-BHC	15	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 01:59	SKS
Chlordane	15	SW8081B	<79.7 ug/kg		79.7	1	12/05/16 14:05	12/08/16 01:59	SKS
delta-BHC	15	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 01:59	SKS
Dieldrin	15	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 01:59	SKS
Endosulfan I	15	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 01:59	SKS
Endosulfan II	15	SW8081B	<11.4 ug/kg		11.4	1	12/05/16 14:05	12/08/16 01:59	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Client Site I.D.:

Sample I.D. SB-26 Laboratory Sample ID: 16L0048-15

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Organochlorine Pesticides a	and PCBs by	GC/ECD							
Endosulfan sulfate	15	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 01:59	SKS
Endrin	15	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 01:59	SKS
Endrin aldehyde	15	SW8081B	<15.2 ug/kg		15.2	1	12/05/16 14:05	12/08/16 01:59	SKS
Endrin ketone	15	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 01:59	SKS
gamma-BHC (Lindane)	15	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 01:59	SKS
Heptachlor	15	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 01:59	SKS
Heptachlor epoxide	15	SW8081B	<75.9 ug/kg		75.9	1	12/05/16 14:05	12/08/16 01:59	SKS
Methoxychlor	15	SW8081B	<75.9 ug/kg		75.9	1	12/05/16 14:05	12/08/16 01:59	SKS
Mirex	15	SW8081B	<11.4 ug/kg		11.4	1	12/05/16 14:05	12/08/16 01:59	SKS
Toxaphene	15	SW8081B	<79.7 ug/kg		79.7	1	12/05/16 14:05	12/08/16 01:59	SKS
Surr: TCMX	15	SW8081B	80.0 %		30-105		12/05/16 14:05	12/08/16 01:59	SKS
Surr: DCB	15	SW8081B	100 %		30-105		12/05/16 14:05	12/08/16 01:59	SKS
Wet Chemistry Analysis									
Cyanide	15	SW9012	5.56 mg/kg		0.99	1	12/06/16 16:48	12/06/16 16:48	BBP
Percent Solids	15	SM18 2540G	82.0 %		0.10	1	12/07/16 10:00	12/08/16 09:52	RCV
рН	15	SW9045D	8.09 SU		0.00	1	12/02/16 17:27	12/02/16 17:27	DLF



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-27 Laboratory Sample ID: 16L0048-16

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7	7000 Series M	1ethods							
Silver	16	SW6010C	<0.500 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:38	CWO
Arsenic	16	SW6010C	5.17 mg/kg		1.00	1	12/05/16 08:45	12/05/16 14:38	CWO
Beryllium	16RE1	SW6010C	<0.970 mg/kg		0.970	5	12/05/16 08:45	12/05/16 16:53	CWO
Cadmium	16	SW6010C	1.53 mg/kg		0.200	1	12/05/16 08:45	12/05/16 14:38	CWO
Chromium	16	SW6010C	15.0 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:38	CWO
Copper	16	SW6010C	21.2 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:38	CWO
Mercury	16RE1	SW7471B	0.217 mg/kg		0.075	10	12/05/16 12:00	12/06/16 13:05	MWL
Nickel	16	SW6010C	8.20 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:38	CWO
Lead	16	SW6010C	47.6 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:38	CWO
Antimony	16	SW6010C	<5.00 mg/kg		5.00	1	12/05/16 08:45	12/05/16 14:38	CWO
Selenium	16RE1	SW6010C	<12.1 mg/kg		12.1	5	12/05/16 08:45	12/05/16 16:53	CWO
Thallium	16	SW6010C	<2.50 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:38	CWO
Zinc	16	SW6010C	63.5 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:38	CWO
Volatile Organic Compounds	s by GCMS								
1,1,1,2-Tetrachloroethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,1,1-Trichloroethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,1,2,2-Tetrachloroethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,1,2-Trichloroethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,1-Dichloroethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,1-Dichloroethylene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,1-Dichloropropene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,2,3-Trichlorobenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,2,3-Trichloropropane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,2,4-Trichlorobenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,2,4-Trimethylbenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3615

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-27 Laboratory Sample ID: 16L0048-16

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,2-Dibromoethane (EDB)	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,2-Dichlorobenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,2-Dichloroethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,2-Dichloropropane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,3,5-Trimethylbenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,3-Dichlorobenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,3-Dichloropropane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
1,4-Dichlorobenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
2,2-Dichloropropane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
2-Butanone (MEK)	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
2-Chlorotoluene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
2-Hexanone (MBK)	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
4-Chlorotoluene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
4-Isopropyltoluene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
4-Methyl-2-pentanone (MIBK)	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Acetone	16	SW8260B	<479 ug/kg		479	50	12/06/16 14:43	12/06/16 14:43	KCS
Benzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Bromobenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Bromochloromethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Bromodichloromethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Bromoform	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Bromomethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Carbon disulfide	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Carbon tetrachloride	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Chlorobenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-27 Laboratory Sample ID: 16L0048-16

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Chloroform	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Chloromethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
cis-1,2-Dichloroethylene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
cis-1,3-Dichloropropene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Dibromochloromethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Dibromomethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Dichlorodifluoromethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Di-isopropyl ether (DIPE)	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Ethylbenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Hexachlorobutadiene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
lodomethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Isopropylbenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
m+p-Xylenes	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Methylene chloride	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Methyl-t-butyl ether (MTBE)	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Naphthalene	16	SW8260B	510 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
n-Butylbenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
n-Propylbenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
o-Xylene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
sec-Butylbenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Styrene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
tert-Butylbenzene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Tetrachloroethylene (PCE)	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Toluene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
trans-1,2-Dichloroethylene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-27 Laboratory Sample ID: 16L0048-16

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Trichloroethylene	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Trichlorofluoromethane	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Vinyl acetate	16	SW8260B	<479 ug/kg		479	50	12/06/16 14:43	12/06/16 14:43	KCS
Vinyl chloride	16	SW8260B	<240 ug/kg		240	50	12/06/16 14:43	12/06/16 14:43	KCS
Xylenes, Total	16	SW8260B	<719 ug/kg		719	50	12/06/16 14:43	12/06/16 14:43	KCS
Surr: 1,2-Dichloroethane-d4	16	SW8260B	97.4 %		80-120		12/06/16 14:43	12/06/16 14:43	KCS
Surr: 4-Bromofluorobenzene	16	SW8260B	103 %		85-120		12/06/16 14:43	12/06/16 14:43	KCS
Surr: Dibromofluoromethane	16	SW8260B	92.9 %		80-119		12/06/16 14:43	12/06/16 14:43	KCS
Surr: Toluene-d8	16	SW8260B	99.5 %		85-115		12/06/16 14:43	12/06/16 14:43	KCS
Semivolatile Organic Compou	ınds by GC	MS							
1,2,4,5-Tetrachlorobenzene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
1,2,4-Trichlorobenzene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
1,2-Dichlorobenzene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
1,2-Diphenylhydrazine	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
1,3-Dichlorobenzene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
1,4-Dichlorobenzene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
1-Chloronaphthalene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
1-Naphthylamine	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2,3,4,6-Tetrachlorophenol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2,4,5-Trichlorophenol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2,4,6-Trichlorophenol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2,4-Dichlorophenol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2,4-Dimethylphenol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2,4-Dinitrophenol	16	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2,4-Dinitrotoluene	16	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 22:11	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-27 Laboratory Sample ID: 16L0048-16

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
- arameter		Wicthiou	rtodat	Quui		<u> </u>	Date/Time	Date/ Time	,
Semivolatile Organic Compo	unds by GC	MS							
2,6-Dichlorophenol	16	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2,6-Dinitrotoluene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2-Chloronaphthalene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2-Chlorophenol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2-Methylnaphthalene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2-Naphthylamine	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2-Nitroaniline	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
2-Nitrophenol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
3,3'-Dichlorobenzidine	16	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 22:11	EWS
3-Methylcholanthrene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
3-Nitroaniline	16	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 22:11	EWS
4,6-Dinitro-2-methylphenol	16	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 22:11	EWS
4-Aminobiphenyl	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
4-Bromophenyl phenyl ether	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
4-Chloroaniline	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
4-Chlorophenyl phenyl ether	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
4-Nitroaniline	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
4-Nitrophenol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
7,12-Dimethylbenz (a) anthracene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Acenaphthene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Acenaphthylene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Acetophenone	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Aniline	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Anthracene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Benzidine	16	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Benzo (a) anthracene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-27 Laboratory Sample ID: 16L0048-16

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	inds by GC	MS							
Benzo (a) pyrene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Benzo (b) fluoranthene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Benzo (g,h,i) perylene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Benzo (k) fluoranthene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Benzoic acid	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Benzyl alcohol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
bis (2-Chloroethoxy) methane	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
bis (2-Chloroethyl) ether	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
bis (2-Chloroisopropyl) ether	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
bis (2-Ethylhexyl) phthalate	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Butyl benzyl phthalate	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Chrysene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Dibenz (a,h) anthracene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Dibenz (a,j) acridine	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Dibenzofuran	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Diethyl phthalate	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Dimethyl phthalate	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Di-n-butyl phthalate	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Di-n-octyl phthalate	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Diphenylamine	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Ethyl methanesulfonate	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Fluoranthene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Fluorene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Hexachlorobenzene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Hexachlorobutadiene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Hexachlorocyclopentadiene	16	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 22:11	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-27 Laboratory Sample ID: 16L0048-16

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Hexachloroethane	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Indeno (1,2,3-cd) pyrene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Isophorone	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
m+p-Cresols	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Methyl methanesulfonate	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Naphthalene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Nitrobenzene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
n-Nitrosodimethylamine	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
n-Nitrosodi-n-butylamine	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
n-Nitrosodi-n-propylamine	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
n-Nitrosodiphenylamine	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
n-Nitrosopiperidine	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
o+m+p-Cresols	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
o-Cresol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
p-(Dimethylamino) azobenzene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
p-Chloro-m-cresol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Pentachloronitrobenzene (quintozene)	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Pentachlorophenol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Phenacetin	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Phenanthrene	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Phenol	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Pronamide	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Pyrene	16	SW8270D	7380 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Pyridine	16	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 22:11	EWS
Surr: 2,4,6-Tribromophenol	16	SW8270D	61.5 %		35-125		12/06/16 09:59	12/07/16 22:11	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gasworks

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Laboratory Order ID: 16L0048

- Analytical Results

Client Site I.D.:

Sample I.D. SB-27 Laboratory Sample ID: 16L0048-16

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Com	pounds by GC	MS							
Surr: 2-Fluorobiphenyl	16	SW8270D	%	DS	45-105		12/06/16 09:59	12/07/16 22:11	EWS
Surr: 2-Fluorophenol	16	SW8270D	59.4 %		35-105		12/06/16 09:59	12/07/16 22:11	EWS
Surr: Nitrobenzene-d5	16	SW8270D	37.3 %		35-100		12/06/16 09:59	12/07/16 22:11	EWS
Surr: Phenol-d5	16	SW8270D	36.6 %	DS	40-100		12/06/16 09:59	12/07/16 22:11	EWS
Surr: p-Terphenyl-d14	16	SW8270D	41.1 %		30-125		12/06/16 09:59	12/07/16 22:11	EWS
Organochlorine Pesticides	and PCBs by	GC/ECD							
PCB as Aroclor 1016	16	SW8082A	<0.247 mg/kg dry		0.247	1	12/05/16 14:05	12/08/16 02:18	SKS
PCB as Aroclor 1221	16	SW8082A	<0.247 mg/kg dry		0.247	1	12/05/16 14:05	12/08/16 02:18	SKS
PCB as Aroclor 1232	16	SW8082A	<0.247 mg/kg dry		0.247	1	12/05/16 14:05	12/08/16 02:18	SKS
PCB as Aroclor 1242	16	SW8082A	<0.247 mg/kg dry		0.247	1	12/05/16 14:05	12/08/16 02:18	SKS
PCB as Aroclor 1248	16	SW8082A	<0.247 mg/kg dry		0.247	1	12/05/16 14:05	12/08/16 02:18	SKS
PCB as Aroclor 1254	16	SW8082A	<0.247 mg/kg dry		0.247	1	12/05/16 14:05	12/08/16 02:18	SKS
PCB as Aroclor 1260	16	SW8082A	<0.247 mg/kg dry		0.247	1	12/05/16 14:05	12/08/16 02:18	SKS
Surr: DCB	16	SW8082A	180 %	S	30-105		12/05/16 14:05	12/08/16 02:18	SKS
Surr: TCMX	16	SW8082A	135 %	S	30-105		12/05/16 14:05	12/08/16 02:18	SKS
4,4'-DDD	16	SW8081B	<11.8 ug/kg		11.8	1	12/05/16 14:05	12/08/16 02:18	SKS
4,4'-DDE	16	SW8081B	<7.89 ug/kg		7.89	1	12/05/16 14:05	12/08/16 02:18	SKS
4,4'-DDT	16	SW8081B	<7.89 ug/kg		7.89	1	12/05/16 14:05	12/08/16 02:18	SKS
Aldrin	16	SW8081B	<3.95 ug/kg		3.95	1	12/05/16 14:05	12/08/16 02:18	SKS
alpha-BHC	16	SW8081B	<3.95 ug/kg		3.95	1	12/05/16 14:05	12/08/16 02:18	SKS
beta-BHC	16	SW8081B	<3.95 ug/kg		3.95	1	12/05/16 14:05	12/08/16 02:18	SKS
Chlordane	16	SW8081B	<82.9 ug/kg		82.9	1	12/05/16 14:05	12/08/16 02:18	SKS
delta-BHC	16	SW8081B	<7.89 ug/kg		7.89	1	12/05/16 14:05	12/08/16 02:18	SKS
Dieldrin	16	SW8081B	<7.89 ug/kg		7.89	1	12/05/16 14:05	12/08/16 02:18	SKS
Endosulfan I	16	SW8081B	<7.89 ug/kg		7.89	1	12/05/16 14:05	12/08/16 02:18	SKS
Endosulfan II	16	SW8081B	<11.8 ug/kg		11.8	1	12/05/16 14:05	12/08/16 02:18	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-27 Laboratory Sample ID: 16L0048-16

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Organochlorine Pesticides a	and PCBs by	GC/ECD							
Endosulfan sulfate	16	SW8081B	<3.95 ug/kg		3.95	1	12/05/16 14:05	12/08/16 02:18	SKS
Endrin	16	SW8081B	<7.89 ug/kg		7.89	1	12/05/16 14:05	12/08/16 02:18	SKS
Endrin aldehyde	16	SW8081B	<15.8 ug/kg		15.8	1	12/05/16 14:05	12/08/16 02:18	SKS
Endrin ketone	16	SW8081B	<3.95 ug/kg		3.95	1	12/05/16 14:05	12/08/16 02:18	SKS
gamma-BHC (Lindane)	16	SW8081B	<3.95 ug/kg		3.95	1	12/05/16 14:05	12/08/16 02:18	SKS
Heptachlor	16	SW8081B	<3.95 ug/kg		3.95	1	12/05/16 14:05	12/08/16 02:18	SKS
Heptachlor epoxide	16	SW8081B	<78.9 ug/kg		78.9	1	12/05/16 14:05	12/08/16 02:18	SKS
Methoxychlor	16	SW8081B	<78.9 ug/kg		78.9	1	12/05/16 14:05	12/08/16 02:18	SKS
Mirex	16	SW8081B	<11.8 ug/kg		11.8	1	12/05/16 14:05	12/08/16 02:18	SKS
Toxaphene	16	SW8081B	<82.9 ug/kg		82.9	1	12/05/16 14:05	12/08/16 02:18	SKS
Surr: TCMX	16	SW8081B	110 %	S	30-105		12/05/16 14:05	12/08/16 02:18	SKS
Surr: DCB	16	SW8081B	145 %	S	30-105		12/05/16 14:05	12/08/16 02:18	SKS
Wet Chemistry Analysis									
Cyanide	16	SW9012	4.67 mg/kg		0.96	1	12/06/16 16:51	12/06/16 16:51	BBP
Percent Solids	16	SM18 2540G	80.0 %		0.10	1	12/07/16 10:00	12/08/16 09:52	RCV
рН	16	SW9045D	7.25 SU		0.00	1	12/02/16 17:31	12/02/16 17:31	DLF



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-28 Laboratory Sample ID: 16L0048-17

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7	000 Series M	1ethods							
Silver	17	SW6010C	<0.500 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:48	CWO
Arsenic	17	SW6010C	8.75 mg/kg		1.00	1	12/05/16 08:45	12/05/16 14:48	CWO
Beryllium	17RE1	SW6010C	<0.946 mg/kg		0.946	5	12/05/16 08:45	12/05/16 16:54	CWO
Cadmium	17	SW6010C	1.82 mg/kg		0.200	1	12/05/16 08:45	12/05/16 14:48	CWO
Chromium	17	SW6010C	13.3 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:48	CWO
Copper	17	SW6010C	32.3 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:48	CWO
Mercury	17RE1	SW7471B	0.501 mg/kg		0.153	20	12/05/16 12:00	12/06/16 13:07	MWL
Nickel	17	SW6010C	9.90 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:48	CWO
Lead	17	SW6010C	247 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:48	CWO
Antimony	17	SW6010C	<5.00 mg/kg		5.00	1	12/05/16 08:45	12/05/16 14:48	CWO
Selenium	17RE1	SW6010C	<11.8 mg/kg		11.8	5	12/05/16 08:45	12/05/16 16:55	CWO
Thallium	17	SW6010C	<2.50 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:48	CWO
Zinc	17	SW6010C	105 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:48	CWO
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,1,1-Trichloroethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,1,2,2-Tetrachloroethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,1,2-Trichloroethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,1-Dichloroethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,1-Dichloroethylene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,1-Dichloropropene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,2,3-Trichlorobenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,2,3-Trichloropropane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,2,4-Trichlorobenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,2,4-Trimethylbenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-28 Laboratory Sample ID: 16L0048-17

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,2-Dibromoethane (EDB)	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,2-Dichlorobenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,2-Dichloroethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,2-Dichloropropane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,3,5-Trimethylbenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,3-Dichlorobenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,3-Dichloropropane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
1,4-Dichlorobenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
2,2-Dichloropropane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
2-Butanone (MEK)	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
2-Chlorotoluene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
2-Hexanone (MBK)	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
4-Chlorotoluene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
4-Isopropyltoluene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
4-Methyl-2-pentanone (MIBK)	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Acetone	17	SW8260B	<495 ug/kg		495	50	12/06/16 15:07	12/06/16 15:07	KCS
Benzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Bromobenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Bromochloromethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Bromodichloromethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Bromoform	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Bromomethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Carbon disulfide	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Carbon tetrachloride	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Chlorobenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-28 Laboratory Sample ID: 16L0048-17

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Chloroform	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Chloromethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
cis-1,2-Dichloroethylene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
cis-1,3-Dichloropropene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Dibromochloromethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Dibromomethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Dichlorodifluoromethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Di-isopropyl ether (DIPE)	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Ethylbenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Hexachlorobutadiene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Iodomethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Isopropylbenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
m+p-Xylenes	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Methylene chloride	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Methyl-t-butyl ether (MTBE)	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Naphthalene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
n-Butylbenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
n-Propylbenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
o-Xylene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
sec-Butylbenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Styrene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
tert-Butylbenzene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Tetrachloroethylene (PCE)	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Toluene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
trans-1,2-Dichloroethylene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-28 Laboratory Sample ID: 16L0048-17

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Trichloroethylene	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Trichlorofluoromethane	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Vinyl acetate	17	SW8260B	<495 ug/kg		495	50	12/06/16 15:07	12/06/16 15:07	KCS
Vinyl chloride	17	SW8260B	<247 ug/kg		247	50	12/06/16 15:07	12/06/16 15:07	KCS
Xylenes, Total	17	SW8260B	<742 ug/kg		742	50	12/06/16 15:07	12/06/16 15:07	KCS
Surr: 1,2-Dichloroethane-d4	17	SW8260B	94.2 %		80-120		12/06/16 15:07	12/06/16 15:07	KCS
Surr: 4-Bromofluorobenzene	17	SW8260B	101 %		85-120		12/06/16 15:07	12/06/16 15:07	KCS
Surr: Dibromofluoromethane	17	SW8260B	92.1 %		80-119		12/06/16 15:07	12/06/16 15:07	KCS
Surr: Toluene-d8	17	SW8260B	98.1 %		85-115		12/06/16 15:07	12/06/16 15:07	KCS
Semivolatile Organic Compou	inds by GC	MS							
1,2,4,5-Tetrachlorobenzene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
1,2,4-Trichlorobenzene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
1,2-Dichlorobenzene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
1,2-Diphenylhydrazine	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
1,3-Dichlorobenzene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
1,4-Dichlorobenzene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
1-Chloronaphthalene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
1-Naphthylamine	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2,3,4,6-Tetrachlorophenol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2,4,5-Trichlorophenol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2,4,6-Trichlorophenol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2,4-Dichlorophenol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2,4-Dimethylphenol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2,4-Dinitrophenol	17	SW8270D	<3880 ug/kg	С	3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2,4-Dinitrotoluene	17	SW8270D	<3880 ug/kg	С	3880	25	12/06/16 09:59	12/07/16 20:21	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-28 Laboratory Sample ID: 16L0048-17

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
	•						Date, Time	Date, Time	
Semivolatile Organic Compo	unds by GC	MS							
2,6-Dichlorophenol	17	SW8270D	<3880 ug/kg	С	3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2,6-Dinitrotoluene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2-Chloronaphthalene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2-Chlorophenol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2-Methylnaphthalene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2-Naphthylamine	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2-Nitroaniline	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
2-Nitrophenol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
3,3'-Dichlorobenzidine	17	SW8270D	<3880 ug/kg	С	3880	25	12/06/16 09:59	12/07/16 20:21	EWS
3-Methylcholanthrene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
3-Nitroaniline	17	SW8270D	<3880 ug/kg	С	3880	25	12/06/16 09:59	12/07/16 20:21	EWS
4,6-Dinitro-2-methylphenol	17	SW8270D	<3880 ug/kg	С	3880	25	12/06/16 09:59	12/07/16 20:21	EWS
4-Aminobiphenyl	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
4-Bromophenyl phenyl ether	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
4-Chloroaniline	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
4-Chlorophenyl phenyl ether	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
4-Nitroaniline	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
4-Nitrophenol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
7,12-Dimethylbenz (a) anthracene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Acenaphthene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Acenaphthylene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Acetophenone	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Aniline	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Anthracene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Benzidine	17	SW8270D	<3880 ug/kg	С	3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Benzo (a) anthracene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-28 Laboratory Sample ID: 16L0048-17

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ands by GC	MS							
Benzo (a) pyrene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Benzo (b) fluoranthene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Benzo (g,h,i) perylene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Benzo (k) fluoranthene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Benzoic acid	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Benzyl alcohol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
bis (2-Chloroethoxy) methane	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
bis (2-Chloroethyl) ether	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
bis (2-Chloroisopropyl) ether	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
bis (2-Ethylhexyl) phthalate	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Butyl benzyl phthalate	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Chrysene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Dibenz (a,h) anthracene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Dibenz (a,j) acridine	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Dibenzofuran	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Diethyl phthalate	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Dimethyl phthalate	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Di-n-butyl phthalate	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Di-n-octyl phthalate	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Diphenylamine	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Ethyl methanesulfonate	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Fluoranthene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Fluorene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Hexachlorobenzene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Hexachlorobutadiene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Hexachlorocyclopentadiene	17	SW8270D	<3880 ug/kg	С	3880	25	12/06/16 09:59	12/07/16 20:21	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-28 Laboratory Sample ID: 16L0048-17

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Hexachloroethane	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Indeno (1,2,3-cd) pyrene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Isophorone	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
m+p-Cresols	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Methyl methanesulfonate	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Naphthalene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Nitrobenzene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
n-Nitrosodimethylamine	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
n-Nitrosodi-n-butylamine	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
n-Nitrosodi-n-propylamine	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
n-Nitrosodiphenylamine	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
n-Nitrosopiperidine	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
o+m+p-Cresols	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
o-Cresol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
p-(Dimethylamino) azobenzene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
p-Chloro-m-cresol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Pentachloronitrobenzene (quintozene)	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Pentachlorophenol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Phenacetin	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Phenanthrene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Phenol	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Pronamide	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Pyrene	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Pyridine	17	SW8270D	<3880 ug/kg		3880	25	12/06/16 09:59	12/07/16 20:21	EWS
Surr: 2,4,6-Tribromophenol	17	SW8270D	63.7 %		35-125		12/06/16 09:59	12/07/16 20:21	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-28 Laboratory Sample ID: 16L0048-17

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Comp	ounds by GC	MS							
Surr: 2-Fluorobiphenyl	17	SW8270D	%	DS	45-105		12/06/16 09:59	12/07/16 20:21	EWS
Surr: 2-Fluorophenol	17	SW8270D	58.5 %		35-105		12/06/16 09:59	12/07/16 20:21	EWS
Surr: Nitrobenzene-d5	17	SW8270D	36.2 %		35-100		12/06/16 09:59	12/07/16 20:21	EWS
Surr: Phenol-d5	17	SW8270D	37.9 %	DS	40-100		12/06/16 09:59	12/07/16 20:21	EWS
Surr: p-Terphenyl-d14	17	SW8270D	47.7 %		30-125		12/06/16 09:59	12/07/16 20:21	EWS
Organochlorine Pesticides a	and PCBs by	GC/ECD							
PCB as Aroclor 1016	17	SW8082A	<0.248 mg/kg dry		0.248	1	12/05/16 14:05	12/08/16 02:37	SKS
PCB as Aroclor 1221	17	SW8082A	<0.248 mg/kg dry		0.248	1	12/05/16 14:05	12/08/16 02:37	SKS
PCB as Aroclor 1232	17	SW8082A	<0.248 mg/kg dry		0.248	1	12/05/16 14:05	12/08/16 02:37	SKS
PCB as Aroclor 1242	17	SW8082A	<0.248 mg/kg dry		0.248	1	12/05/16 14:05	12/08/16 02:37	SKS
PCB as Aroclor 1248	17	SW8082A	<0.248 mg/kg dry		0.248	1	12/05/16 14:05	12/08/16 02:37	SKS
PCB as Aroclor 1254	17	SW8082A	<0.248 mg/kg dry		0.248	1	12/05/16 14:05	12/08/16 02:37	SKS
PCB as Aroclor 1260	17	SW8082A	<0.248 mg/kg dry		0.248	1	12/05/16 14:05	12/08/16 02:37	SKS
Surr: DCB	17	SW8082A	135 %	S	30-105		12/05/16 14:05	12/08/16 02:37	SKS
Surr: TCMX	17	SW8082A	75.0 %		30-105		12/05/16 14:05	12/08/16 02:37	SKS
4,4'-DDD	17	SW8081B	<11.9 ug/kg		11.9	1	12/05/16 14:05	12/08/16 02:37	SKS
4,4'-DDE	17	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 02:37	SKS
4,4'-DDT	17	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 02:37	SKS
Aldrin	17	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 02:37	SKS
alpha-BHC	17	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 02:37	SKS
beta-BHC	17	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 02:37	SKS
Chlordane	17	SW8081B	<83.4 ug/kg		83.4	1	12/05/16 14:05	12/08/16 02:37	SKS
delta-BHC	17	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 02:37	SKS
Dieldrin	17	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 02:37	SKS
Endosulfan I	17	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 02:37	SKS
Endosulfan II	17	SW8081B	<11.9 ug/kg		11.9	1	12/05/16 14:05	12/08/16 02:37	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-28 Laboratory Sample ID: 16L0048-17

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Organochlorine Pesticides an	d PCBs by	GC/ECD							
Endosulfan sulfate	17	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 02:37	SKS
Endrin	17	SW8081B	<7.95 ug/kg		7.95	1	12/05/16 14:05	12/08/16 02:37	SKS
Endrin aldehyde	17	SW8081B	<15.9 ug/kg		15.9	1	12/05/16 14:05	12/08/16 02:37	SKS
Endrin ketone	17	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 02:37	SKS
gamma-BHC (Lindane)	17	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 02:37	SKS
Heptachlor	17	SW8081B	<3.97 ug/kg		3.97	1	12/05/16 14:05	12/08/16 02:37	SKS
Heptachlor epoxide	17	SW8081B	<79.5 ug/kg		79.5	1	12/05/16 14:05	12/08/16 02:37	SKS
Methoxychlor	17	SW8081B	<79.5 ug/kg		79.5	1	12/05/16 14:05	12/08/16 02:37	SKS
Mirex	17	SW8081B	<11.9 ug/kg		11.9	1	12/05/16 14:05	12/08/16 02:37	SKS
Toxaphene	17	SW8081B	<83.4 ug/kg		83.4	1	12/05/16 14:05	12/08/16 02:37	SKS
Surr: TCMX	17	SW8081B	70.0 %		30-105		12/05/16 14:05	12/08/16 02:37	SKS
Surr: DCB	17	SW8081B	125 %	S	30-105		12/05/16 14:05	12/08/16 02:37	SKS
Wet Chemistry Analysis									
Cyanide	17	SW9012	<0.99 mg/kg		0.99	1	12/06/16 16:54	12/06/16 16:54	BBP
Percent Solids	17	SM18 2540G	80.2 %		0.10	1	12/07/16 10:00	12/08/16 09:52	RCV
рН	17	SW9045D	6.43 SU		0.00	1	12/02/16 17:33	12/02/16 17:33	DLF



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-29 Laboratory Sample ID: 16L0048-18

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/	7000 Series N	1ethods							
Silver	18	SW6010C	<0.500 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:50	CWO
Arsenic	18	SW6010C	4.23 mg/kg		1.00	1	12/05/16 08:45	12/05/16 14:50	CWO
Beryllium	18RE1	SW6010C	<0.969 mg/kg		0.969	5	12/05/16 08:45	12/05/16 16:56	CWO
Cadmium	18	SW6010C	0.816 mg/kg		0.200	1	12/05/16 08:45	12/05/16 14:50	CWO
Chromium	18	SW6010C	9.20 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:50	CWO
Copper	18	SW6010C	15.8 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:50	CWO
Mercury	18	SW7471B	0.107 mg/kg		0.008	1	12/05/16 12:00	12/06/16 12:43	MWL
Nickel	18	SW6010C	2.76 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:50	CWO
Lead	18	SW6010C	20.9 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:50	CWO
Antimony	18	SW6010C	<5.00 mg/kg		5.00	1	12/05/16 08:45	12/05/16 14:50	CWO
Selenium	18	SW6010C	<2.50 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:50	CWO
Thallium	18	SW6010C	<2.50 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:50	CWO
Zinc	18	SW6010C	22.2 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:50	CWO
Volatile Organic Compound	s by GCMS								
1,1,1,2-Tetrachloroethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,1,1-Trichloroethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,1,2,2-Tetrachloroethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,1,2-Trichloroethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,1-Dichloroethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,1-Dichloroethylene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,1-Dichloropropene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,2,3-Trichlorobenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,2,3-Trichloropropane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,2,4-Trichlorobenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,2,4-Trimethylbenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 361

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-29 Laboratory Sample ID: 16L0048-18

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,2-Dibromoethane (EDB)	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,2-Dichlorobenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,2-Dichloroethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,2-Dichloropropane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,3,5-Trimethylbenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,3-Dichlorobenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,3-Dichloropropane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
1,4-Dichlorobenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
2,2-Dichloropropane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
2-Butanone (MEK)	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
2-Chlorotoluene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
2-Hexanone (MBK)	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
4-Chlorotoluene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
4-Isopropyltoluene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
4-Methyl-2-pentanone (MIBK)	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Acetone	18	SW8260B	<500 ug/kg		500	50	12/06/16 15:31	12/06/16 15:31	KCS
Benzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Bromobenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Bromochloromethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Bromodichloromethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Bromoform	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Bromomethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Carbon disulfide	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Carbon tetrachloride	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Chlorobenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-29 Laboratory Sample ID: 16L0048-18

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Chloroform	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Chloromethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
cis-1,2-Dichloroethylene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
cis-1,3-Dichloropropene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Dibromochloromethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Dibromomethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Dichlorodifluoromethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Di-isopropyl ether (DIPE)	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Ethylbenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Hexachlorobutadiene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Iodomethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Isopropylbenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
m+p-Xylenes	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Methylene chloride	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Methyl-t-butyl ether (MTBE)	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Naphthalene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
n-Butylbenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
n-Propylbenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
o-Xylene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
sec-Butylbenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Styrene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
tert-Butylbenzene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Tetrachloroethylene (PCE)	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Toluene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
trans-1,2-Dichloroethylene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/20

12/8/2016 16:26

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

SB-29

Sample I.D.

Laboratory Sample ID: 16L0048-18

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Trichloroethylene	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Trichlorofluoromethane	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Vinyl acetate	18	SW8260B	<500 ug/kg		500	50	12/06/16 15:31	12/06/16 15:31	KCS
Vinyl chloride	18	SW8260B	<250 ug/kg		250	50	12/06/16 15:31	12/06/16 15:31	KCS
Xylenes, Total	18	SW8260B	<749 ug/kg		749	50	12/06/16 15:31	12/06/16 15:31	KCS
Surr: 1,2-Dichloroethane-d4	18	SW8260B	93.4 %		80-120		12/06/16 15:31	12/06/16 15:31	KCS
Surr: 4-Bromofluorobenzene	18	SW8260B	99.7 %		85-120		12/06/16 15:31	12/06/16 15:31	KCS
Surr: Dibromofluoromethane	18	SW8260B	91.2 %		80-119		12/06/16 15:31	12/06/16 15:31	KCS
Surr: Toluene-d8	18	SW8260B	98.2 %		85-115		12/06/16 15:31	12/06/16 15:31	KCS
Semivolatile Organic Compou	ınds by GC	MS							
1,2,4,5-Tetrachlorobenzene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
1,2,4-Trichlorobenzene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
1,2-Dichlorobenzene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
1,2-Diphenylhydrazine	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
1,3-Dichlorobenzene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
1,4-Dichlorobenzene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
1-Chloronaphthalene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
1-Naphthylamine	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2,3,4,6-Tetrachlorophenol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2,4,5-Trichlorophenol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2,4,6-Trichlorophenol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2,4-Dichlorophenol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2,4-Dimethylphenol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2,4-Dinitrophenol	18	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2,4-Dinitrotoluene	18	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 19:08	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-29 Laboratory Sample ID: 16L0048-18

					Reporting		Sample Dren	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,6-Dichlorophenol	18	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2,6-Dinitrotoluene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2-Chloronaphthalene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2-Chlorophenol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2-Methylnaphthalene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2-Naphthylamine	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2-Nitroaniline	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
2-Nitrophenol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
3,3'-Dichlorobenzidine	18	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 19:08	EWS
3-Methylcholanthrene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
3-Nitroaniline	18	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 19:08	EWS
4,6-Dinitro-2-methylphenol	18	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 19:08	EWS
4-Aminobiphenyl	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
4-Bromophenyl phenyl ether	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
4-Chloroaniline	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
4-Chlorophenyl phenyl ether	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
4-Nitroaniline	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
4-Nitrophenol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
7,12-Dimethylbenz (a) anthracene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Acenaphthene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Acenaphthylene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Acetophenone	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Aniline	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Anthracene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Benzidine	18	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Benzo (a) anthracene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gasworks**

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

16L0048-18 Sample I.D. SB-29 Laboratory Sample ID:

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	unds by GC	MS							
	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Benzo (a) pyrene		SW8270D SW8270D	0 0		3830	25			EWS
Benzo (b) fluoranthene	18		<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Benzo (g,h,i) perylene	18	SW8270D	<3830 ug/kg			25	12/06/16 09:59	12/07/16 19:08	
Benzo (k) fluoranthene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Benzoic acid	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Benzyl alcohol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
bis (2-Chloroethoxy) methane	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
bis (2-Chloroethyl) ether	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
bis (2-Chloroisopropyl) ether	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
bis (2-Ethylhexyl) phthalate	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Butyl benzyl phthalate	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Chrysene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Dibenz (a,h) anthracene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Dibenz (a,j) acridine	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Dibenzofuran	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Diethyl phthalate	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Dimethyl phthalate	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Di-n-butyl phthalate	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Di-n-octyl phthalate	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Diphenylamine	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Ethyl methanesulfonate	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Fluoranthene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Fluorene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Hexachlorobenzene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Hexachlorobutadiene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Hexachlorocyclopentadiene	18	SW8270D	<3830 ug/kg	С	3830	25	12/06/16 09:59	12/07/16 19:08	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number:

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-29 Laboratory Sample ID: 16L0048-18

Parameter	Samp ID	Method	Result	F Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Hexachloroethane	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Indeno (1,2,3-cd) pyrene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Isophorone	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
m+p-Cresols	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Methyl methanesulfonate	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Naphthalene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Nitrobenzene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
n-Nitrosodimethylamine	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
n-Nitrosodi-n-butylamine	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
n-Nitrosodi-n-propylamine	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
n-Nitrosodiphenylamine	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
n-Nitrosopiperidine	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
o+m+p-Cresols	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
o-Cresol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
p-(Dimethylamino) azobenzene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
p-Chloro-m-cresol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Pentachloronitrobenzene (quintozene)	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Pentachlorophenol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Phenacetin	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Phenanthrene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Phenol	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Pronamide	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Pyrene	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Pyridine	18	SW8270D	<3830 ug/kg		3830	25	12/06/16 09:59	12/07/16 19:08	EWS
Surr: 2,4,6-Tribromophenol	18	SW8270D	70.2 %		35-125		12/06/16 09:59	12/07/16 19:08	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-29 Laboratory Sample ID: 16L0048-18

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Com	pounds by GC	MS							
Surr: 2-Fluorobiphenyl	18	SW8270D	%	DS	45-105		12/06/16 09:59	12/07/16 19:08	EWS
Surr: 2-Fluorophenol	18	SW8270D	64.0 %		35-105		12/06/16 09:59	12/07/16 19:08	EWS
Surr: Nitrobenzene-d5	18	SW8270D	41.7 %		35-100		12/06/16 09:59	12/07/16 19:08	EWS
Surr: Phenol-d5	18	SW8270D	41.4 %		40-100		12/06/16 09:59	12/07/16 19:08	EWS
Surr: p-Terphenyl-d14	18	SW8270D	47.5 %		30-125		12/06/16 09:59	12/07/16 19:08	EWS
Organochlorine Pesticides	and PCBs by	GC/ECD							
PCB as Aroclor 1016	18	SW8082A	<0.227 mg/kg dry		0.227	1	12/05/16 14:05	12/08/16 02:56	SKS
PCB as Aroclor 1221	18	SW8082A	<0.227 mg/kg dry		0.227	1	12/05/16 14:05	12/08/16 02:56	SKS
PCB as Aroclor 1232	18	SW8082A	<0.227 mg/kg dry		0.227	1	12/05/16 14:05	12/08/16 02:56	SKS
PCB as Aroclor 1242	18	SW8082A	<0.227 mg/kg dry		0.227	1	12/05/16 14:05	12/08/16 02:56	SKS
PCB as Aroclor 1248	18	SW8082A	<0.227 mg/kg dry		0.227	1	12/05/16 14:05	12/08/16 02:56	SKS
PCB as Aroclor 1254	18	SW8082A	<0.227 mg/kg dry		0.227	1	12/05/16 14:05	12/08/16 02:56	SKS
PCB as Aroclor 1260	18	SW8082A	<0.227 mg/kg dry		0.227	1	12/05/16 14:05	12/08/16 02:56	SKS
Surr: DCB	18	SW8082A	200 %	S	30-105		12/05/16 14:05	12/08/16 02:56	SKS
Surr: TCMX	18	SW8082A	105 %		30-105		12/05/16 14:05	12/08/16 02:56	SKS
4,4'-DDD	18	SW8081B	<11.3 ug/kg		11.3	1	12/05/16 14:05	12/08/16 02:56	SKS
4,4'-DDE	18	SW8081B	<7.55 ug/kg		7.55	1	12/05/16 14:05	12/08/16 02:56	SKS
4,4'-DDT	18	SW8081B	<7.55 ug/kg		7.55	1	12/05/16 14:05	12/08/16 02:56	SKS
Aldrin	18	SW8081B	<3.77 ug/kg		3.77	1	12/05/16 14:05	12/08/16 02:56	SKS
alpha-BHC	18	SW8081B	<3.77 ug/kg		3.77	1	12/05/16 14:05	12/08/16 02:56	SKS
beta-BHC	18	SW8081B	<3.77 ug/kg		3.77	1	12/05/16 14:05	12/08/16 02:56	SKS
Chlordane	18	SW8081B	<79.2 ug/kg		79.2	1	12/05/16 14:05	12/08/16 02:56	SKS
delta-BHC	18	SW8081B	<7.55 ug/kg		7.55	1	12/05/16 14:05	12/08/16 02:56	SKS
Dieldrin	18	SW8081B	<7.55 ug/kg		7.55	1	12/05/16 14:05	12/08/16 02:56	SKS
Endosulfan I	18	SW8081B	<7.55 ug/kg		7.55	1	12/05/16 14:05	12/08/16 02:56	SKS
Endosulfan II	18	SW8081B	<11.3 ug/kg		11.3	1	12/05/16 14:05	12/08/16 02:56	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-29 Laboratory Sample ID: 16L0048-18

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Organochlorine Pesticides a	and PCBs by	GC/ECD							
Endosulfan sulfate	18	SW8081B	<3.77 ug/kg		3.77	1	12/05/16 14:05	12/08/16 02:56	SKS
Endrin	18	SW8081B	<7.55 ug/kg		7.55	1	12/05/16 14:05	12/08/16 02:56	SKS
Endrin aldehyde	18	SW8081B	<15.1 ug/kg		15.1	1	12/05/16 14:05	12/08/16 02:56	SKS
Endrin ketone	18	SW8081B	<3.77 ug/kg		3.77	1	12/05/16 14:05	12/08/16 02:56	SKS
gamma-BHC (Lindane)	18	SW8081B	<3.77 ug/kg		3.77	1	12/05/16 14:05	12/08/16 02:56	SKS
Heptachlor	18	SW8081B	<3.77 ug/kg		3.77	1	12/05/16 14:05	12/08/16 02:56	SKS
Heptachlor epoxide	18	SW8081B	<75.5 ug/kg		75.5	1	12/05/16 14:05	12/08/16 02:56	SKS
Methoxychlor	18	SW8081B	<75.5 ug/kg		75.5	1	12/05/16 14:05	12/08/16 02:56	SKS
Mirex	18	SW8081B	<11.3 ug/kg		11.3	1	12/05/16 14:05	12/08/16 02:56	SKS
Toxaphene	18	SW8081B	<79.2 ug/kg		79.2	1	12/05/16 14:05	12/08/16 02:56	SKS
Surr: TCMX	18	SW8081B	100 %		30-105		12/05/16 14:05	12/08/16 02:56	SKS
Surr: DCB	18	SW8081B	185 %	S	30-105		12/05/16 14:05	12/08/16 02:56	SKS
Wet Chemistry Analysis									
Cyanide	18	SW9012	<0.98 mg/kg		0.98	1	12/06/16 16:57	12/06/16 16:57	BBP
Percent Solids	18	SM18 2540G	83.1 %		0.10	1	12/07/16 10:00	12/08/16 09:52	RCV
pH	18	SW9045D	6.97 SU		0.00	1	12/02/16 17:36	12/02/16 17:36	DLF



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-30 Laboratory Sample ID: 16L0048-19

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/	7000 Series N	1ethods							
Silver	19	SW6010C	<0.500 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:52	CWO
Arsenic	19	SW6010C	3.92 mg/kg		1.00	1	12/05/16 08:45	12/05/16 14:52	CWO
Beryllium	19RE1	SW6010C	<0.950 mg/kg		0.950	5	12/05/16 08:45	12/05/16 17:05	CWO
Cadmium	19	SW6010C	1.35 mg/kg		0.200	1	12/05/16 08:45	12/05/16 14:52	CWO
Chromium	19	SW6010C	14.7 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:52	CWO
Copper	19	SW6010C	11.8 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:52	CWO
Mercury	19	SW7471B	0.148 mg/kg		0.008	1	12/05/16 12:00	12/06/16 12:46	MWL
Nickel	19	SW6010C	9.31 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:52	CWO
Lead	19	SW6010C	33.0 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:52	CWO
Antimony	19	SW6010C	<5.00 mg/kg		5.00	1	12/05/16 08:45	12/05/16 14:52	CWO
Selenium	19	SW6010C	<2.50 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:52	CWO
Thallium	19	SW6010C	<2.50 mg/kg		2.50	1	12/05/16 08:45	12/05/16 14:52	CWO
Zinc	19	SW6010C	43.3 mg/kg		0.500	1	12/05/16 08:45	12/05/16 14:52	CWO
Volatile Organic Compound	s by GCMS								
1,1,1,2-Tetrachloroethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,1,1-Trichloroethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,1,2,2-Tetrachloroethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,1,2-Trichloroethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,1-Dichloroethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,1-Dichloroethylene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,1-Dichloropropene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,2,3-Trichlorobenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,2,3-Trichloropropane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,2,4-Trichlorobenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,2,4-Trimethylbenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-30 Laboratory Sample ID: 16L0048-19

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2-Dibromo-3-chloropropane (DBCP)	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,2-Dibromoethane (EDB)	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,2-Dichlorobenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,2-Dichloroethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,2-Dichloropropane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,3,5-Trimethylbenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,3-Dichlorobenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,3-Dichloropropane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
1,4-Dichlorobenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
2,2-Dichloropropane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
2-Butanone (MEK)	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
2-Chlorotoluene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
2-Hexanone (MBK)	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
4-Chlorotoluene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
4-Isopropyltoluene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
4-Methyl-2-pentanone (MIBK)	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Acetone	19	SW8260B	<496 ug/kg		496	50	12/06/16 15:55	12/06/16 15:55	KCS
Benzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Bromobenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Bromochloromethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Bromodichloromethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Bromoform	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Bromomethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Carbon disulfide	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Carbon tetrachloride	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Chlorobenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-30 Laboratory Sample ID: 16L0048-19

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chloroethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Chloroform	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Chloromethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
cis-1,2-Dichloroethylene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
cis-1,3-Dichloropropene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Dibromochloromethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Dibromomethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Dichlorodifluoromethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Di-isopropyl ether (DIPE)	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Ethylbenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Hexachlorobutadiene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
lodomethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Isopropylbenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
m+p-Xylenes	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Methylene chloride	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Methyl-t-butyl ether (MTBE)	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Naphthalene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
n-Butylbenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
n-Propylbenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
o-Xylene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
sec-Butylbenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Styrene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
tert-Butylbenzene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Tetrachloroethylene (PCE)	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Toluene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
trans-1,2-Dichloroethylene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Client Site I.D.:

Sample I.D. SB-30 Laboratory Sample ID: 16L0048-19

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,3-Dichloropropene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Trichloroethylene	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Trichlorofluoromethane	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Vinyl acetate	19	SW8260B	<496 ug/kg		496	50	12/06/16 15:55	12/06/16 15:55	KCS
Vinyl chloride	19	SW8260B	<248 ug/kg		248	50	12/06/16 15:55	12/06/16 15:55	KCS
Xylenes, Total	19	SW8260B	<743 ug/kg		743	50	12/06/16 15:55	12/06/16 15:55	KCS
Surr: 1,2-Dichloroethane-d4	19	SW8260B	90.1 %		80-120		12/06/16 15:55	12/06/16 15:55	KCS
Surr: 4-Bromofluorobenzene	19	SW8260B	99.9 %		85-120		12/06/16 15:55	12/06/16 15:55	KCS
Surr: Dibromofluoromethane	19	SW8260B	88.8 %		80-119		12/06/16 15:55	12/06/16 15:55	KCS
Surr: Toluene-d8	19	SW8260B	98.5 %		85-115		12/06/16 15:55	12/06/16 15:55	KCS
Semivolatile Organic Compou	ınds by GC	MS							
1,2,4,5-Tetrachlorobenzene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
1,2,4-Trichlorobenzene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
1,2-Dichlorobenzene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
1,2-Diphenylhydrazine	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
1,3-Dichlorobenzene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
1,4-Dichlorobenzene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
1-Chloronaphthalene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
1-Naphthylamine	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2,3,4,6-Tetrachlorophenol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2,4,5-Trichlorophenol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2,4,6-Trichlorophenol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2,4-Dichlorophenol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2,4-Dimethylphenol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2,4-Dinitrophenol	19	SW8270D	<3930 ug/kg	С	3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2,4-Dinitrotoluene	19	SW8270D	<3930 ug/kg	С	3930	25	12/06/16 09:59	12/07/16 17:54	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-30 Laboratory Sample ID: 16L0048-19

Danamatan	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep	Analysis	Analyst
Parameter	Odnip ib	Metriod	Result	Quai	Liiiit	D.F.	Date/Time	Date/Time	Analyst
Semivolatile Organic Compou	unds by GC	MS							
2,6-Dichlorophenol	19	SW8270D	<3930 ug/kg	С	3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2,6-Dinitrotoluene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2-Chloronaphthalene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2-Chlorophenol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2-Methylnaphthalene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2-Naphthylamine	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2-Nitroaniline	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
2-Nitrophenol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
3,3'-Dichlorobenzidine	19	SW8270D	<3930 ug/kg	С	3930	25	12/06/16 09:59	12/07/16 17:54	EWS
3-Methylcholanthrene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
3-Nitroaniline	19	SW8270D	<3930 ug/kg	С	3930	25	12/06/16 09:59	12/07/16 17:54	EWS
4,6-Dinitro-2-methylphenol	19	SW8270D	<3930 ug/kg	С	3930	25	12/06/16 09:59	12/07/16 17:54	EWS
4-Aminobiphenyl	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
4-Bromophenyl phenyl ether	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
4-Chloroaniline	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
4-Chlorophenyl phenyl ether	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
4-Nitroaniline	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
4-Nitrophenol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
7,12-Dimethylbenz (a) anthracene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Acenaphthene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Acenaphthylene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Acetophenone	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Aniline	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Anthracene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Benzidine	19	SW8270D	<3930 ug/kg	С	3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Benzo (a) anthracene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-30 Laboratory Sample ID: 16L0048-19

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	nds by CC	MS						2010/11110	
Semivolathe Organic Compou	-								
Benzo (a) pyrene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Benzo (b) fluoranthene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Benzo (g,h,i) perylene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Benzo (k) fluoranthene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Benzoic acid	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Benzyl alcohol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
bis (2-Chloroethoxy) methane	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
bis (2-Chloroethyl) ether	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
bis (2-Chloroisopropyl) ether	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
bis (2-Ethylhexyl) phthalate	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Butyl benzyl phthalate	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Chrysene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Dibenz (a,h) anthracene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Dibenz (a,j) acridine	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Dibenzofuran	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Diethyl phthalate	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Dimethyl phthalate	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Di-n-butyl phthalate	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Di-n-octyl phthalate	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Diphenylamine	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Ethyl methanesulfonate	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Fluoranthene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Fluorene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Hexachlorobenzene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Hexachlorobutadiene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Hexachlorocyclopentadiene	19	SW8270D	<3930 ug/kg	С	3930	25	12/06/16 09:59	12/07/16 17:54	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-30 Laboratory Sample ID: 16L0048-19

Parameter	Samp ID	Method	Result	F Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Comp	ounds by GC	MS							
Hexachloroethane	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Indeno (1,2,3-cd) pyrene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Isophorone	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
m+p-Cresols	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Methyl methanesulfonate	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Naphthalene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Nitrobenzene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
n-Nitrosodimethylamine	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
n-Nitrosodi-n-butylamine	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
n-Nitrosodi-n-propylamine	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
n-Nitrosodiphenylamine	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
n-Nitrosopiperidine	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
o+m+p-Cresols	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
o-Cresol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
p-(Dimethylamino) azobenzene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
p-Chloro-m-cresol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Pentachloronitrobenzene (quintozene)	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Pentachlorophenol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Phenacetin	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Phenanthrene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Phenol	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Pronamide	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Pyrene	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Pyridine	19	SW8270D	<3930 ug/kg		3930	25	12/06/16 09:59	12/07/16 17:54	EWS
Surr: 2,4,6-Tribromophenol	19	SW8270D	85.8 %		35-125		12/06/16 09:59	12/07/16 17:54	EWS



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Final Report

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Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

Sample I.D. SB-30 Laboratory Sample ID: 16L0048-19

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Com	pounds by GC	MS							
Surr: 2-Fluorobiphenyl	19	SW8270D	%	DS	45-105		12/06/16 09:59	12/07/16 17:54	EWS
Surr: 2-Fluorophenol	19	SW8270D	82.7 %		35-105		12/06/16 09:59	12/07/16 17:54	EWS
Surr: Nitrobenzene-d5	19	SW8270D	61.0 %		35-100		12/06/16 09:59	12/07/16 17:54	EWS
Surr: Phenol-d5	19	SW8270D	60.1 %		40-100		12/06/16 09:59	12/07/16 17:54	EWS
Surr: p-Terphenyl-d14	19	SW8270D	68.5 %		30-125		12/06/16 09:59	12/07/16 17:54	EWS
Organochlorine Pesticides	and PCBs by	GC/ECD							
PCB as Aroclor 1016	19	SW8082A	<0.226 mg/kg dry		0.226	1	12/05/16 14:05	12/08/16 03:15	SKS
PCB as Aroclor 1221	19	SW8082A	<0.226 mg/kg dry		0.226	1	12/05/16 14:05	12/08/16 03:15	SKS
PCB as Aroclor 1232	19	SW8082A	<0.226 mg/kg dry		0.226	1	12/05/16 14:05	12/08/16 03:15	SKS
PCB as Aroclor 1242	19	SW8082A	<0.226 mg/kg dry		0.226	1	12/05/16 14:05	12/08/16 03:15	SKS
PCB as Aroclor 1248	19	SW8082A	<0.226 mg/kg dry		0.226	1	12/05/16 14:05	12/08/16 03:15	SKS
PCB as Aroclor 1254	19	SW8082A	<0.226 mg/kg dry		0.226	1	12/05/16 14:05	12/08/16 03:15	SKS
PCB as Aroclor 1260	19	SW8082A	<0.226 mg/kg dry		0.226	1	12/05/16 14:05	12/08/16 03:15	SKS
Surr: DCB	19	SW8082A	165 %	S	30-105		12/05/16 14:05	12/08/16 03:15	SKS
Surr: TCMX	19	SW8082A	100 %		30-105		12/05/16 14:05	12/08/16 03:15	SKS
4,4'-DDD	19	SW8081B	<11.4 ug/kg		11.4	1	12/05/16 14:05	12/08/16 03:15	SKS
4,4'-DDE	19	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 03:15	SKS
4,4'-DDT	19	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 03:15	SKS
Aldrin	19	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 03:15	SKS
alpha-BHC	19	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 03:15	SKS
beta-BHC	19	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 03:15	SKS
Chlordane	19	SW8081B	<79.7 ug/kg		79.7	1	12/05/16 14:05	12/08/16 03:15	SKS
delta-BHC	19	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 03:15	SKS
Dieldrin	19	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 03:15	SKS
Endosulfan I	19	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 03:15	SKS
Endosulfan II	19	SW8081B	<11.4 ug/kg		11.4	1	12/05/16 14:05	12/08/16 03:15	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gasworks**

Purchase Order:

Laboratory Order ID: 16L0048

Analytical Results

SB-30

Sample I.D.

16L0048-19 Laboratory Sample ID:

					Reporting		Sample Prep	Analysis	
Parameter	Samp ID	Method	Result	Qual	Limit	D.F.	Date/Time	Date/Time	Analyst
Organochlorine Pesticides an	d PCBs by	GC/ECD							
Endosulfan sulfate	19	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 03:15	SKS
Endrin	19	SW8081B	<7.59 ug/kg		7.59	1	12/05/16 14:05	12/08/16 03:15	SKS
Endrin aldehyde	19	SW8081B	<15.2 ug/kg		15.2	1	12/05/16 14:05	12/08/16 03:15	SKS
Endrin ketone	19	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 03:15	SKS
gamma-BHC (Lindane)	19	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 03:15	SKS
Heptachlor	19	SW8081B	<3.80 ug/kg		3.80	1	12/05/16 14:05	12/08/16 03:15	SKS
Heptachlor epoxide	19	SW8081B	<75.9 ug/kg		75.9	1	12/05/16 14:05	12/08/16 03:15	SKS
Methoxychlor	19	SW8081B	<75.9 ug/kg		75.9	1	12/05/16 14:05	12/08/16 03:15	SKS
Mirex	19	SW8081B	<11.4 ug/kg		11.4	1	12/05/16 14:05	12/08/16 03:15	SKS
Toxaphene	19	SW8081B	<79.7 ug/kg		79.7	1	12/05/16 14:05	12/08/16 03:15	SKS
Surr: TCMX	19	SW8081B	95.0 %		30-105		12/05/16 14:05	12/08/16 03:15	SKS
Surr: DCB	19	SW8081B	140 %	S	30-105		12/05/16 14:05	12/08/16 03:15	SKS
Wet Chemistry Analysis									
Cyanide	19	SW9012	<1.00 mg/kg		1.00	1	12/06/16 17:00	12/06/16 17:00	BBP
Percent Solids	19	SM18 2540G	84.1 %		0.10	1	12/07/16 10:00	12/08/16 09:52	RCV
рН	19	SW9045D	7.39 SU		0.00	1	12/02/16 17:37	12/02/16 17:37	DLF



Certificate of Analysis

Final Report

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Client Site I.D.: Fulton Gasworks

12/8/2016 16:26

Project Number: 36156.015

Purchase Order:

Date Issued:

Analytical Summary

Preparation Method:

Preparation Method:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA	A 200 Series Methods	Preparation Method:	EPA200.2/R2.8		
16L0048-02	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0135	SZL0132	AL60019
16L0048-02RE1	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0135	SZL0139	AL60019
16L0048-05	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0135	SZL0132	AL60019
16L0048-05RE1	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0135	SZL0139	AL60019
16L0048-06	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0135	SZL0132	AL60019
16L0048-06RE1	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0135	SZL0139	AL60019
16L0048-08	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0135	SZL0132	AL60019
16L0048-08RE1	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0135	SZL0139	AL60019
16L0048-09	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0135	SZL0132	AL60019
16L0048-09RE1	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0135	SZL0139	AL60019
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA	A 6000/7000 Series Methods	Preparation Method:	EPA200.9/R2.2		
16L0048-02	50.0 mL / 50.0 mL	SW7010	BZL0149	SZL0161	AL60016
16L0048-02	50.0 mL / 50.0 mL	SW7010	BZL0149	SZL0164	AL60027
16L0048-02	50.0 mL / 50.0 mL	SW7010	BZL0149	SZL0170	AL60028
16L0048-02	50.0 mL / 50.0 mL	SW7010	BZL0149	SZL0181	AL60031
16L0048-05	50.0 mL / 50.0 mL	SW7010	BZL0149	671.0464	41.00040
16L0048-05		0111010	DZLU149	SZL0161	AL60016
100040-00	50.0 mL / 50.0 mL	SW7010	BZL0149 BZL0149	SZL0161 SZL0164	AL60016 AL60027
16L0046-05 16L0048-05					
	50.0 mL / 50.0 mL	SW7010	BZL0149	SZL0164	AL60027
16L0048-05	50.0 mL / 50.0 mL 50.0 mL / 50.0 mL	SW7010 SW7010	BZL0149 BZL0149	SZL0164 SZL0170	AL60027 AL60028
16L0048-05 16L0048-05	50.0 mL / 50.0 mL 50.0 mL / 50.0 mL 50.0 mL / 50.0 mL	SW7010 SW7010 SW7010	BZL0149 BZL0149 BZL0149	SZL0164 SZL0170 SZL0181	AL60027 AL60028 AL60031
16L0048-05 16L0048-05 16L0048-06 16L0048-06	50.0 mL / 50.0 mL 50.0 mL / 50.0 mL 50.0 mL / 50.0 mL 50.0 mL / 50.0 mL	SW7010 SW7010 SW7010 SW7010	BZL0149 BZL0149 BZL0149 BZL0149	SZL0164 SZL0170 SZL0181 SZL0161	AL60027 AL60028 AL60031 AL60016
16L0048-05 16L0048-05 16L0048-06 16L0048-06	50.0 mL / 50.0 mL 50.0 mL / 50.0 mL 50.0 mL / 50.0 mL 50.0 mL / 50.0 mL 50.0 mL / 50.0 mL	SW7010 SW7010 SW7010 SW7010 SW7010	BZL0149 BZL0149 BZL0149 BZL0149 BZL0149	SZL0164 SZL0170 SZL0181 SZL0161 SZL0164	AL60027 AL60028 AL60031 AL60016 AL60027
16L0048-05 16L0048-05 16L0048-06	50.0 mL / 50.0 mL 50.0 mL / 50.0 mL	SW7010 SW7010 SW7010 SW7010 SW7010	BZL0149 BZL0149 BZL0149 BZL0149 BZL0149 BZL0149	SZL0164 SZL0170 SZL0181 SZL0161 SZL0164 SZL0170	AL60027 AL60028 AL60031 AL60016 AL60027 AL60028
16L0048-05 16L0048-05 16L0048-06 16L0048-06 16L0048-06	50.0 mL / 50.0 mL 50.0 mL / 50.0 mL	SW7010 SW7010 SW7010 SW7010 SW7010 SW7010	BZL0149 BZL0149 BZL0149 BZL0149 BZL0149 BZL0149 BZL0149	SZL0164 SZL0170 SZL0181 SZL0161 SZL0164 SZL0170 SZL0181	AL60027 AL60028 AL60031 AL60016 AL60027 AL60028 AL60031
16L0048-05 16L0048-05 16L0048-06 16L0048-06 16L0048-06 16L0048-06	50.0 mL / 50.0 mL 50.0 mL / 50.0 mL	SW7010 SW7010 SW7010 SW7010 SW7010 SW7010 SW7010	BZL0149 BZL0149 BZL0149 BZL0149 BZL0149 BZL0149 BZL0149 BZL0149	SZL0164 SZL0170 SZL0181 SZL0161 SZL0164 SZL0170 SZL0181 SZL0161	AL60027 AL60028 AL60031 AL60016 AL60027 AL60028 AL60031 AL60016



Certificate of Analysis

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Richmond VA, 23225

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	Preparation Factors				
Sample ID	Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
16L0048-09	50.0 mL / 50.0 mL	SW7010	BZL0149	SZL0161	AL60016
16L0048-09	50.0 mL / 50.0 mL	SW7010	BZL0149	SZL0164	AL60027
16L0048-09	50.0 mL / 50.0 mL	SW7010	BZL0149	SZL0175	AL60028
16L0048-09	50.0 mL / 50.0 mL	SW7010	BZL0149	SZL0181	AL60031
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Ana	alysis	Preparation Method:	No Prep Hal	lides	
16L0048-12	1.00 g / 1.00 mL	SM18 2540G	BZL0230	SZL0212	
16L0048-13	1.00 g / 1.00 mL	SM18 2540G	BZL0230	SZL0212	
16L0048-14	1.00 g / 1.00 mL	SM18 2540G	BZL0230	SZL0212	
16L0048-15	1.00 g / 1.00 mL	SM18 2540G	BZL0230	SZL0212	
16L0048-16	1.00 g / 1.00 mL	SM18 2540G	BZL0230	SZL0212	
16L0048-17	1.00 g / 1.00 mL	SM18 2540G	BZL0230	SZL0212	
16L0048-18	1.00 g / 1.00 mL	SM18 2540G	BZL0230	SZL0212	
16L0048-19	1.00 g / 1.00 mL	SM18 2540G	BZL0230	SZL0212	
	Preparation Factors				
Sample ID	Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Mat Chamiata, Ana	alurai a	Drawaration Mathada	No Dron Wo	4 Cham	
Net Chemistry Ana 16L0048-12		Preparation Method: SW9045D	No Prep We BZL0096	SZL0075	
16L0048-12 16L0048-13	20.1 g / 20.0 mL	SW9045D	BZL0096	SZL0075	
16L0046-13 16L0048-14	20.1 g / 20.0 mL 20.2 g / 20.0 mL	SW9045D SW9045D	BZL0096	SZL0075 SZL0075	
16L0046-14 16L0048-15	20.2 g / 20.0 mL	SW9045D SW9045D	BZL0096	SZL0075 SZL0075	
16L0048-15	20.1 g / 20.0 mL	SW9045D	BZL0096	SZL0075	
16L0048-17	20.1 g / 20.0 mL	SW9045D	BZL0096	SZL0075	
16L0048-17	20.4 g / 20.0 mL	SW9045D	BZL0096	SZL0075	
16L0048-19	20.2 g / 20.0 mL	SW9045D	BZL0096	SZL0075	
	-				
Wet Chemistry Ana		Preparation Method:	No Prep We		A1 00004
16L0048-03	6.00 mL / 6.00 mL	SW9012	BZL0159	SZL0126	AL60024
16L0048-05	6.00 mL / 6.00 mL	SW9012	BZL0159	SZL0126	AL60024
16L0048-06	6.00 mL / 6.00 mL	SW9012	BZL0159	SZL0126	AL60024
16L0048-08	6.00 mL / 6.00 mL	SW9012	BZL0159	SZL0126	AL60024
16L0048-09	6.00 mL / 6.00 mL	SW9012	BZL0159	SZL0126	AL60024
Wet Chemistry Ana	alysis	Preparation Method:	No Prep We	t Chem	



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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
16L0048-12	1.01 g / 100 mL	SW9012	BZL0160	SZL0126	AL60024
16L0048-13	1.01 g / 100 mL	SW9012	BZL0160	SZL0126	AL60024
16L0048-14	1.00 g / 100 mL	SW9012	BZL0160	SZL0126	AL60024
16L0048-15	1.01 g / 100 mL	SW9012	BZL0160	SZL0126	AL60024
16L0048-16	1.04 g / 100 mL	SW9012	BZL0160	SZL0126	AL60024
16L0048-17	1.01 g / 100 mL	SW9012	BZL0160	SZL0126	AL60024
16L0048-18	1.02 g / 100 mL	SW9012	BZL0160	SZL0126	AL60024
16L0048-19	1.00 g / 100 mL	SW9012	BZL0160	SZL0126	AL60024
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA	A 6000/7000 Series Methods	Preparation Method:	SW3050B		
16L0048-11	1.02 g / 50.0 mL	SW6010C	BZL0097	SZL0105	AL60011
16L0048-11RE1	1.02 g / 50.0 mL	SW6010C	BZL0097	SZL0111	AL60011
16L0048-12	1.05 g / 50.0 mL	SW6010C	BZL0097	SZL0105	AL60011
16L0048-12RE1	1.05 g / 50.0 mL	SW6010C	BZL0097	SZL0111	AL60011
16L0048-13	1.08 g / 50.0 mL	SW6010C	BZL0097	SZL0105	AL60011
16L0048-13RE1	1.08 g / 50.0 mL	SW6010C	BZL0097	SZL0111	AL60011
16L0048-14	1.02 g / 50.0 mL	SW6010C	BZL0097	SZL0105	AL60011
16L0048-14RE1	1.02 g / 50.0 mL	SW6010C	BZL0097	SZL0111	AL60011
16L0048-15	1.03 g / 50.0 mL	SW6010C	BZL0097	SZL0105	AL60011
16L0048-15RE1	1.03 g / 50.0 mL	SW6010C	BZL0097	SZL0111	AL60011
16L0048-16	1.03 g / 50.0 mL	SW6010C	BZL0097	SZL0105	AL60011
16L0048-16RE1	1.03 g / 50.0 mL	SW6010C	BZL0097	SZL0111	AL60011
16L0048-17	1.06 g / 50.0 mL	SW6010C	BZL0097	SZL0105	AL60011
16L0048-17RE1	1.06 g / 50.0 mL	SW6010C	BZL0097	SZL0111	AL60011
16L0048-18	1.03 g / 50.0 mL	SW6010C	BZL0097	SZL0105	AL60011
16L0048-18RE1	1.03 g / 50.0 mL	SW6010C	BZL0097	SZL0111	AL60011
16L0048-19	1.05 g / 50.0 mL	SW6010C	BZL0097	SZL0105	AL60011
16L0048-19RE1	1.05 g / 50.0 mL	SW6010C	BZL0097	SZL0111	AL60011
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Semivolatile Organic	c Compounds by GCMS	Preparation Method:	SW3510C		
16L0048-01	820 mL / 1.00 mL	EPA625	BZL0098	SZL0243	AE60009



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Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Sample ID	Preparation Factors	Method	Batch ID	Sequence ID	Calibration ID
<u> </u>	Initial / Final			·	
16L0048-05	810 mL / 1.00 mL	EPA625	BZL0098	SZL0243	AE60009
16L0048-06	760 mL / 1.00 mL	EPA625	BZL0098	SZL0243	AE60009
16L0048-08	890 mL / 1.00 mL	EPA625	BZL0098	SZL0243	AE60009
16L0048-09	950 mL / 1.00 mL	EPA625	BZL0098	SZL0243	AE60009
16L0048-01	820 mL / 1.00 mL	SW8270D	BZL0098	SZL0204	AE60009
16L0048-05	810 mL / 1.00 mL	SW8270D	BZL0098	SZL0204	AE60009
16L0048-06	760 mL / 1.00 mL	SW8270D	BZL0098	SZL0204	AE60009
16L0048-08	890 mL / 1.00 mL	SW8270D	BZL0098	SZL0204	AE60009
16L0048-09	950 mL / 1.00 mL	SW8270D	BZL0098	SZL0204	AE60009
Organochlorine Pes	sticides and PCBs by GC/ECD	Preparation Method:	SW3510C		
16L0048-01	800 mL / 1.00 mL	SW8081B	BZL0129	SZL0195	AL60021
16L0048-05	790 mL / 1.00 mL	SW8081B	BZL0129	SZL0195	AL60021
16L0048-06	790 mL / 1.00 mL	SW8081B	BZL0129	SZL0195	AL60021
16L0048-08	890 mL / 1.00 mL	SW8081B	BZL0129	SZL0195	AL60021
16L0048-09	890 mL / 1.00 mL	SW8081B	BZL0129	SZL0195	AL60021
16L0048-01	800 mL / 1.00 mL	SW8082A	BZL0129	SZL0196	AK60132
16L0048-05	790 mL / 1.00 mL	SW8082A	BZL0129	SZL0196	AK60132
16L0048-06	790 mL / 1.00 mL	SW8082A	BZL0129	SZL0196	AK60132
16L0048-08	890 mL / 1.00 mL	SW8082A	BZL0129	SZL0196	AK60132
16L0048-09	890 mL / 1.00 mL	SW8082A	BZL0129	SZL0196	AK60132
Semivolatile Hydro	carbons by GC	Preparation Method:	SW3510C		
16L0048-07	960 mL / 1.00 mL	SW8015C	BZL0161	SZL0220	AL60025
Petroleum Hydroca	rbons by GC	Preparation Method:	SW3510C		
16L0048-07	960 mL / 1.00 mL	ASTM	BZL0221	SZL0221	AL60025
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Organochlarina Dar	oticides and BCPs by CC/ECP	Droporation Mathad	CW2550D		
Organochiorine Pes 16L0048-12	sticides and PCBs by GC/ECD	Preparation Method: SW8081B	SW3550B BZL0126	SZL0195	AL60021
16L0048-12 16L0048-13	15.1 g / 5.00 mL	SW8081B SW8081B	BZL0126 BZL0126	SZL0195 SZL0195	AL60021 AL60021
16L0048-13 16L0048-14	16.7 g / 5.00 mL	SW8081B	BZL0126 BZL0126	SZL0195 SZL0195	AL60021 AL60021
	16.7 g / 5.00 mL				
16L0048-15	15.8 g / 5.00 mL	SW8081B	BZL0126	SZL0195	AL60021
16L0048-16	15.2 g / 5.00 mL	SW8081B	BZL0126	SZL0195	AL60021
16L0048-17	15.1 g / 5.00 mL	SW8081B	BZL0126	SZL0195	AL60021
16L0048-18	15.9 g / 5.00 mL	SW8081B	BZL0126	SZL0195	AL60021



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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
16L0048-19	15.8 g / 5.00 mL	SW8081B	BZL0126	SZL0195	AL60021
16L0048-12	15.1 g / 5.00 mL	SW8082A	BZL0126	SZL0196	AK60132
16L0048-13	16.7 g / 5.00 mL	SW8082A	BZL0126	SZL0196	AK60132
16L0048-14	16.7 g / 5.00 mL	SW8082A	BZL0126	SZL0196	AK60132
16L0048-15	15.8 g / 5.00 mL	SW8082A	BZL0126	SZL0196	AK60132
16L0048-16	15.2 g / 5.00 mL	SW8082A	BZL0126	SZL0196	AK60132
16L0048-17	15.1 g / 5.00 mL	SW8082A	BZL0126	SZL0196	AK60132
16L0048-18	15.9 g / 5.00 mL	SW8082A	BZL0126	SZL0196	AK60132
16L0048-19	15.8 g / 5.00 mL	SW8082A	BZL0126	SZL0196	AK60132
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Semivolatile Organ	ic Compounds by GCMS	Preparation Method:	SW3550C		
16L0048-12	16.8 g / 1.00 mL	SW8270D	BZL0162	SZL0240	AE60009
16L0048-13	15.4 g / 1.00 mL	SW8270D	BZL0162	SZL0240	AE60009
16L0048-14	15.1 g / 1.00 mL	SW8270D	BZL0162	SZL0240	AE60009
16L0048-15	16.3 g / 1.00 mL	SW8270D	BZL0162	SZL0240	AE60009
16L0048-16	16.3 g / 1.00 mL	SW8270D	BZL0162	SZL0240	AE60009
16L0048-17	16.1 g / 1.00 mL	SW8270D	BZL0162	SZL0240	AE60009
16L0048-18	16.3 g / 1.00 mL	SW8270D	BZL0162	SZL0240	AE60009
16L0048-19	15.9 g / 1.00 mL	SW8270D	BZL0162	SZL0240	AE60009
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Organic Co	ompounds by GCMS	Preparation Method:	SW5030B		
16L0048-04	5.00 mL / 5.00 mL	SW8260B	BZL0099	SZL0086	AK60047
16L0048-05	5.00 mL / 5.00 mL	SW8260B	BZL0099	SZL0086	AK60047
16L0048-06	5.00 mL / 5.00 mL	SW8260B	BZL0099	SZL0086	AK60047
16L0048-08	5.00 mL / 5.00 mL	SW8260B	BZL0099	SZL0086	AK60047
16L0048-09	5.00 mL / 5.00 mL	SW8260B	BZL0099	SZL0086	AK60047
16L0048-10	5.00 mL / 5.00 mL	SW8260B	BZL0099	SZL0086	AK60047
•	ompounds by GCMS	Preparation Method:	SW5030B		
16L0048-05RE1	5.00 mL / 5.00 mL	SW8260B	BZL0185	SZL0165	AK60091
Volatile Organic Co	ompounds by GCMS	Preparation Method:	SW5030B		
16L0048-12	10.0 g / 10.0 mL	SW8260B	BZL0206	SZL0191	AK60091



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Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
16L0048-13	10.0 g / 10.0 mL	SW8260B	BZL0206	SZL0191	AK60091
16L0048-14	10.2 g / 10.0 mL	SW8260B	BZL0206	SZL0191	AK60091
16L0048-15	10.1 g / 10.0 mL	SW8260B	BZL0206	SZL0191	AK60091
16L0048-16	10.4 g / 10.0 mL	SW8260B	BZL0206	SZL0191	AK60091
16L0048-17	10.1 g / 10.0 mL	SW8260B	BZL0206	SZL0191	AK60091
16L0048-18	10.0 g / 10.0 mL	SW8260B	BZL0206	SZL0191	AK60091
16L0048-19	10.1 g / 10.0 mL	SW8260B	BZL0206	SZL0191	AK60091
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA	A 200 Series Methods	Preparation Method:	SW7470A		
16L0048-02	20.0 mL / 20.0 mL	EPA245.1 R3.0	BZL0189	SZL0187	AL60032
16L0048-05	20.0 mL / 20.0 mL	EPA245.1 R3.0	BZL0189	SZL0187	AL60032
16L0048-06	20.0 mL / 20.0 mL	EPA245.1 R3.0	BZL0189	SZL0187	AL60032
16L0048-08	20.0 mL / 20.0 mL	EPA245.1 R3.0	BZL0189	SZL0187	AL60032
16L0048-09	20.0 mL / 20.0 mL	EPA245.1 R3.0	BZL0189	SZL0187	AL60032
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EP/	A 6000/7000 Series Methods	Preparation Method:	SW7471A		
16L0048-11	0.514 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
16L0048-12	0.525 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
16L0048-13	0.518 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
16L0048-13RE1	0.518 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
16L0048-14	0.543 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
16L0048-14RE1	0.543 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
16L0048-15	0.536 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
16L0048-16	0.530 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
16L0048-16RE1	0.530 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
16L0048-17	0.522 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
16L0048-17RE1	0.522 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
	0.559 g / 20.0 mL	SW7471B	BZL0148	SZL0141	AL60023
16L0048-18	0.559 g / 20.0 IIIL	CWITIID	BELOTIO		



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Client Name: Timmons Group Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gasworks**

Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0135 - EPA200.2/R2.8										
Blank (BZL0135-BLK1)				Prepared:	12/05/201	6 Analyze	d: 12/06/2	016		
Beryllium	<0.0040 mg/L	0.0040	mg/L			•				
Cadmium	<0.0040 mg/L	0.0040	mg/L							
Chromium	<0.0100 mg/L	0.0100	mg/L							
Copper	<0.0100 mg/L	0.0100	mg/L							
Lead	<0.0100 mg/L	0.0100	mg/L							
Nickel	<0.0100 mg/L	0.0100	mg/L							
Silver	<0.0100 mg/L	0.0100	mg/L							
Zinc	<0.0100 mg/L	0.0100	mg/L							
Blank (BZL0135-BLK2)				Prepared:	12/05/201	6 Analyze	d: 12/06/2	016		
Beryllium	<0.0040 mg/L	0.0040	mg/L							
LCS (BZL0135-BS1)				Prepared:	12/05/201	6 Analyze	d: 12/06/2	016		
Beryllium	0.516 mg/L	0.0040	mg/L	0.500	mg/L	103	80-120			
Cadmium	0.519 mg/L	0.0040	mg/L	0.500	mg/L	104	80-120			
Chromium	0.518 mg/L	0.0100	mg/L	0.500	mg/L	104	80-120			
Copper	0.520 mg/L	0.0100	mg/L	0.500	mg/L	104	80-120			
Lead	0.517 mg/L	0.0100	mg/L	0.500	mg/L	103	80-120			
Nickel	0.513 mg/L	0.0100	mg/L	0.500	mg/L	103	80-120			
Silver	0.105 mg/L	0.0100	mg/L	0.100	mg/L	105	80-120			E
Zinc	0.514 mg/L	0.0100	mg/L	0.500	mg/L	103	80-120			
LCS Dup (BZL0135-BSD1)				Prepared:	12/05/201	6 Analyze	d: 12/06/2	016		
Beryllium	0.521 mg/L	0.0040	mg/L	0.500	mg/L	104	80-120	0.956	20	
Cadmium	0.524 mg/L	0.0040	mg/L	0.500	mg/L	105	80-120	0.946	20	
Chromium	0.519 mg/L	0.0100	mg/L	0.500	mg/L	104	80-120	0.126	20	
Copper	0.523 mg/L	0.0100	mg/L	0.500	mg/L	105	80-120	0.721	20	
Lead	0.518 mg/L	0.0100	mg/L	0.500	mg/L	104	80-120	0.179	20	
Nickel	0.515 mg/L	0.0100	mg/L	0.500	mg/L	103	80-120	0.364	20	
Silver	0.105 mg/L	0.0100	mg/L	0.100	mg/L	105	80-120	0.464	20	E
Zinc	0.520 mg/L	0.0100	mg/L	0.500	mg/L	104	80-120	1.07	20	



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Client Name: Timmons Group

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RPD

RPD

Limit

Qual

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Result

0.501 mg/L

0.102 mg/L

0.509 mg/L

0.0100

0.0100

0.0100

Submitted To: Julia Campus

Analyte

Nickel

Silver

Zinc

Project Number:

36156.015

%REC

Limits

%REC

Client Site I.D.: Fulton Gasworks

Purchase Order:

Source

Result

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Units

Spike

Level

Reporting

Limit

Matrix Spike (BZL0135-MS1)	Sourc	e: 16L0062	-07	Prepared: 12/05/2016	S Analyze	ed: 12/06/2	.016		
Beryllium	0.500 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	100	75-125			
Cadmium	0.503 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	101	75-125			
Chromium	0.503 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	101	75-125			
Copper	0.500 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	100	75-125			
Lead	0.508 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	102	75-125			
Nickel	0.495 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	99.0	75-125			
Silver	0.102 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	102	75-125			Ε
Zinc	0.500 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	99.9	75-125			
Matrix Spike (BZL0135-MS2)	Sourc	e: 16L0091	-01	Prepared: 12/05/2016	S Analyze	ed: 12/06/2	.016		
Beryllium	0.523 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	105	75-125			
Cadmium	0.510 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	102	75-125			
Chromium	0.514 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	103	75-125			
Copper	0.536 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	106	75-125			
Lead	0.517 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	103	75-125			
Nickel	0.511 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	102	75-125			
Silver	0.102 mg/L	0.0100	mg/L	0.100 <0.0100 mg/L	102	75-125			Ε
Zinc	0.520 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	104	75-125			
Matrix Spike Dup (BZL0135-MSD1)	Sourc	e: 16L0062	-07	Prepared: 12/05/2016	S Analyze	ed: 12/06/2	.016		
Beryllium	0.508 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	102	75-125	1.55	20	
Cadmium	0.511 mg/L	0.0040	mg/L	0.500 <0.0040 mg/L	102	75-125	1.64	20	
Chromium	0.508 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	102	75-125	1.04	20	
Copper	0.508 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	102	75-125	1.52	20	
Lead	0.511 mg/L	0.0100	mg/L	0.500 <0.0100 mg/L	102	75-125	0.720	20	

mg/L

mg/L

mg/L

0.500 < 0.0100 mg/L

0.100 <0.0100 mg/L

0.500 <0.0100 mg/L

100

102

102

75-125

75-125

75-125

1.19

0.454

1.83

20

20

20

Е



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Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0135 - EPA200.2/R2.8										
Matrix Spike Dup (BZL0135-MSD2)	Sour	ce: 16L0091	-01	Prepared:	: 12/05/2016	Analyze	d: 12/06/2	016		
Beryllium	0.511 mg/L	0.0040	mg/L	-	<0.0040 mg/L	102	75-125	2.33	20	
Cadmium	0.500 mg/L	0.0040	mg/L		<0.0040 mg/L	99.9	75-125	2.11	20	
Chromium	0.504 mg/L	0.0100	mg/L	0.500 <	<0.0100 mg/L	101	75-125	2.11	20	
Copper	0.523 mg/L	0.0100	mg/L	0.500 <	<0.0100 mg/L	104	75-125	2.35	20	
Lead	0.503 mg/L	0.0100	mg/L	0.500 <	<0.0100 mg/L	101	75-125	2.88	20	
Nickel	0.498 mg/L	0.0100	mg/L	0.500 <	<0.0100 mg/L	98.9	75-125	2.66	20	
Silver	0.0996 mg/L	0.0100	mg/L	0.100 <	<0.0100 mg/L	99.6	75-125	2.01	20	
Zinc	0.508 mg/L	0.0100	mg/L	0.500 <	<0.0100 mg/L	102	75-125	2.27	20	
Blank (BZL0189-BLK1)				Prepared:	: 12/06/2016	Analyze	<u>d: 12/07/2</u>	016		
Plants (P71 0400 Pt 1/4)				D	10/00/0010	A l	4. 40/07/0	040		
Mercury	<0.0002 mg/L	0.0002	mg/L							
LCS (BZL0189-BS1)				_Prepared:	: 12/06/2016	Analyze	d: 12/07/2	016		
Mercury	0.0021 mg/L	0.0002	mg/L	0.00250 1	mg/L	85.1	85-115			
LCS Dup (BZL0189-BSD1)				Prepared:	: 12/06/2016	Analyze	d: 12/07/2	016		
Mercury	0.0022 mg/L	0.0002	mg/L	0.00250		88.6	85-115	4.11	20	
Matrix Spike (BZL0189-MS1)	Sour	ce: 16L0055	i <u>-01</u>	Prepared:	: 12/06/2016	Analyze	d: 12/07/2	016		
Mercury	0.0024 mg/L	0.0002	mg/L	0.00250 <	<0.0002 mg/L	96.0	70-130			
Matrix Spike (BZL0189-MS2)	Sour	ce: 16L0091	-01	_Prepared:	: 12/06/2016	<u>Analyze</u>	d: 12/07/2	016		
Mercury	0.0020 mg/L	0.0002	mg/L	0.002500	0.0003 mg/L	68.6	70-130			М
Matrix Spike Dup (BZL0189-MSD1)	Sour	ce: 16L0055	<u>i-01</u>	Prepared:	: 12/06/2016	Analyze	d: 12/07/2	016		
Mercury	0.0023 mg/L	0.0002	mg/L	0.00250 <	<0.0002 mg/L	92.7	70-130	3.43	20	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0189 - SW7470A

 Matrix Spike Dup (BZL0189-MSD2)
 Source: 16L0091-01
 Prepared: 12/06/2016 Analyzed: 12/07/2016

 Mercury
 0.0021 mg/L
 0.0002 mg/L
 0.00250 0.0003 mg/L
 71.4
 70-130
 3.44
 20



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Final Report

Client Name: Timmons Group

Date Issued: 12/8/20

12/8/2016 16:26

RPD

RPD

Limit

Qual

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Result

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Limits

%REC

Client Site I.D.: Fulton Gasworks

Analyte

Purchase Order:

Source

Result

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Units

Spike

Level

Reporting

Limit

D-4-1- D71 0007 - 014/00502										
Batch BZL0097 - SW3050B										
Blank (BZL0097-BLK1)				Prepare	d & Analyz	zed: 12/05/2	2016			
Chromium	<0.500 mg/kg	0.500	mg/kg							
Nickel	<0.500 mg/kg	0.500	mg/kg							
Beryllium	<0.200 mg/kg	0.200	mg/kg							
Copper	<2.50 mg/kg	2.50	mg/kg							
Lead	<0.500 mg/kg	0.500	mg/kg							
Antimony	<5.00 mg/kg	5.00	mg/kg							
Selenium	<2.50 mg/kg	2.50	mg/kg							
Silver	<0.500 mg/kg	0.500	mg/kg							
Zinc	<0.500 mg/kg	0.500	mg/kg							
Thallium	<2.50 mg/kg	2.50	mg/kg							
Arsenic	<1.00 mg/kg	1.00	mg/kg							
Cadmium	<0.200 mg/kg	0.200	mg/kg							
LCS (BZL0097-BS1)				Prepare	d & Analyz	zed: 12/05/2	016			
Nickel	95.1 mg/kg	0.500	mg/kg	95.1	mg/kg	100	80-120			
Copper	97.1 mg/kg	2.50	mg/kg	95.1	mg/kg	102	80-120			
Cadmium	94.0 mg/kg	0.200	mg/kg	95.1	mg/kg	98.8	80-120			
Thallium	90.5 mg/kg	2.50	mg/kg	95.1	mg/kg	95.1	80-120			
Antimony	78.8 mg/kg	5.00	mg/kg	95.1	mg/kg	82.8	80-120			
Lead	94.4 mg/kg	0.500	mg/kg	95.1	mg/kg	99.2	80-120			
Silver	4.77 mg/kg	0.500	mg/kg	4.76	mg/kg	100	80-120			
Selenium	87.6 mg/kg	2.50	mg/kg	95.1	mg/kg	92.1	80-120			
Arsenic	89.5 mg/kg	1.00	mg/kg	95.1	mg/kg	94.0	80-120			
Chromium	94.9 mg/kg	0.500	mg/kg	95.1	mg/kg	99.8	80-120			
Beryllium	90.8 mg/kg	0.200	mg/kg	95.1	mg/kg	95.5	80-120			
Zinc	93.5 mg/kg	0.500	mg/kg	95.1	mg/kg	98.3	80-120			
LCS Dup (BZL0097-BSD1)				Prepare	d & Analyz	zed: 12/05/2	2016			
Chromium	101 mg/kg	0.500	mg/kg	97.7	mg/kg	103	80-120	6.13	20	
Selenium	94.8 mg/kg	2.50	mg/kg	97.7	mg/kg	97.1	80-120	7.91	20	
Cadmium	99.8 mg/kg	0.200	mg/kg	97.7	mg/kg	102	80-120	6.00	20	
Silver	5.09 mg/kg	0.500	mg/kg	4.88	mg/kg	104	80-120	6.45	20	
	3 0									



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

A maluda	Danuk	Reporting	l luite	Spike	Source	0/ DEC	%REC	RPD	RPD	0
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	KPD	Limit	Qua
atch BZL0097 - SW3050B										
CS Dup (BZL0097-BSD1)				Prepare	d & Analyzed:	12/05/20	016			
Arsenic	97.0 mg/kg	1.00	mg/kg	97.7	mg/kg	99.3	80-120	8.02	20	
⁻ hallium	103 mg/kg	2.50	mg/kg	97.7	mg/kg	105	80-120	12.5	20	
ntimony	95.5 mg/kg	5.00	mg/kg	97.7	mg/kg	97.8	80-120	19.2	20	
nc	99.2 mg/kg	0.500	mg/kg	97.7	mg/kg	102	80-120	5.88	20	
ickel	101 mg/kg	0.500	mg/kg	97.7	mg/kg	103	80-120	5.99	20	
ead	103 mg/kg	0.500	mg/kg	97.7	mg/kg	105	80-120	8.25	20	
opper	103 mg/kg	2.50	mg/kg	97.7	mg/kg	106	80-120	6.29	20	
eryllium	96.1 mg/kg	0.200	mg/kg	97.7	mg/kg	98.4	80-120	5.66	20	
latrix Spike (BZL0097-MS1)	Sour	ce: 16L0073	3-02	Prepare	d & Analyzed:	12/05/20	016			
tilver	4.40 mg/kg	0.500	mg/kg	4.71	<0.500 mg/kg	93.4	75-125			
inc	120 mg/kg	0.500	mg/kg	94.3	33.5 mg/kg	91.5	75-125			
eryllium	84.5 mg/kg	0.200	mg/kg	94.3	<0.200 mg/kg	89.7	75-125			
ickel	94.1 mg/kg	0.500	mg/kg	94.3	5.89 mg/kg	93.6	75-125			
opper	92.5 mg/kg	2.50	mg/kg	94.3	<2.50 mg/kg	97.0	75-125			
admium	88.3 mg/kg	0.200	mg/kg	94.3	0.758 mg/kg	92.9	75-125			
hromium	106 mg/kg	0.500	mg/kg	94.3	15.2 mg/kg	96.3	75-125			
rsenic	91.8 mg/kg	1.00	mg/kg	94.3	4.27 mg/kg	92.9	75-125			
elenium	82.0 mg/kg	2.50	mg/kg	94.3	<2.50 mg/kg	87.0	75-125			
ntimony	42.5 mg/kg	5.00	mg/kg	94.3	<5.00 mg/kg	45.1	75-125			M
ead	93.4 mg/kg	0.500	mg/kg	94.3	3.36 mg/kg	95.5	75-125			
hallium	84.1 mg/kg	2.50	mg/kg	94.3	<2.50 mg/kg	89.2	75-125			
latrix Spike (BZL0097-MS2)	Sour	ce: 16L0073	3-03	Prepare	d & Analyzed:	12/05/20	016			
hallium	79.4 mg/kg	2.50	mg/kg	97.0	<2.50 mg/kg	81.9	75-125			
opper	97.3 mg/kg	2.50	mg/kg	97.0	<2.50 mg/kg	97.9	75-125			
hromium	104 mg/kg	0.500	mg/kg	97.0	10.1 mg/kg	96.7	75-125			
admium	91.9 mg/kg	0.200	mg/kg	97.0	0.400 mg/kg	94.4	75-125			
ntimony	40.3 mg/kg	5.00	mg/kg	97.0	<5.00 mg/kg	41.6	75-125			М
ilver	4.07 mg/kg	0.500	mg/kg	4.85	<0.500 mg/kg	83.9	75-125			
elenium	77.6 mg/kg	2.50	mg/kg	97.0	<2.50 mg/kg	80.0	75-125			
inc	99.3 mg/kg	0.500	mg/kg	97.0	7.69 mg/kg	94.4	75-125			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8

12/8/2016 16:26

RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gasworks

Purchase Order:

Source

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

		reporting		Oplice	Cource		, u. L.		וווט	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0097 - SW3050B										
Matrix Spike (BZL0097-MS2)	Sour	rce: 16L0073	3-03	Prepare	ed & Analyzed:	12/05/2	016			
Arsenic	84.2 mg/kg	1.00	mg/kg	97.0	4.11 mg/kg	82.6	75-125			
Nickel	80.9 mg/kg	0.500	mg/kg	97.0	3.17 mg/kg	80.1	75-125			
Lead	84.6 mg/kg	0.500	mg/kg	97.0	1.61 mg/kg	85.5	75-125			
Beryllium	89.8 mg/kg	0.200	mg/kg	97.0	<0.200 mg/kg	92.6	75-125			
Matrix Spike Dup (BZL0097-MSD1)	Sour	rce: 16L0073	3-02	Prepared & Analyzed: 12/05/2016						
Silver	4.83 mg/kg	0.500	mg/kg	4.95	<0.500 mg/kg	97.8	75-125	9.37	20	
Chromium	116 mg/kg	0.500	mg/kg	98.9	15.2 mg/kg	102	75-125	8.92	20	
Selenium	91.7 mg/kg	2.50	mg/kg	98.9	<2.50 mg/kg	92.7	75-125	11.2	20	
Arsenic	101 mg/kg	1.00	mg/kg	98.9	4.27 mg/kg	98.2	75-125	9.90	20	
∟ead	104 mg/kg	0.500	mg/kg	98.9	3.36 mg/kg	102	75-125	11.1	20	
Beryllium	93.8 mg/kg	0.200	mg/kg	98.9	<0.200 mg/kg	94.8	75-125	10.4	20	
Nickel	104 mg/kg	0.500	mg/kg	98.9	5.89 mg/kg	99.2	75-125	9.94	20	
Zinc	129 mg/kg	0.500	mg/kg	98.9	33.5 mg/kg	96.9	75-125	7.71	20	
Copper	102 mg/kg	2.50	mg/kg	98.9	<2.50 mg/kg	102	75-125	10.1	20	
⁻ Thallium	92.8 mg/kg	2.50	mg/kg	98.9	<2.50 mg/kg	93.8	75-125	9.82	20	
Cadmium	97.7 mg/kg	0.200	mg/kg	98.9	0.758 mg/kg	98.0	75-125	10.1	20	
Antimony	49.5 mg/kg	5.00	mg/kg	98.9	<5.00 mg/kg	50.0	75-125	15.2	20	М
Matrix Spike Dup (BZL0097-MSD2)	Sour	rce: 16L0073	3-03	Prepare	d & Analyzed:	12/05/2	016			
Cadmium	91.1 mg/kg	0.200	mg/kg	99.9	0.400 mg/kg	90.8	75-125	0.922	20	
Chromium	107 mg/kg	0.500	mg/kg	99.9	10.1 mg/kg	97.0	75-125	2.95	20	
Beryllium	91.4 mg/kg	0.200	mg/kg	99.9	<0.200 mg/kg	91.5	75-125	1.69	20	
Arsenic	98.1 mg/kg	1.00	mg/kg	99.9	4.11 mg/kg	94.1	75-125	15.3	20	
Γhallium	86.5 mg/kg	2.50	mg/kg	99.9	<2.50 mg/kg	86.6	75-125	8.55	20	
Silver	4.39 mg/kg	0.500	mg/kg	5.00	<0.500 mg/kg	87.8	75-125	7.57	20	
Copper	98.3 mg/kg	2.50	mg/kg	99.9	<2.50 mg/kg	96.0	75-125	0.929	20	
Antimony	57.5 mg/kg	5.00	mg/kg	99.9	<5.00 mg/kg	57.6	75-125	35.2	20	M, P
Zinc	100 mg/kg	0.500	mg/kg	99.9	7.69 mg/kg	92.4	75-125	0.761	20	
_ead	95.9 mg/kg	0.500	mg/kg	99.9	1.61 mg/kg	94.4	75-125	12.6	20	
Nickel	94.9 mg/kg	0.500	mg/kg	99.9	3.17 mg/kg	91.8	75-125	15.9	20	
Selenium	88.7 mg/kg	2.50	mg/kg	99.9	<2.50 mg/kg	88.8	75-125	13.4	20	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

RPD

%REC

Client Site I.D.: Fulton Gasworks

Purchase Order:

Source

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Potob P71 0440 - CW7474A										
Batch BZL0148 - SW7471A										
Blank (BZL0148-BLK1)				Prepared: 1	2/05/2010	3 Analyze	d: 12/06/2	016		
Mercury	<0.008 mg/kg	0.008	mg/kg							
LCS (BZL0148-BS1)				Prepared: 1	2/05/2010	3 Analyze	d: 12/06/2	016		
Mercury	0.094 mg/kg	0.008	mg/kg	0.0921 mg	g/kg	103	80-120			
LCS Dup (BZL0148-BSD1)				Prepared: 1	2/05/2016	6 Analyze	d: 12/06/2	016		
Mercury	0.097 mg/kg	0.008	mg/kg	0.0992 mg	g/kg	98.0	80-120	2.83	20	
Matrix Spike (BZL0148-MS1)	Sour	ce: 16L0048	3-19	Prepared: 1	2/05/2010	3 Analyze	d: 12/06/2	016		
Mercury	0.284 mg/kg	0.008	mg/kg	0.0986 0.1	48 mg/kg	137	80-120			М
Matrix Spike Dup (BZL0148-MSD1)	Sour	ce: 16L0048	3-19	Prepared: 12/05/2016 Analyzed: 12/06/2016						
Mercury	0.259 mg/kg	0.008	mg/kg	0.0982 0.1	48 mg/kg	113	80-120	8.99	20	
Batch BZL0149 - EPA200.9/R2.2										
Blank (BZL0149-BLK1)				Prepared: 1	2/05/2010	6 Analyze	d: 12/06/2	016		
Arsenic	<0.0050 mg/L	0.0050	mg/L			o,,	<u> </u>			
Blank (BZL0149-BLK2)				Prepared: 1	2/05/2016	6 Analyze	d· 12/06/2	016		
Thallium	<0.0020 mg/L	0.0020	mg/L			o,,	<u> </u>			
Blank (BZL0149-BLK3)				Prepared: 1	2/05/2016	6 Analyze	d: 12/06/2	016		
Antimony	<0.0050 mg/L	0.0050	mg/L			, ==				
Blank (BZL0149-BLK4)				Prepared: 1	2/05/2016	6 Analyze	d: 12/07/2	016		
Selenium	<0.0030 mg/L	0.0030	mg/L			<u>, 20</u>		•		



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0149 - EPA200.9/R2.2										
LCS (BZL0149-BS1)				Prepared:	12/05/2016	3 Analyze	d: 12/06/2	016		
Arsenic	0.0427 mg/L	0.0125	mg/L	0.0500 r	mg/L	85.4	80-120			
LCS (BZL0149-BS2)				Prepared:	12/05/2016	3 Analyze	d: 12/06/2	016		
Thallium	0.0562 mg/L	0.0050	mg/L	0.0500 r	mg/L	112	80-120			
LCS (BZL0149-BS3)				Prepared:	12/05/2016	6 Analyze	d: 12/06/2	016		
Antimony	0.0587 mg/L	0.0125	mg/L	0.0500 r	mg/L	117	80-120			
LCS (BZL0149-BS4)				Prepared:	12/05/2016	6 Analyze	d: 12/07/2	016		
Selenium	0.0509 mg/L	0.0075	mg/L	0.0500 r	mg/L	102	75-125			
LCS Dup (BZL0149-BSD1)				Prepared:	12/05/2016	6 Analyze	d: 12/06/2	016		
Arsenic	0.0432 mg/L	0.0125	mg/L	0.0500 r	mg/L	86.4	80-120	1.18	20	
LCS Dup (BZL0149-BSD2)				Prepared:	12/05/2016	6 Analyze	d: 12/06/2	016		
Thallium	0.0564 mg/L	0.0050	mg/L	0.0500 r	mg/L	113	80-120	0.340	20	
LCS Dup (BZL0149-BSD3)				Prepared:	12/05/2016	6 Analyze	d: 12/06/2	016		
Antimony	0.0592 mg/L	0.0125	mg/L	0.0500 r	mg/L	118	80-120	0.877	20	
LCS Dup (BZL0149-BSD4)				Prepared:	12/05/2016	6 Analyze	d: 12/07/2	016		
Selenium	0.0488 mg/L	0.0075	mg/L	0.0500 r	mg/L	97.6	75-125	4.25	20	
Matrix Spike (BZL0149-MS1)	Sour	ce: 16L0062	2-07	016						
Arsenic	0.0418 mg/L	0.0125	mg/L	0.0500 <	0.0125 mg/L	83.6	75-125			
Matrix Spike (BZL0149-MS2)	Sour	ce: 16L0062	2-07	Prepared:	12/05/2016	3 Analyze	d: 12/06/2	016		
Thallium	0.0579 mg/L	0.0050	mg/L	0.0500 <	0.0050 mg/L	116	75-125			



Certificate of Analysis

Final Report

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0149 - EPA200.9/R2.2										
Matrix Spike (BZL0149-MS3)	Sour	ce: 16L0062	2-07	Prepared:	12/05/2016	S Analyze	d: 12/07/2	016		
Antimony	0.0515 mg/L	0.0125	mg/L	0.0500 <	0.0125 mg/L	103	75-125			
Matrix Spike (BZL0149-MS4)	Sour	ce: 16L0062	2-07	Prepared:	12/05/2016	S Analyze	d: 12/07/2	016		
Selenium	0.0436 mg/L	0.0075	mg/L	0.0500 <	0.0075 mg/L	87.3	75-125			
Matrix Spike Dup (BZL0149-MSD1)	Sour	ce: 16L0062	2-07	Prepared:	12/05/2016	S Analyze	d: 12/06/2	016		
Arsenic	0.0459 mg/L	0.0125	mg/L	0.0500 <	0.0125 mg/L	91.8	75-125	9.40	20	
Matrix Spike Dup (BZL0149-MSD2)	Sour	ce: 16L0062	2-07	Prepared:	12/05/2016	S Analyze	d: 12/06/2	016		
Thallium	0.0580 mg/L	0.0050	mg/L	0.0500 <	0.0050 mg/L	116	75-125	0.0875	20	
Matrix Spike Dup (BZL0149-MSD3)	Sour	ce: 16L0062	2-07	Prepared:	12/05/2016	S Analyze	d: 12/07/2	016		
Antimony	0.0537 mg/L	0.0125	mg/L	0.0500 <	0.0125 mg/L	107	75-125	4.30	20	
Matrix Spike Dup (BZL0149-MSD4)	Sour	ce: 16L0062	2-07	Prepared:	12/05/2016	S Analyze	d: 12/07/2	016		
Selenium	0.0444 mg/L	0.0075	mg/L	0.0500 <	0.0075 mg/L	88.9	75-125	1.83	20	



Certificate of Analysis

Final Report

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12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZL0099-BLK1)				Prepared & Analyzed: 12/02/2016
,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L	
,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L	
,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L	
,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L	
,1-Dichloroethane	<1.00 ug/L	1.00	ug/L	
1-Dichloroethylene	<1.00 ug/L	1.00	ug/L	
1-Dichloropropene	<1.00 ug/L	1.00	ug/L	
2,3-Trichlorobenzene	<1.00 ug/L	1.00	ug/L	
2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L	
2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L	
2,4-Trimethylbenzene	<1.00 ug/L	1.00	ug/L	
2-Dibromo-3-chloropropane (DBCP)	<4.00 ug/L	4.00	ug/L	
2-Dibromoethane (EDB)	<1.00 ug/L	1.00	ug/L	
2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	
2-Dichloroethane	<1.00 ug/L	1.00	ug/L	
2-Dichloropropane	<1.00 ug/L	1.00	ug/L	
3,5-Trimethylbenzene	<1.00 ug/L	1.00	ug/L	
3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	
3-Dichloropropane	<1.00 ug/L	1.00	ug/L	
4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	
2-Dichloropropane	<2.00 ug/L	2.00	ug/L	
Butanone (MEK)	<10.0 ug/L	10.0	ug/L	
Chlorotoluene	<1.00 ug/L	1.00	ug/L	
Hexanone (MBK)	<5.00 ug/L	5.00	ug/L	
Chlorotoluene	<1.00 ug/L	1.00	ug/L	
Isopropyltoluene	<1.00 ug/L	1.00	ug/L	
Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L	
cetone	<10.0 ug/L	10.0	ug/L	
enzene	<1.00 ug/L	1.00	ug/L	
romobenzene	<1.00 ug/L	1.00	ug/L	
romochloromethane	<1.00 ug/L	1.00	ug/L	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

lank (BZL0099-BLK1)				Prepared & Analyzed: 12/02/2016
romodichloromethane	<0.50 ug/L	0.50	ug/L	
romoform	<1.00 ug/L	1.00	ug/L	
romomethane	<1.00 ug/L	1.00	ug/L	
arbon disulfide	<10.0 ug/L	10.0	ug/L	
arbon tetrachloride	<1.00 ug/L	1.00	ug/L	
lorobenzene	<1.00 ug/L	1.00	ug/L	
oroethane	<1.00 ug/L	1.00	ug/L	
loroform	<0.50 ug/L	0.50	ug/L	
loromethane	<1.00 ug/L	1.00	ug/L	
1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L	
-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L	
romochloromethane	<1.00 ug/L	1.00	ug/L	
bromomethane	<1.00 ug/L	1.00	ug/L	
hlorodifluoromethane	<1.00 ug/L	1.00	ug/L	
sopropyl ether (DIPE)	<5.00 ug/L	5.00	ug/L	
nylbenzene	<1.00 ug/L	1.00	ug/L	
achlorobutadiene	<1.00 ug/L	1.00	ug/L	
omethane	<10.0 ug/L	10.0	ug/L	
propylbenzene	<1.00 ug/L	1.00	ug/L	
p-Xylenes	<2.00 ug/L	2.00	ug/L	
hylene chloride	<4.00 ug/L	4.00	ug/L	
hyl-t-butyl ether (MTBE)	<1.00 ug/L	1.00	ug/L	
phthalene	<1.00 ug/L	1.00	ug/L	
Butylbenzene	<1.00 ug/L	1.00	ug/L	
ropylbenzene	<1.00 ug/L	1.00	ug/L	
ylene	<1.00 ug/L	1.00	ug/L	
-Butylbenzene	<1.00 ug/L	1.00	ug/L	
rene	<1.00 ug/L	1.00	ug/L	
-Butylbenzene	<1.00 ug/L	1.00	ug/L	
rachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L	
luene	<1.00 ug/L	1.00	ug/L	



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

12/8/2016 16:26

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.:

Fulton Gasworks

Purchase Order:

Source

Volatile Organic Compounds by GCMS - Quality Control

Spike

Air Water and Soil Laboratories, Inc.

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0099 - SW5030B										
Blank (BZL0099-BLK1)				Prepared	d & Analyze	d: 12/02/2	016			
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L							
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L							
Trichloroethylene	<1.00 ug/L	1.00	ug/L							
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L							
Vinyl acetate	<10.0 ug/L	10.0	ug/L							
Vinyl chloride	<0.50 ug/L	0.50	ug/L							
Xylenes, Total	<3.00 ug/L	3.00	ug/L							
Surr: 1,2-Dichloroethane-d4	46.2		ug/L	50.0		92.4	70-120			
Surr: 4-Bromofluorobenzene	49.1		ug/L	50.0		98.1	75-120			
Surr: Dibromofluoromethane	46.4		ug/L	50.0		92.8	80-119			
Surr: Toluene-d8	49.5		ug/L	50.0		99.0	85-120			
LCS (BZL0099-BS1)				Prepared	d & Analyze	d: 12/02/2	016			
1,1,1,2-Tetrachloroethane	50.0 ug/L	0.4	ug/L	50.0	ug/L	100	80-130			
1,1,1-Trichloroethane	52.4 ug/L	1	ug/L	50.0	ug/L	105	65-130			
1,1,2,2-Tetrachloroethane	47.6 ug/L	0.4	ug/L	50.0	ug/L	95.3	65-130			
1,1,2-Trichloroethane	52.2 ug/L	1	ug/L	50.0	ug/L	104	75-125			
1,1-Dichloroethane	51.2 ug/L	1	ug/L	50.0	ug/L	102	70-135			
1,1-Dichloroethylene	51.5 ug/L	1	ug/L	50.0	ug/L	103	70-130			
1,1-Dichloropropene	50.3 ug/L	1	ug/L	50.0	ug/L	101	75-135			
1,2,3-Trichlorobenzene	52.1 ug/L	1	ug/L	50.0	ug/L	104	55-140			
1,2,3-Trichloropropane	46.6 ug/L	1	ug/L	50.0	ug/L	93.1	75-125			
1,2,4-Trichlorobenzene	51.5 ug/L	1	ug/L	50.0	ug/L	103	65-135			
1,2,4-Trimethylbenzene	53.5 ug/L	1	ug/L	50.0	ug/L	107	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	45.4 ug/L	4	ug/L	50.0	ug/L	90.9	50-130			
1,2-Dibromoethane (EDB)	49.9 ug/L	1	ug/L	50.0	ug/L	99.7	80-120			
1,2-Dichlorobenzene	51.1 ug/L	1	ug/L	50.0	ug/L	102	70-120			
1,2-Dichloroethane	44.4 ug/L	1	ug/L	50.0	ug/L	88.9	70-130			
1,2-Dichloropropane	50.1 ug/L	1	ug/L	50.0	ug/L	100	75-125			
1,3,5-Trimethylbenzene	53.7 ug/L	1	ug/L	50.0	ug/L	107	75-125			
1,3-Dichlorobenzene	52.4 ug/L	1	ug/L	50.0	ug/L	105	75-125			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0099 - SW5030B LCS (BZL0099-BS1) Prepared & Analyzed: 12/02/2016 1,3-Dichloropropane 49.7 ug/L 1 ug/L 50.0 ug/L 99.3 75-125 1,4-Dichlorobenzene 75-125 51.4 ug/L 1 ug/L 50.0 ug/L 103 54.4 ug/L 2 50.0 70-135 2,2-Dichloropropane ug/L 109 ug/L 2-Butanone (MEK) 57.5 ug/L 10 115 30-150 ug/L 50.0 ug/L 2-Chlorotoluene 55.3 ug/L 111 75-125 1 ug/L 50.0 ug/L 2-Hexanone (MBK) 62.3 ug/L 5 ug/L 50.0 ug/L 125 55-130 4-Chlorotoluene 52.2 ug/L ug/L 50.0 ug/L 104 75-130 1 4-Isopropyltoluene 53.5 ug/L 1 ug/L 50.0 ug/L 107 75-130 4-Methyl-2-pentanone (MIBK) 60.5 ug/L 5 ug/L 50.0 ug/L 121 60-135 Acetone 59.6 ug/L 10 ug/L 50.0 ug/L 119 40-140 80-120 Benzene 54.9 ug/L 1 ug/L 50.0 ug/L 110 75-125 Bromobenzene 51.0 ug/L 1 50.0 102 ug/L ug/L 103 65-130 Bromochloromethane 51.3 ug/L 1 ug/L 50.0 ug/L Bromodichloromethane 57.4 ug/L 0.5 ug/L 50.0 ug/L 115 75-120 Bromoform 53.2 ug/L 1 ug/L 50.0 106 70-130 ug/L 50.0 Bromomethane 44.7 ug/L 89.5 30-145 1 ug/L ug/L Carbon disulfide 41.1 ug/L 10 ug/L 50.0 ug/L 82.3 35-160 Carbon tetrachloride 57.4 ug/L ug/L 50.0 115 65-140 1 ug/L Chlorobenzene 52.0 ug/L 1 ug/L 50.0 ug/L 104 80-120 Chloroethane 50.6 ug/L 1 ug/L 50.0 ug/L 101 60-135 Chloroform 50.3 ug/L 0.5 ug/L 50.0 ug/L 101 65-135 Chloromethane 44.6 ug/L 1 ug/L 50.0 ug/L 89.2 40-125 70-125 cis-1,2-Dichloroethylene 50.7 ug/L ug/L 50.0 101 1 ug/L cis-1,3-Dichloropropene 47.2 ug/L ug/L 50.0 ug/L 94.5 70-130 Dibromochloromethane 50.0 111 60-135 55.6 ug/L ug/L ug/L Dibromomethane 54.6 ug/L ug/L 50.0 ug/L 109 75-125 Dichlorodifluoromethane 43.1 ug/L 86.2 30-155 ug/L 50.0 ug/L Ethylbenzene 53.1 ug/L ug/L 50.0 ug/L 106 75-125 50.0 Hexachlorobutadiene 49.7 ug/L 1 ug/L ug/L 99.4 50-140 49.8 ug/L 99.6 75-125 Isopropylbenzene ug/L 50.0 ug/L m+p-Xylenes 107 ug/L 2 ug/L 100 ug/L 107 75-130



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gasworks

Purchase Order:

Source

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0099 - SW5030B										
LCS (BZL0099-BS1)				Prepare	d & Analyze	d: 12/02/2	016			
Methylene chloride	52.3 ug/L	4	ug/L	50.0	ug/L	105	55-140			
Methyl-t-butyl ether (MTBE)	54.0 ug/L	1	ug/L	50.0	ug/L	108	65-125			
Naphthalene	54.0 ug/L	1	ug/L	50.0	ug/L	108	55-140			
n-Butylbenzene	55.5 ug/L	1	ug/L	50.0	ug/L	111	70-135			
n-Propylbenzene	57.0 ug/L	1	ug/L	50.0	ug/L	114	70-130			
o-Xylene	52.3 ug/L	1	ug/L	50.0	ug/L	105	80-120			
sec-Butylbenzene	54.1 ug/L	1	ug/L	50.0	ug/L	108	70-125			
Styrene	52.7 ug/L	1	ug/L	50.0	ug/L	105	65-135			
tert-Butylbenzene	54.7 ug/L	1	ug/L	50.0	ug/L	109	70-130			
Tetrachloroethylene (PCE)	53.2 ug/L	1	ug/L	50.0	ug/L	106	45-150			
Toluene	54.7 ug/L	1	ug/L	50.0	ug/L	109	75-120			
rans-1,2-Dichloroethylene	54.9 ug/L	1	ug/L	50.0	ug/L	110	60-140			
rans-1,3-Dichloropropene	53.2 ug/L	1	ug/L	50.0	ug/L	106	55-140			
Trichloroethylene	52.7 ug/L	1	ug/L	50.0	ug/L	105	70-125			
Trichlorofluoromethane	48.6 ug/L	1	ug/L	50.0	ug/L	97.2	60-145			
/inyl chloride	37.0 ug/L	0.5	ug/L	50.0	ug/L	74.0	50-145			
Surr: 1,2-Dichloroethane-d4	45.4		ug/L	50.0	ug/L	90.8	70-120			
Surr: 4-Bromofluorobenzene	50.1		ug/L	50.0	ug/L	100	75-120			
Surr: Dibromofluoromethane	46.3		ug/L	50.0	ug/L	92.7	80-119			
Surr: Toluene-d8	49.2		ug/L	50.0	ug/L	98.4	85-120			
Matrix Spike (BZL0099-MS1)	Sour	ce: 16L004	8-08	Prepare	d & Analyze	d: 12/02/2	016			
1,1,1,2-Tetrachloroethane	49.3 ug/L	0.4	ug/L	50.0	<0.4 ug/L	98.6	80-130			
1,1,1-Trichloroethane	51.3 ug/L	1	ug/L	50.0	<1 ug/L	103	65-130			
1,1,2,2-Tetrachloroethane	51.6 ug/L	0.4	ug/L	50.0	<0.4 ug/L	103	65-130			
1,1,2-Trichloroethane	54.8 ug/L	1	ug/L	50.0	<1 ug/L	110	75-125			
1,1-Dichloroethane	52.2 ug/L	1	ug/L	50.0	<1 ug/L	104	70-135			
1,1-Dichloroethylene	49.6 ug/L	1	ug/L	50.0	<1 ug/L	99.1	70-130			
1,1-Dichloropropene	49.0 ug/L	1	ug/L	50.0	<1 ug/L	98.1	75-135			
1,2,3-Trichlorobenzene	51.7 ug/L	1	ug/L	50.0	<1 ug/L	103	55-140			
1,2,3-Trichloropropane	49.5 ug/L	1	ug/L	50.0	<1 ug/L	99.0	75-125			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike (BZL0099-MS1)	Source:	16L0048	-08	Prepare	ed & Analyze	d: 12/02/2	2016
1,2,4-Trichlorobenzene	49.8 ug/L	1	ug/L	50.0	<1 ug/L	99.4	65-135
1,2,4-Trimethylbenzene	51.7 ug/L	1	ug/L	50.0	<1 ug/L	103	75-130
1,2-Dibromo-3-chloropropane (DBCP)	46.9 ug/L	4	ug/L	50.0	<4 ug/L	93.8	50-130
1,2-Dibromoethane (EDB)	51.8 ug/L	1	ug/L	50.0	<1 ug/L	104	80-120
1,2-Dichlorobenzene	49.7 ug/L	1	ug/L	50.0	<1 ug/L	99.4	70-120
1,2-Dichloroethane	47.6 ug/L	1	ug/L	50.0	<1 ug/L	95.2	70-130
1,2-Dichloropropane	51.5 ug/L	1	ug/L	50.0	<1 ug/L	103	75-125
1,3,5-Trimethylbenzene	52.0 ug/L	1	ug/L	50.0	<1 ug/L	104	75-125
1,3-Dichlorobenzene	49.7 ug/L	1	ug/L	50.0	<1 ug/L	99.5	75-125
1,3-Dichloropropane	53.3 ug/L	1	ug/L	50.0	<1 ug/L	107	75-125
1,4-Dichlorobenzene	49.4 ug/L	1	ug/L	50.0	<1 ug/L	98.9	75-125
2,2-Dichloropropane	53.1 ug/L	2	ug/L	50.0	<2 ug/L	106	70-135
2-Butanone (MEK)	56.0 ug/L	10	ug/L	50.0	<10 ug/L	112	30-150
2-Chlorotoluene	51.8 ug/L	1	ug/L	50.0	<1 ug/L	104	75-125
2-Hexanone (MBK)	58.8 ug/L	5	ug/L	50.0	<5 ug/L	118	55-130
4-Chlorotoluene	50.1 ug/L	1	ug/L	50.0	<1 ug/L	100	75-130
4-Isopropyltoluene	51.7 ug/L	1	ug/L	50.0	<1 ug/L	103	75-130
4-Methyl-2-pentanone (MIBK)	59.3 ug/L	5	ug/L	50.0	<5 ug/L	119	60-135
Acetone	64.8 ug/L	10	ug/L	50.0	12.1 ug/L	106	40-140
Benzene	55.2 ug/L	1	ug/L	50.0	<1 ug/L	110	80-120
Bromobenzene	49.4 ug/L	1	ug/L	50.0	<1 ug/L	98.7	75-125
Bromochloromethane	53.4 ug/L	1	ug/L	50.0	<1 ug/L	107	65-130
Bromodichloromethane	57.5 ug/L	0.5	ug/L	50.0	<0.5 ug/L	115	75-120
Bromoform	53.3 ug/L	1	ug/L	50.0	<1 ug/L	106	70-130
Bromomethane	40.3 ug/L	1	ug/L	50.0	<1 ug/L	80.5	30-145
Carbon disulfide	40.2 ug/L	10	ug/L	50.0	<10 ug/L	80.1	35-160
Carbon tetrachloride	54.9 ug/L	1	ug/L	50.0	<1 ug/L	110	65-140
Chlorobenzene	50.2 ug/L	1	ug/L	50.0	<1 ug/L	100	80-120
Chloroethane	51.6 ug/L	1	ug/L	50.0	<1 ug/L	103	60-135
Chloroform	51.7 ug/L	0.5	ug/L	50.0	<0.5 ug/L	103	65-135
Chloromethane	45.7 ug/L	1	ug/L	50.0	<1 ug/L	91.4	40-125



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD		l
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	l

Matrix Spike (BZL0099-MS1)	Source:	16L0048-	-08	Prepare	d & Analyze	d: 12/02/2	016	
cis-1,2-Dichloroethylene	52.0 ug/L	1	ug/L	50.0	<1 ug/L	104	70-125	
cis-1,3-Dichloropropene	48.3 ug/L	1	ug/L	50.0	<1 ug/L	96.7	70-130	
Dibromochloromethane	57.2 ug/L	1	ug/L	50.0	<1 ug/L	114	60-135	
Dibromomethane	56.2 ug/L	1	ug/L	50.0	<1 ug/L	112	75-125	
Dichlorodifluoromethane	41.5 ug/L	1	ug/L	50.0	<1 ug/L	82.9	30-155	
Ethylbenzene	51.4 ug/L	1	ug/L	50.0	<1 ug/L	103	75-125	
Hexachlorobutadiene	47.6 ug/L	1	ug/L	50.0	<1 ug/L	95.2	50-140	
Isopropylbenzene	47.2 ug/L	1	ug/L	50.0	<1 ug/L	94.4	75-125	
m+p-Xylenes	101 ug/L	2	ug/L	100	<2 ug/L	101	75-130	
Methylene chloride	53.3 ug/L	4	ug/L	50.0	<4 ug/L	106	55-140	
Methyl-t-butyl ether (MTBE)	58.6 ug/L	1	ug/L	50.0	<1 ug/L	117	65-125	
Naphthalene	56.9 ug/L	1	ug/L	50.0	1.12 ug/L	111	55-140	
n-Butylbenzene	54.0 ug/L	1	ug/L	50.0	<1 ug/L	108	70-135	
n-Propylbenzene	54.6 ug/L	1	ug/L	50.0	<1 ug/L	109	70-130	
o-Xylene	51.0 ug/L	1	ug/L	50.0	<1 ug/L	102	80-120	
sec-Butylbenzene	52.2 ug/L	1	ug/L	50.0	<1 ug/L	104	70-125	
Styrene	51.1 ug/L	1	ug/L	50.0	<1 ug/L	102	65-135	
tert-Butylbenzene	51.6 ug/L	1	ug/L	50.0	<1 ug/L	103	70-130	
Tetrachloroethylene (PCE)	50.1 ug/L	1	ug/L	50.0	<1 ug/L	100	45-150	
Toluene	53.7 ug/L	1	ug/L	50.0	<1 ug/L	107	75-120	
trans-1,2-Dichloroethylene	52.9 ug/L	1	ug/L	50.0	<1 ug/L	106	60-140	
trans-1,3-Dichloropropene	54.1 ug/L	1	ug/L	50.0	<1 ug/L	108	55-140	
Trichloroethylene	49.9 ug/L	1	ug/L	50.0	<1 ug/L	99.9	70-125	
Trichlorofluoromethane	47.1 ug/L	1	ug/L	50.0	<1 ug/L	94.2	60-145	
Vinyl chloride	37.9 ug/L	0.5	ug/L	50.0	<0.5 ug/L	75.8	50-145	
Surr: 1,2-Dichloroethane-d4	48.6		ug/L	50.0	ug/L	97.2	70-120	
Surr: 4-Bromofluorobenzene	50.4		ug/L	50.0	ug/L	101	75-120	
Surr: Dibromofluoromethane	48.3		ug/L	50.0	ug/L	96.7	80-119	
Surr: Toluene-d8	50.3		ug/L	50.0	ug/L	101	85-120	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZL0099-MSD1)	Source:	16L0048	-08	Prepare	ed & Analyzed	d: 12/02/2	016			
1,1,1,2-Tetrachloroethane	55.0 ug/L	0.4	ug/L	50.0	<0.4 ug/L	110	80-130	10.9	30	
1,1,1-Trichloroethane	53.3 ug/L	1	ug/L	50.0	<1 ug/L	107	65-130	3.79	30	
1,1,2,2-Tetrachloroethane	55.0 ug/L	0.4	ug/L	50.0	<0.4 ug/L	110	65-130	6.37	30	
1,1,2-Trichloroethane	57.3 ug/L	1	ug/L	50.0	<1 ug/L	115	75-125	4.48	30	
1,1-Dichloroethane	54.9 ug/L	1	ug/L	50.0	<1 ug/L	110	70-135	5.08	30	
1,1-Dichloroethylene	52.4 ug/L	1	ug/L	50.0	<1 ug/L	105	70-130	5.52	30	
1,1-Dichloropropene	51.5 ug/L	1	ug/L	50.0	<1 ug/L	103	75-135	4.98	30	
1,2,3-Trichlorobenzene	55.9 ug/L	1	ug/L	50.0	<1 ug/L	111	55-140	7.75	30	
1,2,3-Trichloropropane	52.3 ug/L	1	ug/L	50.0	<1 ug/L	105	75-125	5.55	30	
1,2,4-Trichlorobenzene	53.9 ug/L	1	ug/L	50.0	<1 ug/L	108	65-135	7.84	30	
1,2,4-Trimethylbenzene	55.5 ug/L	1	ug/L	50.0	<1 ug/L	111	75-130	7.10	30	
1,2-Dibromo-3-chloropropane (DBCP)	48.3 ug/L	4	ug/L	50.0	<4 ug/L	96.5	50-130	2.82	30	
1,2-Dibromoethane (EDB)	56.6 ug/L	1	ug/L	50.0	<1 ug/L	113	80-120	8.83	30	
1,2-Dichlorobenzene	53.0 ug/L	1	ug/L	50.0	<1 ug/L	106	70-120	6.46	30	
1,2-Dichloroethane	48.4 ug/L	1	ug/L	50.0	<1 ug/L	96.7	70-130	1.52	30	
1,2-Dichloropropane	54.2 ug/L	1	ug/L	50.0	<1 ug/L	108	75-125	5.07	30	
1,3,5-Trimethylbenzene	55.8 ug/L	1	ug/L	50.0	<1 ug/L	112	75-125	6.98	30	
1,3-Dichlorobenzene	53.8 ug/L	1	ug/L	50.0	<1 ug/L	108	75-125	7.76	30	
1,3-Dichloropropane	54.5 ug/L	1	ug/L	50.0	<1 ug/L	109	75-125	2.21	30	
1,4-Dichlorobenzene	53.0 ug/L	1	ug/L	50.0	<1 ug/L	106	75-125	6.87	30	
2,2-Dichloropropane	54.7 ug/L	2	ug/L	50.0	<2 ug/L	109	70-135	2.99	30	
2-Butanone (MEK)	61.3 ug/L	10	ug/L	50.0	<10 ug/L	123	30-150	9.04	30	
2-Chlorotoluene	55.6 ug/L	1	ug/L	50.0	<1 ug/L	111	75-125	7.08	30	
2-Hexanone (MBK)	67.0 ug/L	5	ug/L	50.0	<5 ug/L	134	55-130	13.1	30	M
4-Chlorotoluene	53.8 ug/L	1	ug/L	50.0	<1 ug/L	108	75-130	7.28	30	
4-Isopropyltoluene	55.8 ug/L	1	ug/L	50.0	<1 ug/L	112	75-130	7.60	30	
4-Methyl-2-pentanone (MIBK)	64.7 ug/L	5	ug/L	50.0	<5 ug/L	129	60-135	8.64	30	
Acetone	72.4 ug/L	10	ug/L	50.0	12.1 ug/L	121	40-140	11.0	30	
Benzene	57.5 ug/L	1	ug/L	50.0	<1 ug/L	114	80-120	4.10	30	
Bromobenzene	54.8 ug/L	1	ug/L	50.0	<1 ug/L	110	75-125	10.5	30	
Bromochloromethane	55.2 ug/L	1	ug/L	50.0	<1 ug/L	110	65-130	3.45	30	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0099 - SW5030B Source: 16L0048-08 Prepared & Analyzed: 12/02/2016 Matrix Spike Dup (BZL0099-MSD1) 50.0 < 0.5 ug/L Bromodichloromethane 60.0 ug/L 0.5 ug/L 120 75-120 4.31 30 M 50.0 <1 ug/L Bromoform 56.7 ug/L 1 ug/L 113 70-130 6.22 30 44.4 ug/L 9 85 30 Bromomethane ug/L 50.0 <1 ug/L 88.9 30-145 1 43.3 ug/L 50.0 <10 ug/L 35-160 7.24 30 Carbon disulfide 10 ug/L 86.2 57.7 ug/L 30 Carbon tetrachloride 50.0 <1 ug/L 115 65-140 4 86 1 ug/L Chlorobenzene 55.5 ug/L ug/L 50.0 <1 ug/L 111 80-120 10.0 30 Chloroethane 54.3 ug/L ug/L 50.0 <1 ug/L 109 60-135 5.08 30 1 Chloroform 53.0 ug/L 0.5 ug/L 50.0 < 0.5 ug/L 106 65-135 2.41 30 Chloromethane 48.7 ug/L ug/L 50.0 <1 ug/L 97.3 40-125 6.31 30 1 cis-1,2-Dichloroethylene 54.6 ug/L 1 ug/L 50.0 <1 ug/L 109 70-125 4.86 30 cis-1,3-Dichloropropene 50.5 ug/L 1 ug/L 50.0 <1 ug/L 101 70-130 4.35 30 60-135 3.97 Dibromochloromethane 59.5 ug/L ug/L 50.0 <1 ug/L 119 30 50.0 <1 ug/L 75-125 3.27 Dibromomethane 58.1 ug/L ug/L 116 30 Dichlorodifluoromethane 30 45.6 ug/L 1 ug/L 50.0 <1 ug/L 912 30-155 9 53 Ethylbenzene 56.2 ug/L ug/L 50.0 <1 ug/L 112 75-125 8.94 30 Hexachlorobutadiene 51.0 ug/L ug/L 50.0 <1 ug/L 102 50-140 6.82 30 1 Isopropylbenzene 52.6 ug/L ug/L 50.0 <1 ug/L 105 75-125 10.9 30 m+p-Xylenes 113 ug/L 2 ug/L 100 <2 ug/L 113 75-130 10.7 30 Methylene chloride 55.9 ug/L 4 ug/L 50.0 <4 ug/L 111 55-140 4.78 30 Methyl-t-butyl ether (MTBE) 60.4 ug/L 1 ug/L 50.0 <1 ug/L 121 65-125 3.13 30 Naphthalene 60.8 ug/L ug/L 50.0 1.12 ug/L 119 55-140 6.64 30 n-Butylbenzene 57.8 ug/L ug/L 50.0 <1 ug/L 116 70-135 6.82 30 70-130 7.93 30 n-Propylbenzene 59.1 ug/L ug/L 50.0 <1 ug/L 118 1 o-Xylene 56.2 ug/L ug/L 50.0 <1 ug/L 112 80-120 9.82 30 70-125 8.51 30 sec-Butylbenzene 56.8 ug/L ug/L 50.0 <1 ug/L 114 56.0 ug/L Styrene ug/L 50.0 <1 ug/L 112 65-135 9.14 30 tert-Butylbenzene 56.6 ug/L ug/L 50.0 <1 ug/L 70-130 9.26 30 113 Tetrachloroethylene (PCE) 54.1 ug/L ug/L 50.0 <1 ug/L 108 45-150 7.72 30 Toluene 55.9 ug/L 1 ug/L 50.0 <1 ug/L 111 75-120 3.89 30 56.2 ug/L 50.0 <1 ug/L 60-140 30 trans-1,2-Dichloroethylene ug/L 112 6.15 trans-1,3-Dichloropropene 56.5 ug/L ug/L 50.0 <1 ug/L 113 55-140 4.36 30



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

F	Reporting		Spike	Source		%REC		RPD	
Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZL0099-MSD1)	Source:	16L0048	-08	Prepare	ed & Analyze	d: 12/02/2	016			
Trichloroethylene	52.8 ug/L	1	ug/L	50.0	<1 ug/L	106	70-125	5.59	30	
Trichlorofluoromethane	49.0 ug/L	1	ug/L	50.0	<1 ug/L	98.0	60-145	3.94	30	
Vinyl chloride	41.8 ug/L	0.5	ug/L	50.0	<0.5 ug/L	83.5	50-145	9.65	30	
Surr: 1,2-Dichloroethane-d4	45.5		ug/L	50.0	ug/L	91.1	70-120			
Surr: 4-Bromofluorobenzene	52.1		ug/L	50.0	ug/L	104	75-120			
Surr: Dibromofluoromethane	47.8		ug/L	50.0	ug/L	95.6	80-119			
Surr: Toluene-d8	49.1		ug/L	50.0	ug/L	98.1	85-120			

Detah DZI 0405 CW5020D			
Batch BZL0185 - SW5030B			
Blank (BZL0185-BLK1)			Prepared & Analyzed: 12/05/2016
1,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L
1,2,3-Trichlorobenzene	<1.00 ug/L	1.00	ug/L
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L
1,2,4-Trimethylbenzene	<1.00 ug/L	1.00	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	<4.00 ug/L	4.00	ug/L
1,2-Dibromoethane (EDB)	<1.00 ug/L	1.00	ug/L
1,2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L
1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L
1,2-Dichloropropane	<1.00 ug/L	1.00	ug/L
1,3,5-Trimethylbenzene	<1.00 ug/L	1.00	ug/L
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

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Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0185 - SW5030B

Blank (BZL0185-BLK1)				Prepared & Analyzed: 12/05/2016
2,2-Dichloropropane	<2.00 ug/L	2.00	ug/L	
2-Butanone (MEK)	<10.0 ug/L	10.0	ug/L	
2-Chlorotoluene	<1.00 ug/L	1.00	ug/L	
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L	
4-Chlorotoluene	<1.00 ug/L	1.00	ug/L	
4-Isopropyltoluene	<1.00 ug/L	1.00	ug/L	
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L	
Acetone	<10.0 ug/L	10.0	ug/L	
Benzene	<1.00 ug/L	1.00	ug/L	
Bromobenzene	<1.00 ug/L	1.00	ug/L	
Bromochloromethane	<1.00 ug/L	1.00	ug/L	
Bromodichloromethane	<0.50 ug/L	0.50	ug/L	
Bromoform	<1.00 ug/L	1.00	ug/L	
Bromomethane	<1.00 ug/L	1.00	ug/L	
Carbon disulfide	<10.0 ug/L	10.0	ug/L	
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L	
Chlorobenzene	<1.00 ug/L	1.00	ug/L	
Chloroethane	<1.00 ug/L	1.00	ug/L	
Chloroform	<0.50 ug/L	0.50	ug/L	
Chloromethane	<1.00 ug/L	1.00	ug/L	
cis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L	
cis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L	
Dibromochloromethane	<1.00 ug/L	1.00	ug/L	
Dibromomethane	<1.00 ug/L	1.00	ug/L	
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L	
Di-isopropyl ether (DIPE)	<5.00 ug/L	5.00	ug/L	
Ethylbenzene	<1.00 ug/L	1.00	ug/L	
Hexachlorobutadiene	<1.00 ug/L	1.00	ug/L	
lodomethane	<10.0 ug/L	10.0	ug/L	
Isopropylbenzene	<1.00 ug/L	1.00	ug/L	
m+p-Xylenes	<2.00 ug/L	2.00	ug/L	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0185 - SW5030B										
Blank (BZL0185-BLK1)				Prepared	& Analyze	d: 12/05/20	016			
Methylene chloride	<4.00 ug/L	4.00	ug/L							

Methylene chloride	<4.00 ug/L	4.00	ug/L					
Methyl-t-butyl ether (MTBE)	<1.00 ug/L	1.00	ug/L					
Naphthalene	<1.00 ug/L	1.00	ug/L					
n-Butylbenzene	<1.00 ug/L	1.00	ug/L					
n-Propylbenzene	<1.00 ug/L	1.00	ug/L					
o-Xylene	<1.00 ug/L	1.00	ug/L					
sec-Butylbenzene	<1.00 ug/L	1.00	ug/L					
Styrene	<1.00 ug/L	1.00	ug/L					
tert-Butylbenzene	<1.00 ug/L	1.00	ug/L					
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L					
Toluene	<1.00 ug/L	1.00	ug/L					
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L					
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L					
Trichloroethylene	<1.00 ug/L	1.00	ug/L					
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L					
Vinyl acetate	<10.0 ug/L	10.0	ug/L					
Vinyl chloride	<0.50 ug/L	0.50	ug/L					
Xylenes, Total	<3.00 ug/L	3.00	ug/L					
Surr: 1,2-Dichloroethane-d4	51.6		ug/L	50.0		103	70-120	
Surr: 4-Bromofluorobenzene	46.5		ug/L	50.0		93.1	75-120	
Surr: Dibromofluoromethane	51.0		ug/L	50.0		102	80-119	
Surr: Toluene-d8	50.2		ug/L	50.0		100	85-120	
LCS (BZL0185-BS1)				Prepare	d & Ana	alyzed: 12/05/2	016	
1,1,1,2-Tetrachloroethane	50.6 ug/L	0.4	ug/L	50.0	ug/L	101	80-130	
1,1,1-Trichloroethane	53.3 ug/L	1	ug/L	50.0	ug/L	107	65-130	
1,1,2,2-Tetrachloroethane	44.2 ug/L	0.4	ug/L	50.0	ug/L	88.4	65-130	
1,1,2-Trichloroethane	48.9 ug/L	1	ug/L	50.0	ug/L	97.9	75-125	
1,1-Dichloroethane	49.6 ug/L	1	ug/L	50.0	ug/L	99.2	70-135	
1,1-Dichloroethylene	47.9 ug/L	1	ug/L	50.0	ug/L	95.8	70-130	
1,1-Dichloropropene	49.8 ug/L	1	ug/L	50.0	ug/L	99.6	75-135	
			-		-			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

36156.015

Project Number:

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Client Site I.D.: Fulton Gasworks Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0185 - SW5030B										
LCS (BZL0185-BS1)				Prepared	& Analyze	d: 12/05/20	016			
1,2,3-Trichlorobenzene	53.0 ug/L	1	ug/L	50.0 ι	ug/L	106	55-140			
1.2.3-Trichloropropage	44.3 ug/l	1	ua/l	50.0	ıa/l	88 7	75-125			

LCS (BZL0185-BS1)				Prepare	<u>d & Anal</u>	lyzed: 12/05/2	016	_
1,2,3-Trichlorobenzene	53.0 ug/L	1	ug/L	50.0	ug/L	106	55-140	
1,2,3-Trichloropropane	44.3 ug/L	1	ug/L	50.0	ug/L	88.7	75-125	
1,2,4-Trichlorobenzene	52.8 ug/L	1	ug/L	50.0	ug/L	106	65-135	
1,2,4-Trimethylbenzene	52.5 ug/L	1	ug/L	50.0	ug/L	105	75-130	
1,2-Dibromo-3-chloropropane (DBCP)	40.2 ug/L	4	ug/L	50.0	ug/L	80.4	50-130	
1,2-Dibromoethane (EDB)	48.4 ug/L	1	ug/L	50.0	ug/L	96.9	80-120	
1,2-Dichlorobenzene	51.6 ug/L	1	ug/L	50.0	ug/L	103	70-120	
1,2-Dichloroethane	44.4 ug/L	1	ug/L	50.0	ug/L	88.7	70-130	
1,2-Dichloropropane	46.4 ug/L	1	ug/L	50.0	ug/L	92.7	75-125	
1,3,5-Trimethylbenzene	53.5 ug/L	1	ug/L	50.0	ug/L	107	75-125	
1,3-Dichlorobenzene	52.7 ug/L	1	ug/L	50.0	ug/L	105	75-125	
1,3-Dichloropropane	47.5 ug/L	1	ug/L	50.0	ug/L	95.0	75-125	
1,4-Dichlorobenzene	51.8 ug/L	1	ug/L	50.0	ug/L	104	75-125	
2,2-Dichloropropane	54.9 ug/L	2	ug/L	50.0	ug/L	110	70-135	
2-Butanone (MEK)	40.1 ug/L	10	ug/L	50.0	ug/L	80.3	30-150	
2-Chlorotoluene	53.6 ug/L	1	ug/L	50.0	ug/L	107	75-125	
2-Hexanone (MBK)	43.7 ug/L	5	ug/L	50.0	ug/L	87.5	55-130	
4-Chlorotoluene	51.8 ug/L	1	ug/L	50.0	ug/L	104	75-130	
4-Isopropyltoluene	53.0 ug/L	1	ug/L	50.0	ug/L	106	75-130	
4-Methyl-2-pentanone (MIBK)	42.8 ug/L	5	ug/L	50.0	ug/L	85.6	60-135	
Acetone	37.6 ug/L	10	ug/L	50.0	ug/L	75.3	40-140	
Benzene	51.8 ug/L	1	ug/L	50.0	ug/L	104	80-120	
Bromobenzene	53.2 ug/L	1	ug/L	50.0	ug/L	106	75-125	
Bromochloromethane	54.0 ug/L	1	ug/L	50.0	ug/L	108	65-130	
Bromodichloromethane	55.7 ug/L	0.5	ug/L	50.0	ug/L	111	75-120	
Bromoform	50.6 ug/L	1	ug/L	50.0	ug/L	101	70-130	
Bromomethane	47.3 ug/L	1	ug/L	50.0	ug/L	94.7	30-145	
Carbon disulfide	34.7 ug/L	10	ug/L	50.0	ug/L	69.5	35-160	
Carbon tetrachloride	57.9 ug/L	1	ug/L	50.0	ug/L	116	65-140	
Chlorobenzene	52.4 ug/L	1	ug/L	50.0	ug/L	105	80-120	
Chloroethane	45.9 ug/L	1	ug/L	50.0	ug/L	91.8	60-135	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0185 - SW5030B LCS (BZL0185-BS1) Prepared & Analyzed: 12/05/2016

Chloroform	49.0 ug/L	0.5	ug/L	50.0	ug/L	97.9	65-135	
Chloromethane	39.5 ug/L	1	ug/L	50.0	ug/L	79.0	40-125	
cis-1,2-Dichloroethylene	51.1 ug/L	1	ug/L	50.0	ug/L	102	70-125	
cis-1,3-Dichloropropene	46.3 ug/L	1	ug/L	50.0	ug/L	92.6	70-130	
Dibromochloromethane	56.0 ug/L	1	ug/L	50.0	ug/L	112	60-135	
Dibromomethane	52.6 ug/L	1	ug/L	50.0	ug/L	105	75-125	
Dichlorodifluoromethane	47.2 ug/L	1	ug/L	50.0	ug/L	94.5	30-155	
Ethylbenzene	53.2 ug/L	1	ug/L	50.0	ug/L	106	75-125	
Hexachlorobutadiene	53.6 ug/L	1	ug/L	50.0	ug/L	107	50-140	
Isopropylbenzene	51.0 ug/L	1	ug/L	50.0	ug/L	102	75-125	
m+p-Xylenes	108 ug/L	2	ug/L	100	ug/L	108	75-130	
Methylene chloride	49.3 ug/L	4	ug/L	50.0	ug/L	98.6	55-140	
Methyl-t-butyl ether (MTBE)	49.8 ug/L	1	ug/L	50.0	ug/L	99.7	65-125	
Naphthalene	48.1 ug/L	1	ug/L	50.0	ug/L	96.1	55-140	
n-Butylbenzene	53.1 ug/L	1	ug/L	50.0	ug/L	106	70-135	
n-Propylbenzene	53.5 ug/L	1	ug/L	50.0	ug/L	107	70-130	
o-Xylene	53.2 ug/L	1	ug/L	50.0	ug/L	106	80-120	
sec-Butylbenzene	52.3 ug/L	1	ug/L	50.0	ug/L	105	70-125	
Styrene	53.2 ug/L	1	ug/L	50.0	ug/L	106	65-135	
tert-Butylbenzene	53.0 ug/L	1	ug/L	50.0	ug/L	106	70-130	
Tetrachloroethylene (PCE)	53.5 ug/L	1	ug/L	50.0	ug/L	107	45-150	
Toluene	51.4 ug/L	1	ug/L	50.0	ug/L	103	75-120	
trans-1,2-Dichloroethylene	52.8 ug/L	1	ug/L	50.0	ug/L	106	60-140	
trans-1,3-Dichloropropene	46.7 ug/L	1	ug/L	50.0	ug/L	93.4	55-140	
Trichloroethylene	51.2 ug/L	1	ug/L	50.0	ug/L	102	70-125	
Trichlorofluoromethane	48.6 ug/L	1	ug/L	50.0	ug/L	97.2	60-145	
Vinyl chloride	44.5 ug/L	0.5	ug/L	50.0	ug/L	89.0	50-145	
Surr: 1,2-Dichloroethane-d4	48.0		ug/L	50.0	ug/L	96.1	70-120	
Surr: 4-Bromofluorobenzene	49.3		ug/L	50.0	ug/L	98.7	75-120	
Surr: Dibromofluoromethane	49.7		ug/L	50.0	ug/L	99.3	80-119	
Surr: Toluene-d8	48.7		ug/L	50.0	ug/L	97.4	85-120	
			-		-			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD		l
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	l

Batch BZL0185 - SW5030B

Matrix Spike (BZL0185-MS1)	Source	e: 16L0077-	01	Prepare	ed & Analyze	d: 12/05/2	016
1,1,1,2-Tetrachloroethane	51.0 ug/L	0.4	ug/L	50.0	<0.4 ug/L	102	80-130
1,1,1-Trichloroethane	53.8 ug/L	1	ug/L	50.0	<1 ug/L	108	65-130
1,1,2,2-Tetrachloroethane	46.0 ug/L	0.4	ug/L	50.0	<0.4 ug/L	92.0	65-130
1,1,2-Trichloroethane	51.6 ug/L	1	ug/L	50.0	<1 ug/L	103	75-125
1,1-Dichloroethane	48.5 ug/L	1	ug/L	50.0	<1 ug/L	97.0	70-135
1,1-Dichloroethylene	47.7 ug/L	1	ug/L	50.0	<1 ug/L	95.3	70-130
1,1-Dichloropropene	49.5 ug/L	1	ug/L	50.0	<1 ug/L	98.9	75-135
1,2,3-Trichlorobenzene	52.6 ug/L	1	ug/L	50.0	<1 ug/L	105	55-140
1,2,3-Trichloropropane	45.2 ug/L	1	ug/L	50.0	<1 ug/L	90.5	75-125
1,2,4-Trichlorobenzene	51.4 ug/L	1	ug/L	50.0	<1 ug/L	103	65-135
1,2,4-Trimethylbenzene	51.4 ug/L	1	ug/L	50.0	<1 ug/L	103	75-130
1,2-Dibromo-3-chloropropane (DBCP)	44.6 ug/L	4	ug/L	50.0	<4 ug/L	89.2	50-130
1,2-Dibromoethane (EDB)	49.7 ug/L	1	ug/L	50.0	<1 ug/L	99.5	80-120
1,2-Dichlorobenzene	50.3 ug/L	1	ug/L	50.0	<1 ug/L	101	70-120
1,2-Dichloroethane	44.7 ug/L	1	ug/L	50.0	<1 ug/L	89.4	70-130
1,2-Dichloropropane	47.4 ug/L	1	ug/L	50.0	<1 ug/L	94.7	75-125
1,3,5-Trimethylbenzene	52.0 ug/L	1	ug/L	50.0	<1 ug/L	104	75-125
1,3-Dichlorobenzene	50.8 ug/L	1	ug/L	50.0	<1 ug/L	102	75-125
1,3-Dichloropropane	49.5 ug/L	1	ug/L	50.0	<1 ug/L	99.0	75-125
1,4-Dichlorobenzene	50.4 ug/L	1	ug/L	50.0	<1 ug/L	101	75-125
2,2-Dichloropropane	51.8 ug/L	2	ug/L	50.0	<2 ug/L	104	70-135
2-Butanone (MEK)	45.8 ug/L	10	ug/L	50.0	<10 ug/L	91.6	30-150
2-Chlorotoluene	51.8 ug/L	1	ug/L	50.0	<1 ug/L	104	75-125
2-Hexanone (MBK)	45.6 ug/L	5	ug/L	50.0	<5 ug/L	91.2	55-130
4-Chlorotoluene	49.8 ug/L	1	ug/L	50.0	<1 ug/L	99.7	75-130
4-Isopropyltoluene	50.8 ug/L	1	ug/L	50.0	<1 ug/L	102	75-130
4-Methyl-2-pentanone (MIBK)	47.2 ug/L	5	ug/L	50.0	<5 ug/L	94.3	60-135
Acetone	45.5 ug/L	10	ug/L	50.0	<10 ug/L	86.7	40-140
Benzene	51.3 ug/L	1	ug/L	50.0	<1 ug/L	103	80-120
Bromobenzene	53.5 ug/L	1	ug/L	50.0	<1 ug/L	107	75-125
Bromochloromethane	54.4 ug/L	1	ug/L	50.0	<1 ug/L	109	65-130



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

36156.015

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number:

Client Site I.D.: Fulton Gasworks Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0185 - SW5030B

Matrix Spike (BZL0185-MS1)	Source	: 16L0077-	01	Prepare	d & Analyze	d: 12/05/2	016
Bromodichloromethane	56.8 ug/L	0.5	ug/L	50.0	<0.5 ug/L	114	75-120
Bromoform	51.0 ug/L	1	ug/L	50.0	<1 ug/L	102	70-130
Bromomethane	47.2 ug/L	1	ug/L	50.0	<1 ug/L	94.4	30-145
Carbon disulfide	35.0 ug/L	10	ug/L	50.0	<10 ug/L	70.1	35-160
Carbon tetrachloride	57.5 ug/L	1	ug/L	50.0	<1 ug/L	115	65-140
Chlorobenzene	51.7 ug/L	1	ug/L	50.0	<1 ug/L	103	80-120
Chloroethane	46.4 ug/L	1	ug/L	50.0	<1 ug/L	92.8	60-135
Chloroform	48.7 ug/L	0.5	ug/L	50.0	<0.5 ug/L	97.5	65-135
Chloromethane	40.6 ug/L	1	ug/L	50.0	<1 ug/L	81.3	40-125
cis-1,2-Dichloroethylene	51.8 ug/L	1	ug/L	50.0	<1 ug/L	104	70-125
cis-1,3-Dichloropropene	46.8 ug/L	1	ug/L	50.0	<1 ug/L	93.6	70-130
Dibromochloromethane	58.8 ug/L	1	ug/L	50.0	<1 ug/L	118	60-135
Dibromomethane	55.1 ug/L	1	ug/L	50.0	<1 ug/L	110	75-125
Dichlorodifluoromethane	49.3 ug/L	1	ug/L	50.0	<1 ug/L	98.7	30-155
Ethylbenzene	51.8 ug/L	1	ug/L	50.0	<1 ug/L	104	75-125
Hexachlorobutadiene	50.6 ug/L	1	ug/L	50.0	<1 ug/L	101	50-140
Isopropylbenzene	49.9 ug/L	1	ug/L	50.0	<1 ug/L	99.7	75-125
m+p-Xylenes	107 ug/L	2	ug/L	100	<2 ug/L	107	75-130
Methylene chloride	48.7 ug/L	4	ug/L	50.0	<4 ug/L	96.9	55-140
Methyl-t-butyl ether (MTBE)	51.8 ug/L	1	ug/L	50.0	<1 ug/L	104	65-125
Naphthalene	50.4 ug/L	1	ug/L	50.0	<1 ug/L	100	55-140
n-Butylbenzene	51.2 ug/L	1	ug/L	50.0	<1 ug/L	102	70-135
n-Propylbenzene	50.9 ug/L	1	ug/L	50.0	<1 ug/L	102	70-130
o-Xylene	51.4 ug/L	1	ug/L	50.0	<1 ug/L	103	80-120
sec-Butylbenzene	50.8 ug/L	1	ug/L	50.0	<1 ug/L	102	70-125
Styrene	52.2 ug/L	1	ug/L	50.0	<1 ug/L	104	65-135
tert-Butylbenzene	51.8 ug/L	1	ug/L	50.0	<1 ug/L	104	70-130
Tetrachloroethylene (PCE)	51.2 ug/L	1	ug/L	50.0	<1 ug/L	102	45-150
Toluene	51.4 ug/L	1	ug/L	50.0	<1 ug/L	103	75-120
trans-1,2-Dichloroethylene	49.5 ug/L	1	ug/L	50.0	<1 ug/L	98.9	60-140
trans-1,3-Dichloropropene	47.9 ug/L	1	ug/L	50.0	<1 ug/L	95.8	55-140



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0185 - SW5030B										
Matrix Spike (BZL0185-MS1)	Source	: 16L0077	-01	Prepare	ed & Analyze	d: 12/05/2	2016			
Trichloroethylene	50.4 ug/L	1	ug/L	50.0	<1 ug/L	101	70-125			
Trichlorofluoromethane	49.3 ug/L	1	ug/L	50.0	<1 ug/L	98.7	60-145			
Vinyl chloride	43.9 ug/L	0.5	ug/L	50.0	<0.5 ug/L	87.9	50-145			
Surr: 1,2-Dichloroethane-d4	46.5		ug/L	50.0	ug/L	93.1	70-120			
Surr: 4-Bromofluorobenzene	49.4		ug/L	50.0	ug/L	98.9	75-120			
Surr: Dibromofluoromethane	50.0		ug/L	50.0	ug/L	100	80-119			
Surr: Toluene-d8	49.8		ug/L	50.0	ug/L	99.7	85-120			
Matrix Spike Dup (BZL0185-MSD1)	Source: 16L0077-01 P			Prepare	ed & Analyze	d: 12/05/2	016			
1,1,1,2-Tetrachloroethane	50.7 ug/L	0.4	ug/L	50.0	<0.4 ug/L	101	80-130	0.668	30	
1,1,1-Trichloroethane	52.1 ug/L	1	ug/L	50.0	<1 ug/L	104	65-130	3.23	30	
1,1,2,2-Tetrachloroethane	45.7 ug/L	0.4	ug/L	50.0	<0.4 ug/L	91.4	65-130	0.611	30	
1,1,2-Trichloroethane	48.6 ug/L	1	ug/L	50.0	<1 ug/L	97.2	75-125	5.93	30	
1,1-Dichloroethane	48.4 ug/L	1	ug/L	50.0	<1 ug/L	96.8	70-135	0.268	30	
1,1-Dichloroethylene	46.3 ug/L	1	ug/L	50.0	<1 ug/L	92.7	70-130	2.83	30	
1,1-Dichloropropene	47.7 ug/L	1	ug/L	50.0	<1 ug/L	95.3	75-135	3.71	30	
1,2,3-Trichlorobenzene	52.3 ug/L	1	ug/L	50.0	<1 ug/L	105	55-140	0.553	30	
1,2,3-Trichloropropane	44.7 ug/L	1	ug/L	50.0	<1 ug/L	89.4	75-125	1.16	30	
1,2,4-Trichlorobenzene	50.9 ug/L	1	ug/L	50.0	<1 ug/L	102	65-135	0.939	30	
1,2,4-Trimethylbenzene	51.1 ug/L	1	ug/L	50.0	<1 ug/L	102	75-130	0.449	30	
1,2-Dibromo-3-chloropropane (DBCP)	42.4 ug/L	4	ug/L	50.0	<4 ug/L	84.7	50-130	5.11	30	
1,2-Dibromoethane (EDB)	49.9 ug/L	1	ug/L	50.0	<1 ug/L	99.9	80-120	0.401	30	
1,2-Dichlorobenzene	49.5 ug/L	1	ug/L	50.0	<1 ug/L	99.1	70-120	1.56	30	
1,2-Dichloroethane	44.1 ug/L	1	ug/L	50.0	<1 ug/L	88.2	70-130	1.31	30	
1,2-Dichloropropane	45.7 ug/L	1	ug/L	50.0	<1 ug/L	91.5	75-125	3.48	30	
1,3,5-Trimethylbenzene	51.2 ug/L	1	ug/L	50.0	<1 ug/L	102	75-125	1.51	30	
1,3-Dichlorobenzene	50.9 ug/L	1	ug/L	50.0	<1 ug/L	102	75-125	0.0984	30	
1,3-Dichloropropane	48.4 ug/L	1	ug/L	50.0	<1 ug/L	96.8	75-125	2.25	30	
1,4-Dichlorobenzene	49.6 ug/L	1	ug/L	50.0	<1 ug/L	99.3	75-125	1.46	30	
2,2-Dichloropropane	51.2 ug/L	2	ug/L	50.0	<2 ug/L	102	70-135	1.11	30	
2-Butanone (MEK)	44.8 ug/L	10	ug/L	50.0	<10 ug/L	89.7	30-150	2.12	30	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0185 - SW5030B

Matrix Spike Dup (BZL0185-MSD1)	Source:	16L0077	-01	Prepare	ed & Analyzed	d: 12/05/2	016		
2-Chlorotoluene	51.6 ug/L	1	ug/L	50.0	<1 ug/L	103	75-125	0.386	30
2-Hexanone (MBK)	47.0 ug/L	5	ug/L	50.0	<5 ug/L	93.9	55-130	2.94	30
4-Chlorotoluene	49.6 ug/L	1	ug/L	50.0	<1 ug/L	99.2	75-130	0.543	30
4-Isopropyltoluene	51.0 ug/L	1	ug/L	50.0	<1 ug/L	102	75-130	0.353	30
4-Methyl-2-pentanone (MIBK)	44.5 ug/L	5	ug/L	50.0	<5 ug/L	89.0	60-135	5.85	30
Acetone	42.1 ug/L	10	ug/L	50.0	<10 ug/L	79.9	40-140	7.69	30
Benzene	49.9 ug/L	1	ug/L	50.0	<1 ug/L	99.9	80-120	2.75	30
Bromobenzene	53.5 ug/L	1	ug/L	50.0	<1 ug/L	107	75-125	0.0187	30
Bromochloromethane	53.2 ug/L	1	ug/L	50.0	<1 ug/L	106	65-130	2.23	30
Bromodichloromethane	55.9 ug/L	0.5	ug/L	50.0	<0.5 ug/L	112	75-120	1.49	30
Bromoform	50.9 ug/L	1	ug/L	50.0	<1 ug/L	102	70-130	0.275	30
Bromomethane	47.1 ug/L	1	ug/L	50.0	<1 ug/L	94.3	30-145	0.106	30
Carbon disulfide	33.9 ug/L	10	ug/L	50.0	<10 ug/L	67.8	35-160	3.25	30
Carbon tetrachloride	56.4 ug/L	1	ug/L	50.0	<1 ug/L	113	65-140	1.91	30
Chlorobenzene	51.5 ug/L	1	ug/L	50.0	<1 ug/L	103	80-120	0.368	30
Chloroethane	46.6 ug/L	1	ug/L	50.0	<1 ug/L	93.2	60-135	0.452	30
Chloroform	47.7 ug/L	0.5	ug/L	50.0	<0.5 ug/L	95.4	65-135	2.14	30
Chloromethane	40.0 ug/L	1	ug/L	50.0	<1 ug/L	80.1	40-125	1.46	30
cis-1,2-Dichloroethylene	50.6 ug/L	1	ug/L	50.0	<1 ug/L	101	70-125	2.48	30
cis-1,3-Dichloropropene	45.5 ug/L	1	ug/L	50.0	<1 ug/L	91.1	70-130	2.71	30
Dibromochloromethane	57.1 ug/L	1	ug/L	50.0	<1 ug/L	114	60-135	2.93	30
Dibromomethane	53.4 ug/L	1	ug/L	50.0	<1 ug/L	107	75-125	3.00	30
Dichlorodifluoromethane	47.3 ug/L	1	ug/L	50.0	<1 ug/L	94.7	30-155	4.16	30
Ethylbenzene	52.2 ug/L	1	ug/L	50.0	<1 ug/L	104	75-125	0.712	30
Hexachlorobutadiene	50.6 ug/L	1	ug/L	50.0	<1 ug/L	101	50-140	0.0198	30
Isopropylbenzene	49.8 ug/L	1	ug/L	50.0	<1 ug/L	99.6	75-125	0.161	30
m+p-Xylenes	105 ug/L	2	ug/L	100	<2 ug/L	105	75-130	1.24	30
Methylene chloride	48.4 ug/L	4	ug/L	50.0	<4 ug/L	96.4	55-140	0.556	30
Methyl-t-butyl ether (MTBE)	51.0 ug/L	1	ug/L	50.0	<1 ug/L	102	65-125	1.55	30
Naphthalene	50.5 ug/L	1	ug/L	50.0	<1 ug/L	101	55-140	0.218	30
n-Butylbenzene	50.9 ug/L	1	ug/L	50.0	<1 ug/L	102	70-135	0.685	30



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

80-119

85-120

98.0

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0185 - SW5030B										

Batch BZL0185 - SW5030B									
Matrix Spike Dup (BZL0185-MSD1)	Source: 16L0	0077-0	1	Prepare	d & Analyzed:	: 12/05/20)16		
n-Propylbenzene	50.9 ug/L	1	ug/L	50.0	<1 ug/L	102	70-130	0.0393	30

n-Propylbenzene	50.9 ug/L	1	ug/L	50.0	<1 ug/L	102	70-130	0.0393	30
o-Xylene	52.0 ug/L	1	ug/L	50.0	<1 ug/L	104	80-120	1.20	30
sec-Butylbenzene	50.6 ug/L	1	ug/L	50.0	<1 ug/L	101	70-125	0.473	30
Styrene	52.4 ug/L	1	ug/L	50.0	<1 ug/L	105	65-135	0.382	30
tert-Butylbenzene	51.6 ug/L	1	ug/L	50.0	<1 ug/L	103	70-130	0.580	30
Tetrachloroethylene (PCE)	51.8 ug/L	1	ug/L	50.0	<1 ug/L	104	45-150	1.09	30
Toluene	50.9 ug/L	1	ug/L	50.0	<1 ug/L	102	75-120	0.977	30
trans-1,2-Dichloroethylene	48.2 ug/L	1	ug/L	50.0	<1 ug/L	96.4	60-140	2.64	30
trans-1,3-Dichloropropene	46.8 ug/L	1	ug/L	50.0	<1 ug/L	93.5	55-140	2.39	30
Trichloroethylene	49.3 ug/L	1	ug/L	50.0	<1 ug/L	98.5	70-125	2.21	30
Trichlorofluoromethane	48.4 ug/L	1	ug/L	50.0	<1 ug/L	96.9	60-145	1.80	30
Vinyl chloride	43.1 ug/L	0.5	ug/L	50.0	<0.5 ug/L	86.2	50-145	1.91	30
Surr: 1,2-Dichloroethane-d4	47.4		ug/L	50.0	ug/L	94.8	70-120		
Surr: 4-Bromofluorobenzene	50.5		ug/L	50.0	ug/L	101	75-120		

ug/L

ug/L

50.0 ug/L

50.0 ug/L

48.8

49.0

D-4-k D3I 0000 CWE020E

Surr: Dibromofluoromethane

Surr: Toluene-d8

Batch BZL0206 - SW5030B			
Blank (BZL0206-BLK1)			Prepared & Analyzed: 12/06/2016
1,1,1,2-Tetrachloroethane	<5.00 ug/kg	5.00	ug/kg
1,1,1-Trichloroethane	<5.00 ug/kg	5.00	ug/kg
1,1,2,2-Tetrachloroethane	<5.00 ug/kg	5.00	ug/kg
1,1,2-Trichloroethane	<5.00 ug/kg	5.00	ug/kg
1,1-Dichloroethane	<5.00 ug/kg	5.00	ug/kg
1,1-Dichloroethylene	<5.00 ug/kg	5.00	ug/kg
1,1-Dichloropropene	<5.00 ug/kg	5.00	ug/kg
1,2,3-Trichlorobenzene	<5.00 ug/kg	5.00	ug/kg
1,2,3-Trichloropropane	<5.00 ug/kg	5.00	ug/kg
1,2,4-Trichlorobenzene	<5.00 ug/kg	5.00	ug/kg
1,2,4-Trimethylbenzene	<5.00 ug/kg	5.00	ug/kg



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZL0206-BLK1)			Prepared & Analyzed: 12/06/2016
1,2-Dibromo-3-chloropropane (DBCP)	<5.00 ug/kg	5.00	ug/kg
1,2-Dibromoethane (EDB)	<5.00 ug/kg	5.00	ug/kg
1,2-Dichlorobenzene	<5.00 ug/kg	5.00	ug/kg
1,2-Dichloroethane	<5.00 ug/kg	5.00	ug/kg
1,2-Dichloropropane	<5.00 ug/kg	5.00	ug/kg
1,3,5-Trimethylbenzene	<5.00 ug/kg	5.00	ug/kg
1,3-Dichlorobenzene	<5.00 ug/kg	5.00	ug/kg
1,3-Dichloropropane	<5.00 ug/kg	5.00	ug/kg
1,4-Dichlorobenzene	<5.00 ug/kg	5.00	ug/kg
2,2-Dichloropropane	<5.00 ug/kg	5.00	ug/kg
2-Butanone (MEK)	<5.00 ug/kg	5.00	ug/kg
2-Chlorotoluene	<5.00 ug/kg	5.00	ug/kg
2-Hexanone (MBK)	<5.00 ug/kg	5.00	ug/kg
4-Chlorotoluene	<5.00 ug/kg	5.00	ug/kg
4-Isopropyltoluene	<5.00 ug/kg	5.00	ug/kg
4-Methyl-2-pentanone (MIBK)	<5.00 ug/kg	5.00	ug/kg
Acetone	<10.0 ug/kg	10.0	ug/kg
Benzene	<5.00 ug/kg	5.00	ug/kg
Bromobenzene	<5.00 ug/kg	5.00	ug/kg
Bromochloromethane	<5.00 ug/kg	5.00	ug/kg
Bromodichloromethane	<5.00 ug/kg	5.00	ug/kg
Bromoform	<5.00 ug/kg	5.00	ug/kg
Bromomethane	<5.00 ug/kg	5.00	ug/kg
Carbon disulfide	<5.00 ug/kg	5.00	ug/kg
Carbon tetrachloride	<5.00 ug/kg	5.00	ug/kg
Chlorobenzene	<5.00 ug/kg	5.00	ug/kg
Chloroethane	<5.00 ug/kg	5.00	ug/kg
Chloroform	<5.00 ug/kg	5.00	ug/kg
Chloromethane	<5.00 ug/kg	5.00	ug/kg
cis-1,2-Dichloroethylene	<5.00 ug/kg	5.00	ug/kg
cis-1,3-Dichloropropene	<5.00 ug/kg	5.00	ug/kg



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

	Reporting		Spike	Source	%REC			RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZL0206-BLK1)				Prepared & Analyzed: 12/06/2016
Dibromochloromethane	<5.00 ug/kg	5.00	ug/kg	
Dibromomethane	<5.00 ug/kg	5.00	ug/kg	
Dichlorodifluoromethane	<5.00 ug/kg	5.00	ug/kg	
Di-isopropyl ether (DIPE)	<5.00 ug/kg	5.00	ug/kg	
Ethylbenzene	<5.00 ug/kg	5.00	ug/kg	
Hexachlorobutadiene	<5.00 ug/kg	5.00	ug/kg	
lodomethane	<5.00 ug/kg	5.00	ug/kg	
Isopropylbenzene	<5.00 ug/kg	5.00	ug/kg	
m+p-Xylenes	<5.00 ug/kg	5.00	ug/kg	
Methylene chloride	<5.00 ug/kg	5.00	ug/kg	
Methyl-t-butyl ether (MTBE)	<5.00 ug/kg	5.00	ug/kg	
Naphthalene	<5.00 ug/kg	5.00	ug/kg	
n-Butylbenzene	<5.00 ug/kg	5.00	ug/kg	
n-Propylbenzene	<5.00 ug/kg	5.00	ug/kg	
o-Xylene	<5.00 ug/kg	5.00	ug/kg	
sec-Butylbenzene	<5.00 ug/kg	5.00	ug/kg	
Styrene	<5.00 ug/kg	5.00	ug/kg	
tert-Butylbenzene	<5.00 ug/kg	5.00	ug/kg	
Tetrachloroethylene (PCE)	<5.00 ug/kg	5.00	ug/kg	
Toluene	<5.00 ug/kg	5.00	ug/kg	
trans-1,2-Dichloroethylene	<5.00 ug/kg	5.00	ug/kg	
trans-1,3-Dichloropropene	<5.00 ug/kg	5.00	ug/kg	
Trichloroethylene	<5.00 ug/kg	5.00	ug/kg	
Trichlorofluoromethane	<5.00 ug/kg	5.00	ug/kg	
Vinyl acetate	<10.0 ug/kg	10.0	ug/kg	
Vinyl chloride	<5.00 ug/kg	5.00	ug/kg	
Xylenes, Total	<15.0 ug/kg	15.0	ug/kg	
Surr: 1,2-Dichloroethane-d4	47.1		ug/kg	50.0 94.2 80-120
Surr: 4-Bromofluorobenzene	47.9		ug/kg	50.0 95.8 85-120
Surr: Dibromofluoromethane	49.0		ug/kg	50.0 98.1 80-119
Surr: Toluene-d8	49.2		ug/kg	50.0 98.3 85-115



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12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Batch BZL0206 - SW5030B

Acetone

Benzene

Bromobenzene

Bromochloromethane

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

	Reporting			Spike	Source		%REC	RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

LCS (BZL0206-BS1) Prepared & Analyzed: 12/06/2016 1,1,1,2-Tetrachloroethane 48.8 ug/L 5 ug/L 50.0 ug/L 97.5 75-125 50.2 ug/L 1,1,1-Trichloroethane 5 ug/L 50.0 ug/L 100 70-135 1,1,2,2-Tetrachloroethane 43.3 ug/L 5 ug/L 50.0 86.6 55-130 ug/L 49.5 ug/L 5 99.0 60-125 1,1,2-Trichloroethane ug/L 50.0 ug/L 5 45.8 ug/L 91.7 75-125 1.1-Dichloroethane ug/L 50.0 ug/L 1,1-Dichloroethylene 45.9 ug/L 5 ug/L 50.0 ug/L 91.9 65-135 1,1-Dichloropropene 46.8 ug/L 5 ug/L 50.0 93.6 70-135 ug/L 1,2,3-Trichlorobenzene 51.6 ug/L 5 ug/L 50.0 ug/L 103 60-135 1,2,3-Trichloropropane 44.7 ug/L 5 ug/L 50.0 89.3 65-130 ug/L 5 1,2,4-Trichlorobenzene 51.2 ug/L ug/L 50.0 ug/L 102 65-130 1,2,4-Trimethylbenzene 48.7 ug/L 5 ug/L 50.0 ug/L 97.4 65-135 5 1,2-Dibromo-3-chloropropane (DBCP) 42.4 ug/L 84.9 40-135 ug/L 50.0 ug/L 5 70-125 1,2-Dibromoethane (EDB) 48.5 ug/L ug/L 50.0 ug/L 96.9 75-120 1.2-Dichlorobenzene 47.8 ug/L 5 ug/L 50.0 ug/L 95.7 1,2-Dichloroethane 43.4 ug/L 5 ug/L 50.0 86.7 70-135 ug/L 44.6 ug/L 5 89.1 70-120 1,2-Dichloropropane ug/L 50.0 ug/L 1,3,5-Trimethylbenzene 48.7 ug/L 5 ug/L 50.0 ug/L 97.3 65-135 1,3-Dichlorobenzene 49.0 ug/L 5 ug/L 50.0 98.1 70-125 ug/L 5 1,3-Dichloropropane 46.8 ug/L ug/L 50.0 ug/L 93.5 75-125 1,4-Dichlorobenzene 47.8 ug/L 5 ug/L 50.0 ug/L 95.7 70-125 2,2-Dichloropropane 51.8 ug/L 5 ug/L 50.0 ug/L 104 65-135 2-Butanone (MEK) 47.0 ug/L 5 ug/L 50.0 ug/L 94.0 30-160 5 2-Chlorotoluene 48.6 ug/L ug/L 97.1 70-130 50.0 ug/L 2-Hexanone (MBK) 47.1 ug/L 5 ug/L 50.0 ug/L 94.3 45-145 4-Chlorotoluene 5 50.0 95.3 75-125 47.7 ug/L ug/L ug/L 4-Isopropyltoluene 48.7 ug/L 5 ug/L 50.0 97.4 75-135 ug/L 4-Methyl-2-pentanone (MIBK) 5 96.6 45-145 48.3 ug/L ug/L 50.0 ug/L

37.9 ug/L

49.2 ug/L

52.0 ug/L

52.2 ug/L

10

5

5

5

ug/L

ug/L

ug/L

ug/L

50.0

50.0

50.0

50.0 ug/L

ug/L

ug/L

ug/L

75.9

98.4

104

104

20-160

75-125

65-120

70-125



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

	Reporting			Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0206 - SW5030B LCS (BZL0206-BS1) Prepared & Analyzed: 12/06/2016 Bromodichloromethane 54.8 ug/L 5 ug/L 50.0 ug/L 110 70-130 50.0 ug/L 55-135 Bromoform 5 ug/L 50.0 ug/L 100 Bromomethane 47.0 ug/L 50.0 93.9 30-160 5 ug/L ug/L Carbon disulfide 33.4 ug/L 5 66.8 45-160 ug/L 50.0 ug/L 5 Carbon tetrachloride 54.0 ug/L ug/L 108 65-135 50.0 ug/L Chlorobenzene 49.1 ug/L 5 ug/L 50.0 ug/L 98.3 75-125 Chloroethane 44.6 ug/L 5 ug/L 50.0 ug/L 89.1 40-155 5 Chloroform 46.6 ug/L ug/L 50.0 ug/L 93.1 70-125 5 Chloromethane 38.6 ug/L ug/L 50.0 ug/L 77.2 50-130 5 cis-1,2-Dichloroethylene 49.1 ug/L ug/L 50.0 ug/L 98.2 65-125 5 70-125 cis-1,3-Dichloropropene 44.9 ug/L ug/L 50.0 ug/L 89.8 5 65-130 Dibromochloromethane 56.7 ug/L ug/L 50.0 113 ug/L 52.4 ug/L 5 105 75-130 Dibromomethane ug/L 50.0 ug/L 5 93.2 Dichlorodifluoromethane 46.6 ug/L ug/L 50.0 ug/L 35-135 Ethylbenzene 49.4 ug/L 5 ug/L 50.0 98.8 75-125 ug/L 50.0 98.5 Hexachlorobutadiene 49.2 ug/L 5 55-140 ug/L ug/L Isopropylbenzene 47.8 ug/L 5 ug/L 50.0 ug/L 95.6 75-130 m+p-Xylenes 101 ug/L 5 ug/L 100 ug/L 101 80-125 5 Methylene chloride 47.5 ug/L ug/L 50.0 ug/L 94.9 55-140 Methyl-t-butyl ether (MTBE) 49.1 ug/L 5 ug/L 50.0 ug/L 98.1 65-125 5 Naphthalene 49.1 ug/L ug/L 50.0 ug/L 98.1 40-125 n-Butylbenzene 48.9 ug/L 5 ug/L 50.0 ug/L 97.8 65-140 5 97.4 65-135 n-Propylbenzene 48.7 ug/L ug/L 50.0 ug/L o-Xylene 50.1 ug/L 5 ug/L 50.0 ug/L 100 75-125 47.9 ug/L 5 50.0 95.9 65-130 sec-Butylbenzene ug/L ug/L Styrene 50.2 ug/L 5 ug/L 50.0 ug/L 100 75-125 tert-Butylbenzene 48.8 ug/L 5 ug/L 97.7 65-130 50.0 ug/L Tetrachloroethylene (PCE) 72.7 ug/L 5 ug/L 50.0 ug/L 145 65-140 Toluene 48.7 ug/L 5 ug/L 50.0 ug/L 97.4 70-125 trans-1,2-Dichloroethylene 46.0 ug/L 5 91.9 65-135 ug/L 50.0 ug/L trans-1,3-Dichloropropene 47.0 ug/L 5 ug/L 50.0 ug/L 94.0 65-125



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

RPD

%REC

Client Site I.D.: Fulton Gasworks

Purchase Order:

Source

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0206 - SW5030B										
LCS (BZL0206-BS1)				Prepare	d & Analyze	d: 12/06/20	016			
Trichloroethylene	49.7 ug/L	5	ug/L	50.0	ug/L	99.4	75-125			
Trichlorofluoromethane	45.7 ug/L	5	ug/L	50.0	ug/L	91.5	25-185			
/inyl chloride	42.1 ug/L	5	ug/L	50.0	ug/L	84.2	60-125			
Surr: 1,2-Dichloroethane-d4	48.9		ug/kg	50.0	ug/kg	97.9	80-120			
Surr: 4-Bromofluorobenzene	50.1		ug/kg	50.0	ug/kg	100	85-120			
Surr: Dibromofluoromethane	49.2		ug/kg	50.0	ug/kg	98.3	80-119			
Surr: Toluene-d8	49.5		ug/kg	50.0	ug/kg	99.0	85-115			
Matrix Spike (BZL0206-MS1)	Sour	ce: 16L007	'6-01	Prepare	d & Analyze	d: 12/06/20	016			
1,1,1,2-Tetrachloroethane	40.2 ug/L	5	ug/L	50.0	<5 ug/L	80.4	75-125			
1,1,1-Trichloroethane	40.4 ug/L	5	ug/L	50.0	<5 ug/L	80.9	70-135			
,1,2,2-Tetrachloroethane	41.5 ug/L	5	ug/L	50.0	<5 ug/L	83.0	55-130			
,1,2-Trichloroethane	41.1 ug/L	5	ug/L	50.0	<5 ug/L	82.1	60-125			
,1-Dichloroethane	38.9 ug/L	5	ug/L	50.0	<5 ug/L	77.8	75-125			
,1-Dichloroethylene	43.3 ug/L	5	ug/L	50.0	<5 ug/L	86.5	65-135			
,1-Dichloropropene	41.0 ug/L	5	ug/L	50.0	<5 ug/L	82.1	70-135			
1,2,3-Trichlorobenzene	41.6 ug/L	5	ug/L	50.0	<5 ug/L	82.6	60-135			
1,2,3-Trichloropropane	40.0 ug/L	5	ug/L	50.0	<5 ug/L	80.0	65-130			
1,2,4-Trichlorobenzene	40.7 ug/L	5	ug/L	50.0	<5 ug/L	80.8	65-130			
1,2,4-Trimethylbenzene	64.1 ug/L	5	ug/L	50.0	<5 ug/L	128	65-135			
1,2-Dibromo-3-chloropropane (DBCP)	44.8 ug/L	5	ug/L	50.0	<5 ug/L	89.6	40-135			
I,2-Dibromoethane (EDB)	41.0 ug/L	5	ug/L	50.0	<5 ug/L	82.1	70-125			
1,2-Dichlorobenzene	39.8 ug/L	5	ug/L	50.0	<5 ug/L	79.7	75-120			
,2-Dichloroethane	34.0 ug/L	5	ug/L	50.0	<5 ug/L	67.9	70-135			M
I,2-Dichloropropane	39.9 ug/L	5	ug/L	50.0	<5 ug/L	79.8	70-120			
1,3,5-Trimethylbenzene	47.1 ug/L	5	ug/L	50.0	<5 ug/L	94.1	65-135			
,3-Dichlorobenzene	40.8 ug/L	5	ug/L	50.0	<5 ug/L	81.6	70-125			
,3-Dichloropropane	39.1 ug/L	5	ug/L	50.0	<5 ug/L	78.3	75-125			
I,4-Dichlorobenzene	40.0 ug/L	5	ug/L	50.0	<5 ug/L	80.1	70-125			
2,2-Dichloropropane	39.3 ug/L	5	ug/L	50.0	<5 ug/L	78.6	65-135			
2-Butanone (MEK)	58.0 ug/L	5	ug/L	50.0	<5 ug/L	116	30-160			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

	Reporting			Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	

Matrix Spike (BZL0206-MS1)	Source	: 16L0076-	01	Prepare	ed & Analyze	d: 12/06/2	016
2-Chlorotoluene	41.2 ug/L	5	ug/L	50.0	<5 ug/L	82.5	70-130
2-Hexanone (MBK)	51.2 ug/L	5	ug/L	50.0	<5 ug/L	102	45-145
4-Chlorotoluene	40.2 ug/L	5	ug/L	50.0	<5 ug/L	80.5	75-125
4-Isopropyltoluene	41.6 ug/L	5	ug/L	50.0	<5 ug/L	83.2	75-135
4-Methyl-2-pentanone (MIBK)	50.2 ug/L	5	ug/L	50.0	<5 ug/L	100	45-145
Acetone	52.9 ug/L	10	ug/L	50.0	<10 ug/L	106	20-160
Benzene	42.7 ug/L	5	ug/L	50.0	<5 ug/L	85.4	75-125
Bromobenzene	44.4 ug/L	5	ug/L	50.0	<5 ug/L	88.9	65-120
Bromochloromethane	44.5 ug/L	5	ug/L	50.0	<5 ug/L	88.9	70-125
Bromodichloromethane	43.2 ug/L	5	ug/L	50.0	<5 ug/L	86.3	70-130
Bromoform	43.5 ug/L	5	ug/L	50.0	<5 ug/L	86.9	55-135
Bromomethane	29.9 ug/L	5	ug/L	50.0	<5 ug/L	59.9	30-160
Carbon disulfide	33.4 ug/L	5	ug/L	50.0	<5 ug/L	66.7	45-160
Carbon tetrachloride	41.6 ug/L	5	ug/L	50.0	<5 ug/L	83.2	65-135
Chlorobenzene	42.4 ug/L	5	ug/L	50.0	<5 ug/L	84.8	75-125
Chloroethane	42.1 ug/L	5	ug/L	50.0	<5 ug/L	84.2	40-155
Chloroform	37.9 ug/L	5	ug/L	50.0	<5 ug/L	75.8	70-125
Chloromethane	35.7 ug/L	5	ug/L	50.0	<5 ug/L	71.3	50-130
cis-1,2-Dichloroethylene	41.3 ug/L	5	ug/L	50.0	<5 ug/L	82.5	65-125
cis-1,3-Dichloropropene	36.6 ug/L	5	ug/L	50.0	<5 ug/L	73.3	70-125
Dibromochloromethane	44.1 ug/L	5	ug/L	50.0	<5 ug/L	88.1	65-130
Dibromomethane	42.9 ug/L	5	ug/L	50.0	<5 ug/L	85.8	75-130
Dichlorodifluoromethane	36.7 ug/L	5	ug/L	50.0	<5 ug/L	73.3	35-135
Ethylbenzene	45.6 ug/L	5	ug/L	50.0	<5 ug/L	91.3	75-125
Hexachlorobutadiene	39.9 ug/L	5	ug/L	50.0	<5 ug/L	79.4	55-140
Isopropylbenzene	41.9 ug/L	5	ug/L	50.0	<5 ug/L	83.8	75-130
m+p-Xylenes	93.2 ug/L	5	ug/L	100	<5 ug/L	93.2	80-125
Methylene chloride	46.0 ug/L	5	ug/L	50.0	<5 ug/L	91.0	55-140
Methyl-t-butyl ether (MTBE)	43.7 ug/L	5	ug/L	50.0	<5 ug/L	87.3	65-125
Naphthalene	59.6 ug/L	5	ug/L	50.0	<5 ug/L	119	40-125
n-Butylbenzene	43.1 ug/L	5	ug/L	50.0	<5 ug/L	86.2	65-140



Certificate of Analysis

Final Report

Client Name: Timmons Group

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0206 - SW5030B										

Matrix Spike (BZL0206-MS1)	Source: 1	6L0076	-01	Prepare	d & Analyze	d: 12/06/2	016	
n-Propylbenzene	44.1 ug/L	5	ug/L	50.0	<5 ug/L	88.2	65-135	
o-Xylene	42.0 ug/L	5	ug/L	50.0	<5 ug/L	84.0	75-125	
sec-Butylbenzene	41.4 ug/L	5	ug/L	50.0	<5 ug/L	82.7	65-130	
Styrene	44.9 ug/L	5	ug/L	50.0	<5 ug/L	89.8	75-125	
tert-Butylbenzene	41.4 ug/L	5	ug/L	50.0	<5 ug/L	82.7	65-130	
Tetrachloroethylene (PCE)	45.8 ug/L	5	ug/L	50.0	<5 ug/L	91.7	65-140	
Toluene	42.7 ug/L	5	ug/L	50.0	<5 ug/L	85.4	70-125	
trans-1,2-Dichloroethylene	40.6 ug/L	5	ug/L	50.0	<5 ug/L	81.3	65-135	
trans-1,3-Dichloropropene	37.4 ug/L	5	ug/L	50.0	<5 ug/L	74.8	65-125	
Trichloroethylene	42.2 ug/L	5	ug/L	50.0	<5 ug/L	84.3	75-125	
Trichlorofluoromethane	37.7 ug/L	5	ug/L	50.0	<5 ug/L	75.4	25-185	
Vinyl chloride	31.4 ug/L	5	ug/L	50.0	<5 ug/L	62.8	60-125	
Surr: 1,2-Dichloroethane-d4	4700		ug/kg	5000	ug/kg	94.1	80-120	
Surr: 4-Bromofluorobenzene	5110		ug/kg	5000	ug/kg	102	85-120	
Surr: Dibromofluoromethane	4580		ug/kg	5000	ug/kg	91.7	80-119	
Surr: Toluene-d8	4950		ug/kg	5000	ug/kg	99.0	85-115	
Surr: Toluene-d8 Matrix Spike Dup (BZL0206-MSD1)	4950 Source: 1	6L0076			ug/kg ed & Analyze			
		1 6L0076 -		Prepare	0 0			30
Matrix Spike Dup (BZL0206-MSD1)	Source: 1		-01	Prepare 50.0	ed & Analyze	d: 12/06/2	016	30 30
Matrix Spike Dup (BZL0206-MSD1) 1,1,1,2-Tetrachloroethane	Source: 1 49.1 ug/L	5	-01 ug/L	Prepare 50.0	ed & Analyze <5 ug/L	<u>d: 12/06/2</u> 98.2	016 75-125	
Matrix Spike Dup (BZL0206-MSD1) 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane	Source: 1 49.1 ug/L 48.0 ug/L	5 5	ug/L	Prepare 50.0 50.0	ed & Analyze <5 ug/L <5 ug/L	<u>d: 12/06/2</u> 98.2 96.1	016 75-125 70-135	30
Matrix Spike Dup (BZL0206-MSD1) 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane	Source: 1 49.1 ug/L 48.0 ug/L 48.4 ug/L	5 5 5	ug/L ug/L ug/L ug/L	Prepare 50.0 50.0 50.0	ed & Analyze <5 ug/L <5 ug/L <5 ug/L	98.2 96.1 96.7	016 75-125 70-135 55-130	30 30
Matrix Spike Dup (BZL0206-MSD1) 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane	Source: 1 49.1 ug/L 48.0 ug/L 48.4 ug/L 47.5 ug/L	5 5 5 5	ug/L ug/L ug/L ug/L	Prepare 50.0 50.0 50.0 50.0	ed & Analyze <5 ug/L <5 ug/L <5 ug/L <5 ug/L	d: 12/06/2 98.2 96.1 96.7 95.0	75-125 70-135 55-130 60-125	30 30 30
Matrix Spike Dup (BZL0206-MSD1) 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane	Source: 1 49.1 ug/L 48.0 ug/L 48.4 ug/L 47.5 ug/L 45.3 ug/L	5 5 5 5	ug/L ug/L ug/L ug/L ug/L	Prepare 50.0 50.0 50.0 50.0 50.0 50.0	ed & Analyze	d: 12/06/2 98.2 96.1 96.7 95.0 90.6	75-125 70-135 55-130 60-125 75-125	30 30 30 30
Matrix Spike Dup (BZL0206-MSD1) 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethylene	Source: 1 49.1 ug/L 48.0 ug/L 48.4 ug/L 47.5 ug/L 45.3 ug/L 49.6 ug/L	5 5 5 5 5	ug/L ug/L ug/L ug/L ug/L ug/L	Prepare 50.0 50.0 50.0 50.0 50.0 50.0	ed & Analyze <5 ug/L	d: 12/06/2 98.2 96.1 96.7 95.0 90.6 99.2	75-125 70-135 55-130 60-125 75-125 65-135	30 30 30 30 30
Matrix Spike Dup (BZL0206-MSD1) 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethylene 1,1-Dichloropropene	Source: 1 49.1 ug/L 48.0 ug/L 48.4 ug/L 47.5 ug/L 45.3 ug/L 49.6 ug/L 49.8 ug/L	5 5 5 5 5 5	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	Prepare 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.	ed & Analyze <5 ug/L	98.2 96.1 96.7 95.0 90.6 99.2 99.6	75-125 70-135 55-130 60-125 75-125 65-135 70-135	30 30 30 30 30 30
Matrix Spike Dup (BZL0206-MSD1) 1,1,1,2-Tetrachloroethane 1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethylene 1,1-Dichloropropene 1,2,3-Trichlorobenzene	Source: 1 49.1 ug/L 48.0 ug/L 48.4 ug/L 47.5 ug/L 45.3 ug/L 49.6 ug/L 49.8 ug/L 48.7 ug/L	5 5 5 5 5 5 5 5	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	Prepare 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.	ed & Analyze	d: 12/06/2 98.2 96.1 96.7 95.0 90.6 99.2 99.6 96.9	75-125 70-135 55-130 60-125 75-125 65-135 70-135 60-135	30 30 30 30 30 30 30
Matrix Spike Dup (BZL0206-MSD1) 1,1,1,2-Tetrachloroethane 1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethylene 1,1-Dichloropropene 1,2,3-Trichlorobenzene 1,2,3-Trichloropropane	Source: 1 49.1 ug/L 48.0 ug/L 48.4 ug/L 47.5 ug/L 45.3 ug/L 49.6 ug/L 49.8 ug/L 48.7 ug/L 46.6 ug/L	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	Prepare 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.	ed & Analyze <5 ug/L	d: 12/06/2 98.2 96.1 96.7 95.0 90.6 99.2 99.6 96.9 93.3	75-125 70-135 55-130 60-125 75-125 65-135 70-135 60-135 65-130	30 30 30 30 30 30 30 30
Matrix Spike Dup (BZL0206-MSD1) 1,1,1,2-Tetrachloroethane 1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethylene 1,1-Dichloropropene 1,2,3-Trichlorobenzene 1,2,3-Trichloropropane 1,2,4-Trichlorobenzene	Source: 1 49.1 ug/L 48.0 ug/L 48.4 ug/L 47.5 ug/L 45.3 ug/L 49.6 ug/L 49.8 ug/L 46.6 ug/L 48.4 ug/L	5 5 5 5 5 5 5 5	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	Prepare 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.	ed & Analyze <5 ug/L d: 12/06/2 98.2 96.1 96.7 95.0 90.6 99.2 99.6 96.9 93.3 96.2	75-125 70-135 55-130 60-125 75-125 65-135 70-135 60-135 65-130 65-130	30 30 30 30 30 30 30 30 30	
Matrix Spike Dup (BZL0206-MSD1) 1,1,1,2-Tetrachloroethane 1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethylene 1,1-Dichloropropene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene	Source: 1 49.1 ug/L 48.0 ug/L 48.4 ug/L 47.5 ug/L 45.3 ug/L 49.6 ug/L 49.8 ug/L 48.7 ug/L 48.4 ug/L 58.1 ug/L	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	Prepare 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.	ed & Analyze <5 ug/L d: 12/06/2 98.2 96.1 96.7 95.0 90.6 99.2 99.6 96.9 93.3 96.2 116	75-125 70-135 55-130 60-125 75-125 65-135 70-135 60-135 65-130 65-130 65-135	30 30 30 30 30 30 30 30 30	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZL0206-MSD1)	Source:	16L0076	-01	Prepare	ed & Analyze	d: 12/06/2	016	
1,2-Dichlorobenzene	48.8 ug/L	5	ug/L	50.0	<5 ug/L	97.6	75-120	30
1,2-Dichloroethane	38.6 ug/L	5	ug/L	50.0	<5 ug/L	77.1	70-135	30
1,2-Dichloropropane	46.8 ug/L	5	ug/L	50.0	<5 ug/L	93.7	70-120	30
1,3,5-Trimethylbenzene	52.7 ug/L	5	ug/L	50.0	<5 ug/L	105	65-135	30
1,3-Dichlorobenzene	49.0 ug/L	5	ug/L	50.0	<5 ug/L	98.1	70-125	30
1,3-Dichloropropane	46.0 ug/L	5	ug/L	50.0	<5 ug/L	92.0	75-125	30
1,4-Dichlorobenzene	48.5 ug/L	5	ug/L	50.0	<5 ug/L	97.0	70-125	30
2,2-Dichloropropane	47.0 ug/L	5	ug/L	50.0	<5 ug/L	94.0	65-135	30
2-Butanone (MEK)	54.6 ug/L	5	ug/L	50.0	<5 ug/L	109	30-160	30
2-Chlorotoluene	50.7 ug/L	5	ug/L	50.0	<5 ug/L	101	70-130	30
2-Hexanone (MBK)	51.0 ug/L	5	ug/L	50.0	<5 ug/L	102	45-145	30
4-Chlorotoluene	48.8 ug/L	5	ug/L	50.0	<5 ug/L	97.7	75-125	30
4-Isopropyltoluene	50.8 ug/L	5	ug/L	50.0	<5 ug/L	102	75-135	30
4-Methyl-2-pentanone (MIBK)	49.0 ug/L	5	ug/L	50.0	<5 ug/L	98.0	45-145	30
Acetone	53.0 ug/L	10	ug/L	50.0	<10 ug/L	106	20-160	30
Benzene	51.8 ug/L	5	ug/L	50.0	<5 ug/L	104	75-125	30
Bromobenzene	52.9 ug/L	5	ug/L	50.0	<5 ug/L	106	65-120	30
Bromochloromethane	52.1 ug/L	5	ug/L	50.0	<5 ug/L	104	70-125	30
Bromodichloromethane	52.3 ug/L	5	ug/L	50.0	<5 ug/L	105	70-130	30
Bromoform	52.9 ug/L	5	ug/L	50.0	<5 ug/L	106	55-135	30
Bromomethane	43.2 ug/L	5	ug/L	50.0	<5 ug/L	86.3	30-160	30
Carbon disulfide	37.2 ug/L	5	ug/L	50.0	<5 ug/L	74.3	45-160	30
Carbon tetrachloride	50.2 ug/L	5	ug/L	50.0	<5 ug/L	100	65-135	30
Chlorobenzene	52.4 ug/L	5	ug/L	50.0	<5 ug/L	105	75-125	30
Chloroethane	49.2 ug/L	5	ug/L	50.0	<5 ug/L	98.4	40-155	30
Chloroform	43.8 ug/L	5	ug/L	50.0	<5 ug/L	87.6	70-125	30
Chloromethane	45.8 ug/L	5	ug/L	50.0	<5 ug/L	91.6	50-130	30
cis-1,2-Dichloroethylene	47.2 ug/L	5	ug/L	50.0	<5 ug/L	94.3	65-125	30
cis-1,3-Dichloropropene	45.0 ug/L	5	ug/L	50.0	<5 ug/L	90.1	70-125	30
Dibromochloromethane	54.6 ug/L	5	ug/L	50.0	<5 ug/L	109	65-130	30
Dibromomethane	50.6 ug/L	5	ug/L	50.0	<5 ug/L	101	75-130	30



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Richmond VA, 23225

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Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZL0206-MSD1)	Source:	16L0076	-01	Prepare	d & Analyze			
Dichlorodifluoromethane	45.9 ug/L	5	ug/L	50.0	<5 ug/L	91.7	35-135	30
Ethylbenzene	54.8 ug/L	5	ug/L	50.0	<5 ug/L	110	75-125	30
Hexachlorobutadiene	48.6 ug/L	5	ug/L	50.0	<5 ug/L	96.8	55-140	30
Isopropylbenzene	50.7 ug/L	5	ug/L	50.0	<5 ug/L	101	75-130	30
m+p-Xylenes	109 ug/L	5	ug/L	100	<5 ug/L	109	80-125	30
Methylene chloride	51.1 ug/L	5	ug/L	50.0	<5 ug/L	101	55-140	30
Methyl-t-butyl ether (MTBE)	48.6 ug/L	5	ug/L	50.0	<5 ug/L	97.2	65-125	30
Naphthalene	54.8 ug/L	5	ug/L	50.0	<5 ug/L	109	40-125	30
n-Butylbenzene	50.6 ug/L	5	ug/L	50.0	<5 ug/L	101	65-140	30
n-Propylbenzene	52.2 ug/L	5	ug/L	50.0	<5 ug/L	104	65-135	30
o-Xylene	52.0 ug/L	5	ug/L	50.0	<5 ug/L	104	75-125	30
sec-Butylbenzene	50.4 ug/L	5	ug/L	50.0	<5 ug/L	101	65-130	30
Styrene	53.9 ug/L	5	ug/L	50.0	<5 ug/L	108	75-125	30
tert-Butylbenzene	52.1 ug/L	5	ug/L	50.0	<5 ug/L	104	65-130	30
Tetrachloroethylene (PCE)	55.9 ug/L	5	ug/L	50.0	<5 ug/L	112	65-140	30
Toluene	50.8 ug/L	5	ug/L	50.0	<5 ug/L	102	70-125	30
trans-1,2-Dichloroethylene	46.0 ug/L	5	ug/L	50.0	<5 ug/L	92.0	65-135	30
trans-1,3-Dichloropropene	44.4 ug/L	5	ug/L	50.0	<5 ug/L	88.7	65-125	30
Trichloroethylene	50.1 ug/L	5	ug/L	50.0	<5 ug/L	100	75-125	30
Trichlorofluoromethane	43.9 ug/L	5	ug/L	50.0	<5 ug/L	87.7	25-185	30
Vinyl chloride	38.0 ug/L	5	ug/L	50.0	<5 ug/L	76.0	60-125	30
Surr: 1,2-Dichloroethane-d4	4430		ug/kg	5000	ug/kg	88.6	80-120	
Surr: 4-Bromofluorobenzene	5130		ug/kg	5000	ug/kg	103	85-120	
Surr: Dibromofluoromethane	4460		ug/kg	5000	ug/kg	89.2	80-119	
Surr: Toluene-d8	4930		ug/kg	5000	ug/kg	98.6	85-115	



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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

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Client Site I.D.: Fulton Gasworks Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0098 - SW3510C

Blank (BZL0098-BLK1)				Prepared: 12/05/2016 Analyzed: 12/06/2016
1,2,4,5-Tetrachlorobenzene	<10.0 ug/L	10.0	ug/L	
1,2,4-Trichlorobenzene	<10.0 ug/L	10.0	ug/L	
I,2-Dichlorobenzene	<10.0 ug/L	10.0	ug/L	
,2-Diphenylhydrazine	<10.0 ug/L	10.0	ug/L	
,3-Dichlorobenzene	<10.0 ug/L	10.0	ug/L	
,3-Dinitrobenzene	<2.50 ug/L	2.50	ug/L	
,4-Dichlorobenzene	<10.0 ug/L	10.0	ug/L	
-Naphthylamine	<10.0 ug/L	10.0	ug/L	
,3,4,6-Tetrachlorophenol	<10.0 ug/L	10.0	ug/L	
,4,5-Trichlorophenol	<10.0 ug/L	10.0	ug/L	
,4,6-Trichlorophenol	<10.0 ug/L	10.0	ug/L	
,4-Dichlorophenol	<10.0 ug/L	10.0	ug/L	
,4-Dimethylphenol	<0.50 ug/L	0.50	ug/L	
,4-Dinitrophenol	<50.0 ug/L	50.0	ug/L	
,4-Dinitrotoluene	<10.0 ug/L	10.0	ug/L	
,6-Dichlorophenol	<10.0 ug/L	10.0	ug/L	
,6-Dinitrotoluene	<10.0 ug/L	10.0	ug/L	
-Chloronaphthalene	<10.0 ug/L	10.0	ug/L	
-Chlorophenol	<10.0 ug/L	10.0	ug/L	
-Methylnaphthalene	<10.0 ug/L	10.0	ug/L	
-Naphthylamine	<10.0 ug/L	10.0	ug/L	
-Nitroaniline	<20.0 ug/L	20.0	ug/L	
-Nitrophenol	<10.0 ug/L	10.0	ug/L	
,3'-Dichlorobenzidine	<10.0 ug/L	10.0	ug/L	
-Methylcholanthrene	<10.0 ug/L	10.0	ug/L	
-Nitroaniline	<20.0 ug/L	20.0	ug/L	
6-Dinitro-2-methylphenol	<50.0 ug/L	50.0	ug/L	
-Aminobiphenyl	<10.0 ug/L	10.0	ug/L	
-Bromophenyl phenyl ether	<10.0 ug/L	10.0	ug/L	
-Chloroaniline	<10.0 ug/L	10.0	ug/L	
-Chlorophenyl phenyl ether	<10.0 ug/L	10.0	ug/L	



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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0098 - SW3510C

Blank (BZL0098-BLK1)				Prepared: 12/05/2016 Analyzed: 12/06/2016
4-Nitroaniline	<20.0 ug/L	20.0	ug/L	
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	
7,12-Dimethylbenz (a) anthracene	<10.0 ug/L	10.0	ug/L	
Acenaphthene	<10.0 ug/L	10.0	ug/L	
Acenaphthylene	<10.0 ug/L	10.0	ug/L	
Acetophenone	<20.0 ug/L	20.0	ug/L	
Aniline	<50.0 ug/L	50.0	ug/L	
Anthracene	<10.0 ug/L	10.0	ug/L	
Benzidine	<50.0 ug/L	50.0	ug/L	
Benzo (a) anthracene	<0.05 ug/L	0.05	ug/L	
Benzo (a) pyrene	<10.0 ug/L	10.0	ug/L	
Benzo (b) fluoranthene	<10.0 ug/L	10.0	ug/L	
Benzo (g,h,i) perylene	<10.0 ug/L	10.0	ug/L	
Benzo (k) fluoranthene	<10.0 ug/L	10.0	ug/L	
Benzoic acid	<50.0 ug/L	50.0	ug/L	
enzyl alcohol	<20.0 ug/L	20.0	ug/L	
is (2-Chloroethoxy) methane	<10.0 ug/L	10.0	ug/L	
is (2-Chloroethyl) ether	<10.0 ug/L	10.0	ug/L	
is (2-Chloroisopropyl) ether	<10.0 ug/L	10.0	ug/L	
is (2-Ethylhexyl) phthalate	<10.0 ug/L	10.0	ug/L	
Butyl benzyl phthalate	<10.0 ug/L	10.0	ug/L	
Chrysene	<10.0 ug/L	10.0	ug/L	
Dibenz (a,h) anthracene	<10.0 ug/L	10.0	ug/L	
Dibenz (a,j) acridine	<10.0 ug/L	10.0	ug/L	
Dibenzofuran	<5.00 ug/L	5.00	ug/L	
Diethyl phthalate	<10.0 ug/L	10.0	ug/L	
Dimethyl phthalate	<10.0 ug/L	10.0	ug/L	
Di-n-butyl phthalate	<10.0 ug/L	10.0	ug/L	
Di-n-octyl phthalate	<10.0 ug/L	10.0	ug/L	
Diphenylamine	<10.0 ug/L	10.0	ug/L	
Ethyl methanesulfonate	<20.0 ug/L	20.0	ug/L	



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1001 Boulders Parkway, Suite 300 Richmond VA, 23225

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Project Number:

36156.015

Client Site I.D.:

Fulton Gasworks

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0098 - SW3510C

Blank (BZL0098-BLK1)				Prepared: 12/05/2016 Analyzed: 12/06/2016	
Fluoranthene	<10.0 ug/L	10.0	ug/L		
Fluorene	<10.0 ug/L	10.0	ug/L		
Hexachlorobenzene	<1.00 ug/L	1.00	ug/L		
Hexachlorobutadiene	<10.0 ug/L	10.0	ug/L		
Hexachlorocyclopentadiene	<10.0 ug/L	10.0	ug/L		
Hexachloroethane	<10.0 ug/L	10.0	ug/L		
ndeno (1,2,3-cd) pyrene	<10.0 ug/L	10.0	ug/L		
sophorone	<10.0 ug/L	10.0	ug/L		
m+p-Cresols	<10.0 ug/L	10.0	ug/L		
Methyl methanesulfonate	<10.0 ug/L	10.0	ug/L		
Naphthalene	<5.00 ug/L	5.00	ug/L		
Nitrobenzene	<10.0 ug/L	10.0	ug/L		
n-Nitrosodimethylamine	<10.0 ug/L	10.0	ug/L		
n-Nitrosodi-n-butylamine	<10.0 ug/L	10.0	ug/L		
n-Nitrosodi-n-propylamine	<10.0 ug/L	10.0	ug/L		
n-Nitrosodiphenylamine	<10.0 ug/L	10.0	ug/L		
n-Nitrosopiperidine	<10.0 ug/L	10.0	ug/L		
p+m+p-Cresols	<10.0 ug/L	10.0	ug/L		
o-Cresol	<10.0 ug/L	10.0	ug/L		
o-(Dimethylamino) azobenzene	<2.50 ug/L	2.50	ug/L		
o-Chloro-m-cresol	<10.0 ug/L	10.0	ug/L		
Pentachloronitrobenzene (quintozene)	<10.0 ug/L	10.0	ug/L		
Pentachlorophenol	<20.0 ug/L	20.0	ug/L		
Phenacetin	<10.0 ug/L	10.0	ug/L		
Phenanthrene	<10.0 ug/L	10.0	ug/L		
Phenol	<10.0 ug/L	10.0	ug/L		
Pronamide	<10.0 ug/L	10.0	ug/L		
Pyrene	<10.0 ug/L	10.0	ug/L		
Pyridine	<10.0 ug/L	10.0	ug/L		
Surr: 2,4,6-Tribromophenol	40.8		ug/L	200 20.4 40-125 S	
Surr: 2-Fluorobiphenyl	20.5		ug/L	100 20.5 23-87 S	



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

RPD

%REC

Client Site I.D.: **Fulton Gasworks**

Purchase Order:

Source

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0098 - SW3510C										
Blank (BZL0098-BLK1)				Prepare	d: 12/05/201	16 Analyze	ed: 12/06/20	016		
Surr: 2-Fluorophenol	28.1		ug/L	200		14.1	14-52			
Surr: Nitrobenzene-d5	22.0		ug/L	100		22.0	40-110			S
Surr: Phenol-d5	18.6		ug/L	200		9.29	5-33			
Surr: p-Terphenyl-d14	25.2		ug/L	100		25.2	27-133			S
LCS (BZL0098-BS1)				Prepare	d: 12/05/201	16 Analyze	ed: 12/06/20	016		
1,2,4-Trichlorobenzene	31.9 ug/L	10.0	ug/L	49.7	ug/L	64.3	21.8-66.7			
1,4-Dichlorobenzene	31.8 ug/L	10.0	ug/L	50.0	ug/L	63.7	20-124			
2,4-Dinitrotoluene	26.6 ug/L	10.0	ug/L	50.0	ug/L	53.1	39-139			
2-Chlorophenol	63.6 ug/L	10.0	ug/L	99.0	ug/L	64.3	35-105			
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	ug/L	25.0	0-125			J
Acenaphthene	31.3 ug/L	10.0	ug/L	49.8	ug/L	63.0	45-110			
n-Nitrosodi-n-propylamine	33.5 ug/L	10.0	ug/L	49.8	ug/L	67.3	35-130			
p-Chloro-m-cresol	61.4 ug/L	10.0	ug/L	100	ug/L	61.4	45-110			
Pentachlorophenol	74.7 ug/L	20.0	ug/L	99.0	ug/L	75.5	40-115			
Phenol	27.1 ug/L	10.0	ug/L	100	ug/L	27.1	0-115			
Pyrene	36.6 ug/L	10.0	ug/L	50.0	ug/L	73.2	50-130			
Surr: 2,4,6-Tribromophenol	76.4		ug/L	200	ug/L	38.2	40-125			S
Surr: 2-Fluorobiphenyl	35.4		ug/L	100	ug/L	35.4	23-87			
Surr: 2-Fluorophenol	48.4		ug/L	200	ug/L	24.2	14-52			
Surr: Nitrobenzene-d5	35.6		ug/L	100	ug/L	35.6	40-110			S
Surr: Phenol-d5	29.3		ug/L	200	ug/L	14.7	5-33			
Surr: p-Terphenyl-d14	32.6		ug/L	100	ug/L	32.6	27-133			
LCS (BZL0098-BS2)				Prepare	d: 12/05/201	16 Analyze	ed: 12/06/20	016		
1,2,4-Trichlorobenzene	61.6 ug/L	10.0	ug/L	100	ug/L	61.6	21.8-66.7			
1,4-Dichlorobenzene	62.0 ug/L	10.0	ug/L	100	ug/L	62.0	20-124			
2,4-Dinitrotoluene	70.0 ug/L	10.0	ug/L	100	ug/L	70.0	39-139			
2-Chlorophenol	65.0 ug/L	10.0	ug/L	100	ug/L	65.0	35-105			
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	ug/L	29.2	0-125			J
Acenaphthene	72.7 ug/L	10.0	ug/L	100	ug/L	72.7	45-110			
n-Nitrosodi-n-propylamine	67.4 ug/L	10.0	ug/L	100	ug/L	67.4	35-130			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8

12/8/2016 16:26

RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gasworks

Purchase Order:

Source

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0098 - SW3510C										
LCS (BZL0098-BS2)				Prepare	d: 12/05/201	6 Analyze	d: 12/06/2	016		
p-Chloro-m-cresol	67.4 ug/L	10.0	ug/L	100	ug/L	67.4	45-110			
Pentachlorophenol	80.4 ug/L	20.0	ug/L	100	ug/L	80.4	40-115			
Phenol	28.2 ug/L	10.0	ug/L	101	ug/L	28.0	0-115			
Pyrene	93.1 ug/L	10.0	ug/L	100	ug/L	93.1	50-130			
Surr: 2,4,6-Tribromophenol	82.8		ug/L	200	ug/L	41.4	40-125			
Surr: 2-Fluorobiphenyl	37.2		ug/L	100	ug/L	37.2	23-87			
Surr: 2-Fluorophenol	49.9		ug/L	200	ug/L	24.9	14-52			
Surr: Nitrobenzene-d5	37.2		ug/L	100	ug/L	37.2	40-110			S
Surr: Phenol-d5	30.3		ug/L	200	ug/L	15.1	5-33			
Surr: p-Terphenyl-d14	40.3		ug/L	100	ug/L	40.3	27-133			
Matrix Spike (BZL0098-MS1)	Sour	ce: 16L0022	2-01	Prepare	d: 12/05/201	6 Analyze	d: 12/07/2	016		
1,2,4-Trichlorobenzene	27.6 ug/L	10.1	ug/L	50.2	<10.1 ug/L	55.1	44-142			
,4-Dichlorobenzene	26.2 ug/L	10.1	ug/L	50.5	<10.1 ug/L	51.9	20-124			
2,4-Dinitrotoluene	25.2 ug/L	10.1	ug/L	50.5	<10.1 ug/L	49.8	39-139			
2-Chlorophenol	51.6 ug/L	10.1	ug/L	100	<10.1 ug/L	51.6	35-105			
I-Nitrophenol	<50.5 ug/L	50.5	ug/L	101	<50.5 ug/L	25.6	0-125			J
Acenaphthene	28.3 ug/L	10.1	ug/L	50.3	<10.1 ug/L	56.2	4-98			
n-Nitrosodi-n-propylamine	31.6 ug/L	10.1	ug/L	50.3	<10.1 ug/L	62.7	35-130			
o-Chloro-m-cresol	57.5 ug/L	10.1	ug/L	101	<10.1 ug/L	56.9	45-110			
Pentachlorophenol	82.1 ug/L	20.2	ug/L	100	<20.2 ug/L	82.1	40-115			
Phenol	21.9 ug/L	10.1	ug/L	101	<10.1 ug/L	21.7	0-115			
Pyrene	41.6 ug/L	10.1	ug/L	50.5	<10.1 ug/L	82.3	50-130			
Surr: 2,4,6-Tribromophenol	71.5		ug/L	202	ug/L	35.4	40-125			S
Surr: 2-Fluorobiphenyl	31.2		ug/L	101	ug/L	30.9	23-87			
Surr: 2-Fluorophenol	37.0		ug/L	202	ug/L	18.3	14-52			
Surr: Nitrobenzene-d5	30.6		ug/L	101	ug/L	30.3	40-110			S
Surr: Phenol-d5	23.2		ug/L	202	ug/L	11.5	5-33			
Surr: p-Terphenyl-d14	36.1		ug/L	101	ug/L	35.8	27-133			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

51.0 <10.2 ug/L

102 ug/L

72.4

40.7

50-130

27-133

11.8

20

S

S

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0098 - SW3510C										
Matrix Spike Dup (BZL0098-MSD1)	Sour	rce: 16L002	2-01	Prepared:	12/05/201	6 Analyze	d: 12/07/2	016		
1,2,4-Trichlorobenzene	21.2 ug/L	10.2	ug/L	50.7 <	:10.2 ug/L	41.9	44-142	26.2	20	M, P
1,4-Dichlorobenzene	20.7 ug/L	10.2	ug/L	51.0 <	:10.2 ug/L	40.5	20-124	23.7	20	Р
0.4.5: 11.4.4	40 7 "									

2,4-Dinitrotoluene	18.7 ug/L	10.2	ug/L	51.0	<10.2 ug/L	36.6	39-139	29.7	20	M, P
2-Chlorophenol	42.5 ug/L	10.2	ug/L	101	<10.2 ug/L	42.0	35-105	19.4	20	
4-Nitrophenol	<51.0 ug/L	51.0	ug/L	102	<51.0 ug/L	22.8	0-125	10.6	20	J
Acenaphthene	21.3 ug/L	10.2	ug/L	50.8	<10.2 ug/L	41.9	4-98	28.1	20	Р
n-Nitrosodi-n-propylamine	22.2 ug/L	10.2	ug/L	50.8	<10.2 ug/L	43.6	35-130	34.9	20	Р
p-Chloro-m-cresol	41.8 ug/L	10.2	ug/L	102	<10.2 ug/L	41.0	45-110	31.6	20	M, P
Pentachlorophenol	60.8 ug/L	20.4	ug/L	101	<20.4 ug/L	60.2	40-115	29.8	20	Р
Phenol	17.6 ug/L	10.2	ug/L	102	<10.2 ug/L	17.3	0-115	21.6	20	Р

ug/L

ug/L

Surr: 2,4,6-Tribromophenol	51.5	ug/L	204	ug/L 25.2	40-125
Surr: 2-Fluorobiphenyl	23.9	ug/L	102	ug/L 23.4	23-87
Surr: 2-Fluorophenol	30.5	ug/L	204	ug/L 14.9	14-52
Surr: Nitrobenzene-d5	24.2	ug/L	102	ug/L 23.7	40-110
Surr: Phenol-d5	18.9	ug/L	204	ug/L 9.25	5-33

10.2

36.9 ug/L

41.5

Batch BZL0162 - SW3550C

Surr: p-Terphenyl-d14

Pyrene

Batch BZL0162 - SW3550C				_
Blank (BZL0162-BLK1)			Prepared: 12/06/2016 Analyzed: 12/07/2016	
1,2,4,5-Tetrachlorobenzene	<83.3 ug/kg	83.3	ug/kg	
1,2,4-Trichlorobenzene	<83.3 ug/kg	83.3	ug/kg	
1,2-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg	
1,2-Diphenylhydrazine	<83.3 ug/kg	83.3	ug/kg	
1,3-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg	
1,4-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg	
1-Chloronaphthalene	<83.3 ug/kg	83.3	ug/kg	
1-Naphthylamine	<83.3 ug/kg	83.3	ug/kg	
2,3,4,6-Tetrachlorophenol	<83.3 ug/kg	83.3	ug/kg	
2,4,5-Trichlorophenol	<83.3 ug/kg	83.3	ug/kg	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8

12/8/2016 16:26

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0162 - SW3550C

Blank (BZL0162-BLK1)			Prepared: 12/06/2016 Analyzed: 12/07/2016
2,4,6-Trichlorophenol	<83.3 ug/kg	83.3	ug/kg
2,4-Dichlorophenol	<83.3 ug/kg	83.3	ug/kg
2,4-Dimethylphenol	<83.3 ug/kg	83.3	ug/kg
2,4-Dinitrophenol	<83.3 ug/kg	83.3	ug/kg
2,4-Dinitrotoluene	<83.3 ug/kg	83.3	ug/kg
2,6-Dichlorophenol	<83.3 ug/kg	83.3	ug/kg
2,6-Dinitrotoluene	<83.3 ug/kg	83.3	ug/kg
2-Chloronaphthalene	<83.3 ug/kg	83.3	ug/kg
2-Chlorophenol	<83.3 ug/kg	83.3	ug/kg
2-Methylnaphthalene	<83.3 ug/kg	83.3	ug/kg
2-Naphthylamine	<83.3 ug/kg	83.3	ug/kg
2-Nitroaniline	<83.3 ug/kg	83.3	ug/kg
2-Nitrophenol	<83.3 ug/kg	83.3	ug/kg
3,3'-Dichlorobenzidine	<83.3 ug/kg	83.3	ug/kg
3-Methylcholanthrene	<83.3 ug/kg	83.3	ug/kg
3-Nitroaniline	<83.3 ug/kg	83.3	ug/kg
4,6-Dinitro-2-methylphenol	<83.3 ug/kg	83.3	ug/kg
4-Aminobiphenyl	<83.3 ug/kg	83.3	ug/kg
4-Bromophenyl phenyl ether	<83.3 ug/kg	83.3	ug/kg
4-Chloroaniline	<83.3 ug/kg	83.3	ug/kg
4-Chlorophenyl phenyl ether	<83.3 ug/kg	83.3	ug/kg
4-Nitroaniline	<83.3 ug/kg	83.3	ug/kg
4-Nitrophenol	<83.3 ug/kg	83.3	ug/kg
7,12-Dimethylbenz (a) anthracene	<83.3 ug/kg	83.3	ug/kg
Acenaphthene	<83.3 ug/kg	83.3	ug/kg
Acenaphthylene	<83.3 ug/kg	83.3	ug/kg
Acetophenone	<83.3 ug/kg	83.3	ug/kg
Aniline	<83.3 ug/kg	83.3	ug/kg
Anthracene	<83.3 ug/kg	83.3	ug/kg
Benzidine	<83.3 ug/kg	83.3	ug/kg
Benzo (a) anthracene	<83.3 ug/kg	83.3	ug/kg



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0162 - SW3550C

Butch BEEG10E - GVV00000				
Blank (BZL0162-BLK1)				Prepared: 12/06/2016 Analyzed: 12/07/2016
Benzo (a) pyrene	<83.3 ug/kg	83.3	ug/kg	
Benzo (b) fluoranthene	<83.3 ug/kg	83.3	ug/kg	
Benzo (g,h,i) perylene	<83.3 ug/kg	83.3	ug/kg	
Benzo (k) fluoranthene	<83.3 ug/kg	83.3	ug/kg	
Benzoic acid	<83.3 ug/kg	83.3	ug/kg	
Benzyl alcohol	<83.3 ug/kg	83.3	ug/kg	
bis (2-Chloroethoxy) methane	<83.3 ug/kg	83.3	ug/kg	
bis (2-Chloroethyl) ether	<83.3 ug/kg	83.3	ug/kg	
bis (2-Chloroisopropyl) ether	<83.3 ug/kg	83.3	ug/kg	
bis (2-Ethylhexyl) phthalate	<83.3 ug/kg	83.3	ug/kg	
Butyl benzyl phthalate	<83.3 ug/kg	83.3	ug/kg	
Chrysene	<83.3 ug/kg	83.3	ug/kg	
Dibenz (a,h) anthracene	<83.3 ug/kg	83.3	ug/kg	
Dibenz (a,j) acridine	<83.3 ug/kg	83.3	ug/kg	
Dibenzofuran	<83.3 ug/kg	83.3	ug/kg	
Diethyl phthalate	<83.3 ug/kg	83.3	ug/kg	
Dimethyl phthalate	<83.3 ug/kg	83.3	ug/kg	
Di-n-butyl phthalate	<83.3 ug/kg	83.3	ug/kg	
Di-n-octyl phthalate	<83.3 ug/kg	83.3	ug/kg	
Diphenylamine	<83.3 ug/kg	83.3	ug/kg	
Ethyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg	
Fluoranthene	<83.3 ug/kg	83.3	ug/kg	
Fluorene	<83.3 ug/kg	83.3	ug/kg	
Hexachlorobenzene	<83.3 ug/kg	83.3	ug/kg	
Hexachlorobutadiene	<83.3 ug/kg	83.3	ug/kg	
Hexachlorocyclopentadiene	<83.3 ug/kg	83.3	ug/kg	
Hexachloroethane	<83.3 ug/kg	83.3	ug/kg	
Indeno (1,2,3-cd) pyrene	<83.3 ug/kg	83.3	ug/kg	
Isophorone	<83.3 ug/kg	83.3	ug/kg	
m+p-Cresols	<83.3 ug/kg	83.3	ug/kg	
Methyl methanesulfonate	<83.3 ug/kg	83.3	ug/kg	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0162 - SW3550C Blank (BZL0162-BLK1) Prepared: 12/06/2016 Analyzed: 12/07/2016 Naphthalene <83.3 ug/kg 83.3 ug/kg <83.3 ug/kg 83.3 Nitrobenzene ug/kg 83.3 n-Nitrosodimethylamine <83.3 ug/kg ug/kg n-Nitrosodi-n-butylamine <83.3 ug/kg 83.3 ug/kg n-Nitrosodi-n-propylamine 83.3 <83.3 ug/kg ug/kg n-Nitrosodiphenylamine <83.3 ug/kg 83.3 ug/kg n-Nitrosopiperidine <83.3 ug/kg 83.3 ug/kg o+m+p-Cresols <83.3 ug/kg 83.3 ug/kg o-Cresol <83.3 ug/kg 83.3 ug/kg <83.3 ug/kg 83.3 p-(Dimethylamino) azobenzene ug/kg 83.3 p-Chloro-m-cresol <83.3 ug/kg ug/kg Pentachloronitrobenzene (quintozene) 83.3 <83.3 ug/kg ug/kg <83.3 ug/kg Pentachlorophenol 83.3 ug/kg Phenacetin <83.3 ug/kg 83.3 ug/kg Phenanthrene <83.3 ug/kg 83.3 ug/kg Phenol <83.3 ug/kg 83.3 ug/kg Pronamide <83.3 ug/kg 83.3 ug/kg Pyrene <83.3 ug/kg 83.3 ug/kg Pyridine <83.3 ug/kg 83.3 ug/kg Surr: 2,4,6-Tribromophenol 2510 3250 77 2 35-125 ug/kg Surr: 2-Fluorobiphenyl 1300 1620 80.4 45-105 ug/kg Surr: 2-Fluorophenol 2700 3250 83.2 35-105 ug/kg Surr. Nitrobenzene-d5 1350 1620 83.2 35-100 ug/kg Surr: Phenol-d5 2540 3250 78.1 40-100 ug/kg Surr: p-Terphenyl-d14 1210 74.7 30-125 ug/kg 1620 Prepared: 12/06/2016 Analyzed: 12/07/2016 LCS (BZL0162-BS1) 1,2,4-Trichlorobenzene 810 ug/kg 83.3 ug/kg 1580 ug/kg 51.3 44-142 1,4-Dichlorobenzene 834 ug/kg 83.3 ug/kg 1590 ug/kg 52.6 20-124 4-Nitrophenol 1310 ug/kg 15-140 83.3 3170 41.3 ug/kg ug/kg Acenaphthene 746 ug/kg 45-110 83.3 ug/kg 1580 ug/kg 47.2



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

12/8/2016 16:26

RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: **Fulton Gasworks**

Purchase Order:

Source

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	Limit	Qual
Allalyte	Result	Lilling	Office	Level	rtesuit	70INEC	Lillits		Liiiiii	Quai
Batch BZL0162 - SW3550C										
LCS (BZL0162-BS1)				Prepared	d: 12/06/201	6 Analyze	d: 12/07/2	016		
n-Nitrosodi-n-propylamine	842 ug/kg	83.3	ug/kg	1580	ug/kg	53.3	40-115			
Pentachlorophenol	1590 ug/kg	83.3	ug/kg	3140	ug/kg	50.6	25-120			
Phenol	1460 ug/kg	83.3	ug/kg	3170	ug/kg	45.9	40-100			
Pyrene	845 ug/kg	83.3	ug/kg	1590	ug/kg	53.2	45-125			
Surr: 2,4,6-Tribromophenol	1830		ug/kg	3170	ug/kg	57.7	35-125			
Surr: 2-Fluorobiphenyl	880		ug/kg	1590	ug/kg	55.4	45-105			
Surr: 2-Fluorophenol	1730		ug/kg	3170	ug/kg	54.4	35-105			
Surr: Nitrobenzene-d5	913		ug/kg	1590	ug/kg	57.5	35-100			
Surr: Phenol-d5	1710		ug/kg	3170	ug/kg	53.7	40-100			
Surr: p-Terphenyl-d14	764		ug/kg	1590	ug/kg	48.1	30-125			
Matrix Spike (BZL0162-MS1)	Sou	rce: 16L0076	6-01	Prepared	d: 12/06/201	6 Analyze	d: 12/07/2	016		
,2,4-Trichlorobenzene	<83.3 ug/kg	83.3	ug/kg	1610	<83.3 ug/kg		44-142			M2
,4-Dichlorobenzene	84.8 ug/kg	83.3	ug/kg	1620	<83.3 ug/kg	5.24	20-124			M2
-Nitrophenol	515 ug/kg	83.3	ug/kg	3240	<83.3 ug/kg	15.9	15-140			
Acenaphthene	135 ug/kg	83.3	ug/kg	1610	<83.3 ug/kg	8.37	45-110			M2
n-Nitrosodi-n-propylamine	116 ug/kg	83.3	ug/kg	1610	<83.3 ug/kg	7.21	40-115			M2
Pentachlorophenol	475 ug/kg	83.3	ug/kg	3200	<83.3 ug/kg	14.8	25-120			M2
Phenol	242 ug/kg	83.3	ug/kg	3240	<83.3 ug/kg	7.49	40-100			M2
Pyrene	207 ug/kg	83.3	ug/kg	1620	<83.3 ug/kg	12.8	45-125			M2
Surr: 2,4,6-Tribromophenol	491		ug/kg	3240	ug/kg	15.2	35-125			DS
Surr: 2-Fluorobiphenyl	114		ug/kg	1620	ug/kg	7.06	45-105			DS
Surr: 2-Fluorophenol	277		ug/kg	3240	ug/kg	8.57	35-105			DS
Surr: Nitrobenzene-d5	137		ug/kg	1620	ug/kg	8.45	35-100			DS
Surr: Phenol-d5	275		ug/kg	3240	ug/kg	8.49	40-100			DS
Surr: p-Terphenyl-d14	184		ug/kg	1620	ug/kg	11.4	30-125			DS
Matrix Spike Dup (BZL0162-MSD1)	Sour	rce: 16L0070	6-01	Prepared	d: 12/06/201	6 Analyze	d: 12/07/2	016		
1,2,4-Trichlorobenzene	<83.3 ug/kg	83.3	ug/kg	1530	<83.3 ug/kg		44-142		20	M2
,4-Dichlorobenzene	<83.3 ug/kg	83.3	ug/kg	1540	<83.3 ug/kg		20-124		20	M2
1-Nitrophenol	392 ug/kg	83.3	ug/kg	3080	<83.3 ug/kg	12.7	15-140	27.0	20	M2, P
Acenaphthene	101 ug/kg	83.3	ug/kg	1530	<83.3 ug/kg	6.61	45-110		20	M2



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.:

Fulton Gasworks

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0162 - SW3550C

Matrix Spike Dup (BZL0162-MSD1)	Source	: 16L0076	-01	Prepared	016					
n-Nitrosodi-n-propylamine	<83.3 ug/kg	83.3	ug/kg	1530	<83.3 ug/kg		40-115		20	M2
Pentachlorophenol	380 ug/kg	83.3	ug/kg	3050	<83.3 ug/kg	12.5	25-120	22.3	20	M2, P
Phenol	161 ug/kg	83.3	ug/kg	3080	<83.3 ug/kg	5.24	40-100		20	M2
Pyrene	168 ug/kg	83.3	ug/kg	1540	<83.3 ug/kg	10.9	45-125		20	M2
Surr: 2,4,6-Tribromophenol	439		ug/kg	3080	ug/kg	14.3	35-125			DS
Surr: 2-Fluorobiphenyl	94.4		ug/kg	1540	ug/kg	6.13	45-105			DS
Surr: 2-Fluorophenol	203		ug/kg	3080	ug/kg	6.58	35-105			DS
Surr: Nitrobenzene-d5	109		ug/kg	1540	ug/kg	7.10	35-100			DS
Surr: Phenol-d5	207		ug/kg	3080	ug/kg	6.72	40-100			DS
Surr: p-Terphenyl-d14	161		ug/kg	1540	ug/kg	10.4	30-125			DS



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Client Name: Timmons Group

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RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gasworks

Purchase Order:

Source

Semivolatile Hydrocarbons by GC - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0161 - SW3510C										
Blank (BZL0161-BLK1)				Prepared: 1	12/06/2016	S Analyze	d: 12/08/2	016		
TPH-Semi-Volatiles (DRO)	<0.500 mg/L	0.500	mg/L							
Surr: Pentacosane	0.301		mg/L	0.250		120	40-160			
LCS (BZL0161-BS1)				Prepared: 1	12/06/2016	S Analyze	d: 12/08/2	016		
TPH-Semi-Volatiles (DRO)	3.9 mg/L	0.500	mg/L	5.00 mg	g/L	78.1	40-160			
Surr: Pentacosane	0.218		mg/L	0.250 mg	g/L	87.4	40-160			
Matrix Spike (BZL0161-MS1)	Sour	ce: 16L010	3-01	Prepared: 1	12/06/2016	S Analyze	d: 12/08/2	016		
TPH-Semi-Volatiles (DRO)	3.6 mg/L	0.500	mg/L	5.26 <0	.500 mg/L	58.3	40-160			
Surr: Pentacosane	0.237		mg/L	0.263 mg	g/L	90.2	40-160			
Matrix Spike Dup (BZL0161-MSD1)	Sour	ce: 16L010	3-01	Prepared: 1	12/06/2016	S Analyze	d: 12/08/2	016		
TPH-Semi-Volatiles (DRO)	3.8 mg/L	0.500	mg/L	5.26 <0	.500 mg/L	62.6	40-160	6.21	20	
Surr: Pentacosane	0.248		mg/L	0.263 mg	g/L	94.1	40-160			



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Client Name: Timmons Group

Date Issued: 12/8/20

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1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0126 - SW3550B

Blank (BZL0126-BLK1)			F	Prepared: 12/05/2016 Analyzed: 12/07/2016	
PCB as Aroclor 1016	<0.100 mg/kg wet	0.100	mg/kg wet		
4,4'-DDD	<6.00 ug/kg	6.00	ug/kg		
PCB as Aroclor 1221	<0.100 mg/kg wet	0.100	mg/kg wet		
PCB as Aroclor 1232	<0.100 mg/kg wet	0.100	mg/kg wet		
4,4'-DDE	<4.00 ug/kg	4.00	ug/kg		
PCB as Aroclor 1242	<0.100 mg/kg wet	0.100	mg/kg wet		
PCB as Aroclor 1248	<0.100 mg/kg wet	0.100	mg/kg wet		
4,4'-DDT	<4.00 ug/kg	4.00	ug/kg		
PCB as Aroclor 1254	<0.100 mg/kg wet	0.100	mg/kg wet		
PCB as Aroclor 1260	<0.100 mg/kg wet	0.100	mg/kg wet		
Aldrin	<2.00 ug/kg	2.00	ug/kg		
alpha-BHC	<2.00 ug/kg	2.00	ug/kg		
beta-BHC	<2.00 ug/kg	2.00	ug/kg		
Chlordane	<42.0 ug/kg	42.0	ug/kg		
delta-BHC	<4.00 ug/kg	4.00	ug/kg		
Dieldrin	<4.00 ug/kg	4.00	ug/kg		
Endosulfan I	<4.00 ug/kg	4.00	ug/kg		
Endosulfan II	<6.00 ug/kg	6.00	ug/kg		
Endosulfan sulfate	<2.00 ug/kg	2.00	ug/kg		
Endrin	<4.00 ug/kg	4.00	ug/kg		
Endrin aldehyde	<8.00 ug/kg	8.00	ug/kg		
Endrin ketone	<2.00 ug/kg	2.00	ug/kg		
gamma-BHC (Lindane)	<2.00 ug/kg	2.00	ug/kg		
Heptachlor	<2.00 ug/kg	2.00	ug/kg		
Heptachlor epoxide	<40.0 ug/kg	40.0	ug/kg		
Methoxychlor	<40.0 ug/kg	40.0	ug/kg		
Mirex	<6.00 ug/kg	6.00	ug/kg		
Toxaphene	<42.0 ug/kg	42.0	ug/kg		
Surr: DCB	0.0513		mg/kg wet	0.0331 155 30-105	S
Surr: TCMX	0.0298		mg/kg wet	0.0331 90.0 30-105	
Surr: TCMX	29.8		ug/kg	33.1 90.0 30-105	



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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZL0126-BLK1)				Prepare	d: 12/05/201	6 Analyze	ed: 12/07/2016	
Surr: DCB	51.3		ug/kg	33.1		155	30-105	S
LCS (BZL0126-BS1)			ſ	Prepare	d: 12/05/201	6 Analyze	ed: 12/07/2016	
4,4'-DDD	12.0 ug/kg	6.00	ug/kg	15.0	ug/kg	80.0	23-134	
1,4'-DDE	12.0 ug/kg	4.00	ug/kg	15.0	ug/kg	80.0	23-134	
1,4'-DDT	10.5 ug/kg	4.00	ug/kg	15.0	ug/kg	70.0	23-134	
Aldrin	9.01 ug/kg	2.00	ug/kg	15.0	ug/kg	60.0	23-134	
alpha-BHC	9.01 ug/kg	2.00	ug/kg	15.0	ug/kg	60.0	23-134	
peta-BHC	10.5 ug/kg	2.00	ug/kg	15.0	ug/kg	70.0	23-134	
delta-BHC	9.01 ug/kg	4.00	ug/kg	15.0	ug/kg	60.0	23-134	
Dieldrin	12.0 ug/kg	4.00	ug/kg	15.0	ug/kg	80.0	23-134	
Endosulfan I	12.0 ug/kg	4.00	ug/kg	15.0	ug/kg	80.0	23-134	
Endosulfan II	10.5 ug/kg	6.00	ug/kg	15.0	ug/kg	70.0	23-134	
Endosulfan sulfate	10.5 ug/kg	2.00	ug/kg	15.0	ug/kg	70.0	23-134	
Endrin	12.0 ug/kg	4.00	ug/kg	15.0	ug/kg	80.0	23-134	
Endrin aldehyde	9.01 ug/kg	8.00	ug/kg	15.0	ug/kg	60.0	23-134	
Endrin ketone	12.0 ug/kg	2.00	ug/kg		ug/kg		23-134	
gamma-BHC (Lindane)	9.01 ug/kg	2.00	ug/kg	15.0	ug/kg	60.0	23-134	
Heptachlor	9.01 ug/kg	2.00	ug/kg	15.0	ug/kg	60.0	23-134	
Heptachlor epoxide	<40.0 ug/kg	40.0	ug/kg	15.0	ug/kg	70.0	23-134	J
Methoxychlor	<40.0 ug/kg	40.0	ug/kg	15.0	ug/kg	70.0	23-134	J
Mirex	12.0 ug/kg	6.00	ug/kg	15.0	ug/kg	80.0	23-134	
Surr: TCMX	19.5		ug/kg	30.0	ug/kg	65.0	30-105	
Surr: DCB	24.0		ug/kg	30.0	ug/kg	80.0	30-105	
LCS (BZL0126-BS2)			ı	repare	d: 12/05/201	6 Analyze	ed: 12/07/2016	
PCB as Aroclor 1016	0.172 mg/kg wet	0.100	mg/kg wet	0.155	mg/kg wet	111	60-140	
PCB as Aroclor 1260	0.154 mg/kg wet	0.100	mg/kg wet	0.155	mg/kg wet	99.0	60-140	
Surr: DCB	0.0404		mg/kg wet	0.0311	mg/kg wet	130	30-105	S
Surr: TCMX	0.0311		mg/kg wet	0.0311	mg/kg wet	100	30-105	



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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0126 - SW3550B										
_CS (BZL0126-BS3)				Prepare	d: 12/05/201	6 Analyze	d: 12/08/2	016		
Toxaphene	309 ug/kg	42.0	ug/kg	415	ug/kg	74.4	23-134			
_CS (BZL0126-BS4)				Prepare	d: 12/05/201	3 Analyze	d· 12/08/2	016		
Chlordane	251 ug/kg	42.0	ug/kg	374	ug/kg	67.2	23-134			
Matrix Spike (BZL0126-MS1)		ce: 16L007	0 0	Prenare	d: 12/05/201	3 Δnalvze	d. 12/08/2	016		
PCB as Aroclor 1016	1.31 mg/kg dry	0.107	mg/kg dry	•	4. 12/03/2010 0.107 mg/kg		60-140	010		M
PCB as Aroclor 1260	0.235 mg/kg dry	0.107	mg/kg dry		<0.107 mg/kg	•	60-140			.71
										 S
Surr: DCB Surr: TCMX	0.0659 0.0338		mg/kg dry mg/kg dry		mg/kg dry mg/kg dry	185 95.0	30-105 30-105			3
oun. I OlviA	0.0336		mg/kg dry	0.0550	mg/kg ury	33.0	30-103			
Matrix Spike (BZL0126-MS2)		ce: 16L004	8-15	Prepare	d: 12/05/201	<u> Analyze</u>	d: 12/07/2	016		
.,4'-DDD	16.6 ug/kg	11.9	ug/kg	33.1	<11.9 ug/kg	50.0	23-134			
,4'-DDE	13.2 ug/kg	7.95	ug/kg	33.1	<7.95 ug/kg	40.0	23-134			
4,4'-DDT	16.6 ug/kg	7.95	ug/kg	33.1	<7.95 ug/kg	50.0	23-134			
Aldrin	16.6 ug/kg	3.97	ug/kg		<3.97 ug/kg	50.0	23-134			
alpha-BHC	16.6 ug/kg	3.97	ug/kg	33.1	<3.97 ug/kg	50.0	23-134			
peta-BHC	13.2 ug/kg	3.97	ug/kg	33.1	<3.97 ug/kg	40.0	23-134			
delta-BHC	26.5 ug/kg	7.95	ug/kg	33.1	<7.95 ug/kg	80.0	23-134			
Dieldrin	16.6 ug/kg	7.95	ug/kg	33.1	<7.95 ug/kg	50.0	23-134			
Endosulfan I	16.6 ug/kg	7.95	ug/kg	33.1	<7.95 ug/kg	50.0	23-134			
Endosulfan II	19.9 ug/kg	11.9	ug/kg	33.1	<11.9 ug/kg	60.0	23-134			
Endosulfan sulfate	23.2 ug/kg	3.97	ug/kg	33.1	<3.97 ug/kg	70.0	23-134			
Endrin	19.9 ug/kg	7.95	ug/kg	33.1	<7.95 ug/kg	60.0	23-134			
Endrin aldehyde	<15.9 ug/kg	15.9	ug/kg	33.1	<15.9 ug/kg		23-134			M
Endrin ketone	26.5 ug/kg	3.97	ug/kg		<3.97 ug/kg		23-134			
gamma-BHC (Lindane)	16.6 ug/kg	3.97	ug/kg	33.1	<3.97 ug/kg	50.0	23-134			
leptachlor	16.6 ug/kg	3.97	ug/kg	33.1	<3.97 ug/kg	50.0	23-134			
leptachlor epoxide	<79.5 ug/kg	79.5	ug/kg	33.1	<79.5 ug/kg	50.0	23-134			J
Methoxychlor	<79.5 ug/kg	79.5	ug/kg	33.1	<79.5 ug/kg	70.0	23-134			J
<i>f</i> lirex	16.6 ug/kg	11.9	ug/kg	33.1	<11.9 ug/kg	50.0	23-134			
	26.5		ug/kg	66.2	ug/kg	40.0	30-105			



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Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.:

Fulton Gasworks

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0126 - SW3550B

Matrix Spike (BZL0126-MS2)	Source	e: 16L004	8-15	Prepared: 12/05/20	16 Analyze	ed: 12/07/2	016		
Surr: DCB	36.4		ug/kg	66.2 ug/kg	55.0	30-105			
Matrix Spike Dup (BZL0126-MSD1)	Source	e: 16L007	6-01	Prepared: 12/05/20	16 Analyze	ed: 12/08/2	016		
PCB as Aroclor 1016	1.84 mg/kg dry	0.107	mg/kg dry	0.179 <0.107 mg/k	g dry1030	60-140	34.2	20	M, P
PCB as Aroclor 1260	0.184 mg/kg dry	0.107	mg/kg dry	0.179 <0.107 mg/k	g dry103	60-140	24.4	20	Р
Surr: DCB	0.0554		mg/kg dry	0.0357 mg/kg dry	155	30-105			S
Surr: TCMX	0.0322		mg/kg dry	0.0357 mg/kg dry	90.0	30-105			

Batch BZL0129 - SW35100

		Prepared: 12/05/2016 Analyzed: 12/07/2016
<0.050 ug/L	0.050	ug/L
<0.200 ug/L	0.200	ug/L
<0.200 ug/L	0.200	ug/L
<0.050 ug/L	0.050	ug/L
<0.200 ug/L	0.200	ug/L
<0.200 ug/L	0.200	ug/L
<0.200 ug/L	0.200	ug/L
<0.050 ug/L	0.050	ug/L
<0.200 ug/L	0.200	ug/L
<0.200 ug/L	0.200	ug/L
<0.050 ug/L	0.050	ug/L
<0.050 ug/L	0.050	ug/L
<0.050 ug/L	0.050	ug/L
<0.200 ug/L	0.200	ug/L
<0.050 ug/L	0.050	ug/L
	<0.200 ug/L <0.050 ug/L	 <0.200 ug/L <0.050 ug/L <0.200 ug/L <0.200 ug/L <0.200 ug/L <0.200 ug/L <0.050 ug/L



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

RPD

RPD

Limit

Qual

1001 Boulders Parkway, Suite 300

Result

Richmond VA, 23225

Submitted To: Julia Campus

Analyte

Project Number:

36156.015

%REC

Limits

%REC

Client Site I.D.: Fulton Gasworks

Purchase Order:

Source

Result

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Units

Spike

Level

Reporting

Limit

Allalyte	- I Vesuit	LIIIIII	Ullis	Level	Nesuit	70KEC	LIIIIIIS		LIIIII	Quai
Batch BZL0129 - SW3510C										
Blank (BZL0129-BLK1)				Prepared	l: 12/05/201	6 Analyze	d: 12/07/2	016		
Endrin aldehyde	<0.050 ug/L	0.050	ug/L							
gamma-BHC (Lindane)	<0.050 ug/L	0.050	ug/L							
Heptachlor	<0.050 ug/L	0.050	ug/L							
Heptachlor epoxide	<0.050 ug/L	0.050	ug/L							
Methoxychlor	<0.050 ug/L	0.050	ug/L							
Toxaphene	<1.00 ug/L	1.00	ug/L							
Surr: DCB	0.210		ug/L	0.200		105	30-105			
Surr: TCMX	0.130		ug/L	0.200		65.0	18-112			
Surr: TCMX	0.130		ug/L	0.200		65.0	30-105			
Surr: DCB	0.200		ug/L	0.200		100	27-131			
LCS (BZL0129-BS1)				Prepared	l: 12/05/201	6 Analyze	d: 12/07/2	016		
4,4'-DDD	0.100 ug/L	0.050	ug/L	0.100	ug/L	100	23-134			
4,4'-DDE	0.090 ug/L	0.050	ug/L	0.100	ug/L	90.0	23-134			
4,4'-DDT	0.100 ug/L	0.050	ug/L	0.100	ug/L	100	23-134			
Aldrin	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134			
alpha-BHC	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134			
beta-BHC	0.090 ug/L	0.050	ug/L	0.100	ug/L	90.0	23-134			
Chlordane	<0.200 ug/L	0.200	ug/L		ug/L		23-134			
delta-BHC	0.100 ug/L	0.050	ug/L	0.100	ug/L	100	23-134			
Dieldrin	0.090 ug/L	0.050	ug/L	0.100	ug/L	90.0	23-134			
Endosulfan I	0.090 ug/L	0.050	ug/L	0.100	ug/L	90.0	23-134			
Endosulfan II	0.100 ug/L	0.050	ug/L	0.100	ug/L	100	23-134			
Endosulfan sulfate	0.100 ug/L	0.050	ug/L	0.100	ug/L	100	23-134			
Endrin	0.100 ug/L	0.050	ug/L	0.100	ug/L	100	23-134			
Endrin aldehyde	0.090 ug/L	0.050	ug/L	0.100	ug/L	90.0	23-134			
gamma-BHC (Lindane)	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134			
Heptachlor	0.080 ug/L	0.050	ug/L	0.100	ug/L	80.0	23-134			
Heptachlor epoxide	0.090 ug/L	0.050	ug/L	0.100	ug/L	90.0	23-134			
Methoxychlor	0.110 ug/L	0.050	ug/L	0.100	ug/L	110	23-134			
Mirex	0.090 ug/L	0.050	ug/L	0.100	ug/L	90.0	23-134			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gasworks

Purchase Order:

Source

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0129 - SW3510C										
LCS (BZL0129-BS1)				Prepared	d: 12/05/201	6 Analyze	d: 12/07/2	016		
Toxaphene	<1.00 ug/L	1.00	ug/L		ug/L		23-134			
Surr: TCMX	0.150		ug/L	0.200	ug/L	75.0	18-112			
Surr: DCB	0.140		ug/L	0.200	ug/L	70.0	27-131			
LCS (BZL0129-BS2)				Prepared	d: 12/05/201	6 Analyze	d: 12/07/2	016		
PCB as Aroclor 1016	0.650 ug/L	0.200	ug/L	1.00	ug/L	65.0	40-120			
PCB as Aroclor 1260	0.680 ug/L	0.200	ug/L	1.00	ug/L	68.0	40-120			
Surr: DCB	0.140		ug/L	0.200	ug/L	70.0	30-105			
Surr: TCMX	0.110		ug/L	0.200	ug/L	55.0	30-105			
LCS (BZL0129-BS3)				Prepared	d: 12/05/201	6 Analyze	d: 12/07/2	016		
Toxaphene	1.36 ug/L	1.00	ug/L	2.50	ug/L	54.4	23-134			
LCS (BZL0129-BS4)				Prepared	d: 12/05/201	6 Analyze	d: 12/07/2	016		
Chlordane	1.64 ug/L	0.200	ug/L	2.50	ug/L	65.6	23-134			
Matrix Spike (BZL0129-MS1)	Sour	ce: 16L0048	8-06	Prepared	d: 12/05/201	6 Analyze	d: 12/08/2	016		
4,4'-DDD	0.179 ug/L	0.064	ug/L		<0.064 ug/L	140	23-134			М
4,4'-DDE	0.192 ug/L	0.064	ug/L	0.128	<0.064 ug/L	150	23-134			M
4,4'-DDT	0.282 ug/L	0.064	ug/L	0.128	<0.064 ug/L	220	23-134			M
Aldrin	0.333 ug/L	0.064	ug/L	0.128	<0.064 ug/L	260	23-134			M
alpha-BHC	0.385 ug/L	0.064	ug/L	0.128	<0.064 ug/L	300	23-134			M
beta-BHC	1.50 ug/L	0.064	ug/L	0.128	<0.064 ug/L	1170	23-134			M
delta-BHC	1.12 ug/L	0.064	ug/L	0.128	<0.064 ug/L	870	23-134			M
Dieldrin	0.205 ug/L	0.064	ug/L	0.128	<0.064 ug/L	160	23-134			M
Endosulfan I	0.179 ug/L	0.064	ug/L	0.128	<0.064 ug/L	140	23-134			М
Endosulfan II	0.308 ug/L	0.064	ug/L	0.128	<0.064 ug/L	240	23-134			М
Endosulfan sulfate	0.269 ug/L	0.064	ug/L	0.128	<0.064 ug/L	210	23-134			М
Endrin	0.167 ug/L	0.064	ug/L	0.128	<0.064 ug/L	130	23-134			
Endrin aldehyde	0.487 ug/L	0.064	ug/L	0.128	<0.064 ug/L	380	23-134			М
gamma-BHC (Lindane)	1.08 ug/L	0.064	ug/L	0.128	<0.064 ug/L	840	23-134			М
Heptachlor	2.22 ug/L	0.064	ug/L	0.128	<0.064 ug/L	1730	23-134			М



Certificate of Analysis

Final Report

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Date Issued: 12/8

12/8/2016 16:26

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

A maketa	Desuit	Reporting	l luite	Spike	Source	W DE 0	%REC	RPD	RPD	01
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	KFD	Limit	Qual
Ratch R7I 0129 - SW3510C										

Matrix Spike (BZL0129-MS1)	Sourc	e: 16L0048	-06	Prepared:	12/05/2016	Analyze	ed: 12/08/2	016		
Methoxychlor	0.526 ug/L	0.064	ug/L	0.128 <	0.064 ug/L	410	23-134			M
Mirex	0.500 ug/L	0.064	ug/L	0.128 <	0.064 ug/L	390	23-134			М
Surr: TCMX	0.346		ug/L	0.256 u	ıg/L	135	18-112			S
Surr: DCB	0.346		ug/L	0.256 u	ıg/L	135	27-131			S
Matrix Spike Dup (BZL0129-MSD1)	Sourc	e: 16L0048	-06	Prepared:	12/05/2016	S Analyze	ed: 12/08/2	016		
4,4'-DDD	0.246 ug/L	0.088	ug/L	0.175 <	0.088 ug/L	140	23-134	31.1	20	M, F
4,4'-DDE	0.088 ug/L	0.088	ug/L	0.175 <	0.088 ug/L	50.0	23-134	74.7	20	Р
4,4'-DDT	0.140 ug/L	0.088	ug/L	0.175 <	0.088 ug/L	80.0	23-134	67.1	20	Р
Aldrin	5.56 ug/L	0.088	ug/L	0.175 <	0.088 ug/L	3170	23-134	177	20	M, F
alpha-BHC	0.105 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L	60.0	23-134	114	20	Р
beta-BHC	0.228 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L	130	23-134	147	20	Р
delta-BHC	0.246 ug/L	0.088	ug/L	0.175 <	0.088 ug/L	140	23-134	128	20	M, I
Dieldrin	<0.088 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L	40.0	23-134	98.0	20	PJ
Endosulfan I	0.088 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L	50.0	23-134	68.7	20	Р
Endosulfan II	0.123 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L	70.0	23-134	85.9	20	Р
Endosulfan sulfate	0.158 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L	90.0	23-134	52.1	20	Р
Endrin	0.228 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L	130	23-134	31.1	20	Р
Endrin aldehyde	0.193 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L	110	23-134	86.5	20	Р
gamma-BHC (Lindane)	0.105 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L	60.0	23-134	164	20	Р
Heptachlor	<0.088 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L		23-134		20	М
Heptachlor epoxide	0.123 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L	70.0	23-134	74.7	20	Р
Methoxychlor	0.351 ug/L	0.088	ug/L	0.175 <0	0.088 ug/L	200	23-134	39.9	20	M, F
Mirex	0.263 ug/L	0.088	ug/L	0.175 <	0.088 ug/L	150	23-134	62.1	20	M, F
Surr: TCMX	0.263		ug/L	0.351 u	ıg/L	75.0	18-112			
Surr: DCB	0.421		ug/L	0.351 u	ıg/L	120	27-131			



Certificate of Analysis

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Wet Chemistry Analysis - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0096 - No Prep Wet Chem										
LCS (BZL0096-BS1)				Prepared	& Analyzed	: 12/02/2	016			
рН	5.07 SU	0	SU	5.00	SU	101	94-106			
Duplicate (BZL0096-DUP1)	Sour	ce: 16L0048	B-15	Prepared	& Analyzed	: 12/02/2	016			
рН	8.21 SU	0.00	SU	8	3.09 SU			1.47	20	
Batch BZL0159 - No Prep Wet Chem										
Blank (BZL0159-BLK1)				Prepared	& Analyzed	: 12/06/2	016			
Cyanide	<0.01 mg/L	0.01	mg/L							
LCS (BZL0159-BS1)				Prepared	& Analyzed	: 12/06/2	016			
Cyanide	0.24 mg/L	0.01	mg/L	0.250	mg/L	96.4	80-120			
LCS Dup (BZL0159-BSD1)				Prepared	& Analyzed	: 12/06/2	016			
Cyanide	0.24 mg/L	0.01	mg/L	0.250	mg/L	97.6	80-120	1.24	20	
Matrix Spike (BZL0159-MS1)	Sour	ce: 16K0773	3-01	Prepared	& Analyzed	: 12/06/2	016			
Cyanide	0.25 mg/L	0.01	mg/L	0.250 <	<0.01 mg/L	98.3	80-120			CI
Matrix Spike (BZL0159-MS2)	Sour	ce: 16K0773	3-02	Prepared	& Analyzed	: 12/06/2	016			
Cyanide	0.22 mg/L	0.01	mg/L	0.250 <	<0.01 mg/L	89.4	80-120			CI
Matrix Spike Dup (BZL0159-MSD1)	Sour	ce: 16K0773	3-01	Prepared	& Analyzed	: 12/06/2	016			
Cyanide	0.25 mg/L	0.01	mg/L	0.250 <	<0.01 mg/L	101	80-120	2.89	20	CI
Matrix Spike Dup (BZL0159-MSD2)	Sour	ce: 16K0773	3-02	Prepared	& Analyzed	: 12/06/2	016			
Cyanide	0.23 mg/L	0.01	mg/L	0.250 <	<0.01 mg/L	90.8	80-120	1.60	20	CI



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36156.015

Client Site I.D.: Fulton Gasworks

Purchase Order:

Wet Chemistry Analysis - Quality Control

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0160 - No Prep Wet Chem										
Blank (BZL0160-BLK1)				Prepared	& Analyzed	l: 12/06/2	016			
Cyanide	<0.01 mg/kg	0.01	mg/kg							
LCS (BZL0160-BS1)				Prepared	& Analyzed	l: 12/06/2	016			
Cyanide	0.24 mg/L	0.01	mg/L	0.250	mg/L	97.2	80-120			
LCS Dup (BZL0160-BSD1)				Prepared	& Analyzed	l: 12/06/2	016			
Cyanide	0.26 mg/L	0.01	mg/L	0.250	mg/L	102	80-120	5.10	20	
Matrix Spike (BZL0160-MS1)	Sour	ce: 16L0048	3-12	Prepared	& Analyzed	I: 12/06/2	016			
Cyanide	41.4 mg/kg	0.99	mg/kg	24.7	15.8 mg/kg	104	75-125			
Matrix Spike Dup (BZL0160-MSD1)	Sour	ce: 16L0048	3-12	Prepared	& Analyzed	l: 12/06/2	016			
Cyanide	40.9 mg/kg	0.99	mg/kg	24.7	15.8 mg/kg	102	75-125	1.22	20	
Batch BZL0230 - No Prep Halides										
Blank (BZL0230-BLK1)				Prepared	: 12/07/201	6 Analyze	d: 12/08/2	016		
Percent Solids	100 %	0.10	%							
Duplicate (BZL0230-DUP1)	Sour	ce: 16L0027	7-01	Prepared	: 12/07/201	6 Analyze	d: 12/08/2	.016		
Percent Solids	84.3 %	0.10	%	8	84.5 %			0.212	20	
Duplicate (BZL0230-DUP2)	Sour	ce: 16L0076	6-01	Prepared	: 12/07/201	6 Analyze	d: 12/08/2	.016		
Percent Solids	92.0 %	0.10	%	Ç	91.7 %			0.306	20	



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Richmond VA, 23225

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Client Site I.D.: Fulton Gasworks Purchase Order:

Analyte	Certifications
EPA200.7 Rev 4.4 in Non-Potable Water	·
Beryllium	VELAP,NC,WVDEP
Cadmium	VELAP,NC,WVDEP
Chromium	VELAP,NC,WVDEP
Copper	VELAP,NC,WVDEP
Lead	VELAP,NC,WVDEP
Nickel	VELAP,NC,WVDEP
Silver	VELAP,NC,WVDEP
Zinc	VELAP,NC,WVDEP
EPA245.1 R3.0 in Non-Potable Water	
Mercury	VELAP,NC,WVDEP
SW6010C in Solids	
Antimony	VELAP
Arsenic	VELAP
Beryllium	VELAP
Cadmium	VELAP,WVDEP
Chromium	VELAP
Copper	VELAP
Lead	VELAP,WVDEP
Nickel	VELAP
Selenium	VELAP,WVDEP
Silver	VELAP,WVDEP
Thallium	VELAP
Zinc	VELAP
SW7010 in Non-Potable Water	
Antimony	VELAP,NC
Arsenic	VELAP,NC
Selenium	VELAP,NC
Thallium	VELAP,NC
SW7471B in Solids	
Mercury	VELAP,WVDEP
SW8015C in Non-Potable Water	
TPH-Semi-Volatiles (DRO)	VELAP,NC,WVDEP
SW8081B in Non-Potable Water	
4,4'-DDD	NC,VELAP,WVDEP
4,4'-DDE	NC,VELAP,WVDEP



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Richmond VA, 23225

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Client Site I.D.: Fulton Gasworks Purchase Order:

Analyte	Certifications
4,4'-DDT	NC,VELAP,WVDEP
Aldrin	NC,VELAP,WVDEP
alpha-BHC	NC,VELAP,WVDEP
beta-BHC	NC,VELAP,WVDEP
Chlordane	NC,VELAP,WVDEP
delta-BHC	NC,VELAP,WVDEP
Dieldrin	NC,VELAP,WVDEP
Endosulfan I	NC,VELAP,WVDEP
Endosulfan II	NC,VELAP,WVDEP
Endosulfan sulfate	NC,VELAP,WVDEP
Endrin	NC,VELAP,WVDEP
Endrin aldehyde	NC,VELAP,WVDEP
gamma-BHC (Lindane)	NC,VELAP,WVDEP
Heptachlor	NC,VELAP,WVDEP
Heptachlor epoxide	NC,VELAP,WVDEP
Methoxychlor	NC,VELAP,WVDEP
Toxaphene	NC,VELAP,WVDEP
SW8081B in Solids	
alpha-BHC	NC,VELAP
beta-BHC	NC,VELAP
Chlordane	NC,VELAP
delta-BHC	NC,VELAP
Dieldrin	NC,VELAP
Endosulfan I	NC,VELAP
Endosulfan II	NC,VELAP
Endosulfan sulfate	NC,VELAP
Endrin	NC,VELAP
Endrin aldehyde	NC,VELAP
Endrin ketone	NC,VELAP
gamma-BHC (Lindane)	NC,VELAP
Heptachlor	NC,VELAP
Heptachlor epoxide	NC,VELAP
Methoxychlor	NC,VELAP
Mirex	NC,VELAP
Toxaphene	NC,VELAP
SW8082A in Non-Potable Water	
PCB as Aroclor 1016	VELAP,NC,WVDEP



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Richmond VA, 23225

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Client Site I.D.: Fulton Gasworks Purchase Order:

PCB as Aroclor 1221 PCB as Aroclor 1232 PCB as Aroclor 1242 VELAPNC,WWDEP PCB as Aroclor 1248 VELAPNC,WWDEP PCB as Aroclor 1248 VELAPNC,WWDEP PCB as Aroclor 1248 VELAPNC,WWDEP PCB as Aroclor 1260 VELAPNC PCB as Aroclor 1260 VELAPNC PCB as Aroclor 1210 PCB as Aroclor 1211 VELAPNC PCB as Aroclor 1222 VELAPNC PCB as Aroclor 1232 VELAPNC PCB as Aroclor 1242 VELAPNC PCB as Aroclor 1248 VELAPNC PCB as Aroclor 1248 VELAPNC PCB as Aroclor 1248 VELAPNC PCB as Aroclor 1249 PCB as Aroclor 1249 PCB as Aroclor 1240 VELAPNC	Analyte	Certifications	
PCB as Aroclor 1242 VELAP,NC,WVDEP PCB as Aroclor 1254 VELAP,NC,WVDEP PCB as Aroclor 1260 VELAP,NC,WVDEP SW8082A in Solids VELAP,NC PCB as Aroclor 1016 VELAP,NC PCB as Aroclor 1021 VELAP,NC PCB as Aroclor 1222 VELAP,NC PCB as Aroclor 1232 VELAP,NC PCB as Aroclor 1248 VELAP,NC PCB as Aroclor 1254 VELAP,NC PCB as Aroclor 1260 VELAP,NC PCB as Aroclor 1260 VELAP,NC PCB as Aroclor 1260 VELAP,NC SW2008 in Non-Potable Water VELAP,NC 1,1,1-2-Tetrachloroethane NC,VELAP,WVDEP 1,1,2-Trichloroethane NC,VELAP,WVDEP 1,1,2-Trichloroethane NC,VELAP,WVDEP 1,1-Dichloroethylene NC,VELAP,WVDEP 1,2-Birthoroptopene NC,VELAP,WVDEP 1,2-3-Trichloroptopene NC,VELAP,WVDEP 1,2-3-Trichlorobenzene NC,VELAP,WVDEP 1,2-4-Trindriyblenzene NC,VELAP,WVDEP 1,2-4-Trindriyblenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene <td< td=""><td>PCB as Aroclor 1221</td><td>VELAP,NC,WVDEP</td><td></td></td<>	PCB as Aroclor 1221	VELAP,NC,WVDEP	
PCB as Aroclor 1248 VELAP,NC,WVDEP PCB as Aroclor 1254 VELAP,NC,WVDEP PCB as Aroclor 1260 VELAP,NC SW8082A in Solids VELAP,NC PCB as Aroclor 1016 VELAP,NC PCB as Aroclor 1221 VELAP,NC PCB as Aroclor 1232 VELAP,NC PCB as Aroclor 1242 VELAP,NC PCB as Aroclor 1254 VELAP,NC PCB as Aroclor 1254 VELAP,NC PCB as Aroclor 1256 VELAP,NC PCB as Aroclor 1260 VELAP,NC SW8260B in Non-Potable Water NC,VELAP,WVDEP 1,1,1,2-Térabriloroethane NC,VELAP,WVDEP 1,1,1-Zireabriloroethane NC,VELAP,WVDEP 1,1-Dichloroethane NC,VELAP,WVDEP 1,1-Dichloroethane NC,VELAP,WVDEP 1,1-Dichloroethylne NC,VELAP,WVDEP 1,1-Dichloroethylne NC,VELAP,WVDEP 1,2-3-Trichloropopane NC,VELAP,WVDEP 1,2-3-Trichloropopane NC,VELAP,WVDEP 1,2-4-Timethylbenzene NC,VELAP,WVDEP 1,2-Dichloropopane (DBCP) NC,VELAP,WVDEP 1,2-Dichloropopane	PCB as Aroclor 1232	VELAP,NC,WVDEP	
PCB as Arcolor 1254 VELAP,NC,WVDEP SW8082A in Solids VELAP,NC PCB as Arcolor 1016 VELAP,NC PCB as Arcolor 1221 VELAP,NC PCB as Arcolor 1232 VELAP,NC PCB as Arcolor 1242 VELAP,NC PCB as Arcolor 1248 VELAP,NC PCB as Arcolor 1254 VELAP,NC PCB as Arcolor 1260 NC,VELAP,WDEP 1,1,1-Tichloroethane NC,VELAP,WDEP 1,1,2-Tetrachloroethane NC,VELAP,WDEP 1,1-Dichloroethane NC,VELAP,WDEP 1,1-Dichloroethane NC,VELAP,WDEP 1,2-3-Tichloroethane NC,VELAP,WDEP 1,2-Dichloroethan	PCB as Aroclor 1242	VELAP,NC,WVDEP	
PCB as Arcolor 1260 VELAP,NC,WVDEP SW8082A in Solids VELAP,NC PCB as Arcolor 1016 VELAP,NC PCB as Arcolor 1221 VELAP,NC PCB as Arcolor 1232 VELAP,NC PCB as Arcolor 1242 VELAP,NC PCB as Arcolor 1248 VELAP,NC PCB as Arcolor 1254 VELAP,NC PCB as Arcolor 1260 VELAP,NC SW8260B in Non-Potable Water VELAP,WVDEP 1,1,1,2-Tetrachloroethane NC,VELAP,WVDEP 1,1,2-Ertachloroethane NC,VELAP,WVDEP 1,1,2-Ertachloroethane NC,VELAP,WVDEP 1,1-Dichloroethylene NC,VELAP,WVDEP 1,1-Dichloroethylene NC,VELAP,WVDEP 1,1-Dichloroptropene NC,VELAP,WVDEP 1,2,3-Trichlorobenzene NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dichromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dichloroethane NC,VELAP,WVDEP 1,2-Dichloroethane NC,VELAP,WVDEP 1,2-Dichloroethane NC,VELAP,WVDEP 1,2-Dichloroethane NC,VELAP,WVDEP 1,2-Dichlo	PCB as Aroclor 1248	VELAP,NC,WVDEP	
SW8082A in Solids PCB as Arcolor 1016 VELAP,NC PCB as Arcolor 1221 VELAP,NC PCB as Arcolor 1232 VELAP,NC PCB as Arcolor 1242 VELAP,NC PCB as Arcolor 1248 VELAP,NC PCB as Arcolor 1260 VELAP,NC PCB as Arcolor 1260 VELAP,NC SW8260B in Mon-Potable Water 1,1,1,2-Tetrachloroethane NC,VELAP,WVDEP 1,1,1-Tichloroethane NC,VELAP,WVDEP 1,1,2-Tichloroethane NC,VELAP,WVDEP 1,1-Dichloroethane NC,VELAP,WVDEP 1,1-Dichloroethane NC,VELAP,WVDEP 1,1-Dichloroethylne NC,VELAP,WVDEP 1,1-Dichloroethylne NC,VELAP,WVDEP 1,2-3-Tirichlorobenzene NC,VELAP,WVDEP 1,2-3-Tirichloropropane NC,VELAP,WVDEP 1,2-4-Tirinethylbenzene NC,VELAP,WVDEP 1,2-4-Tirinethylbenzene NC,VELAP,WVDEP 1,2-Dichloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP	PCB as Aroclor 1254	VELAP,NC,WVDEP	
PCB as Aroclor 1016 VELAP.NC PCB as Aroclor 1221 VELAP.NC PCB as Aroclor 1232 VELAP.NC PCB as Aroclor 1242 VELAP.NC PCB as Aroclor 1248 VELAP.NC PCB as Aroclor 1254 VELAP.NC PCB as Aroclor 1260 VELAP.NC SW8260B in Non-Potable Water 1.1,1.2-Tetrachloroethane NC,VELAP,WVDEP 1.1,1.2-Tirchloroethane NC,VELAP,WVDEP 1.1,2-Tirchloroethane NC,VELAP,WVDEP 1.1,2-Tirchloroethane NC,VELAP,WVDEP 1.1-Dichloroethane NC,VELAP,WVDEP 1.1-Dichloroethylene NC,VELAP,WVDEP 1.1-Dichloroethylene NC,VELAP,WVDEP 1.2,3-Tirchlorobenzene NC,VELAP,WVDEP 1.2,3-Tirchlorobenzene NC,VELAP,WVDEP 1.2,4-Trimethylbenzene NC,VELAP,WVDEP 1.2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1.2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1.2-Dichlorobenzene NC,VELAP,WVDEP 1.2-Dichlorobenzene NC,VELAP,WVDEP 1.3-Dichlorobenzene NC,VELAP,WVDEP <t< td=""><td>PCB as Aroclor 1260</td><td>VELAP,NC,WVDEP</td><td></td></t<>	PCB as Aroclor 1260	VELAP,NC,WVDEP	
PCB as Aroclor 1221 VELAP,NC PCB as Aroclor 1232 VELAP,NC PCB as Aroclor 1248 VELAP,NC PCB as Aroclor 1248 VELAP,NC PCB as Aroclor 1254 VELAP,NC PCB as Aroclor 1260 VELAP,NC SWB260B in Non-Potable Water VELAP,WOEP 1.1,1,2-Tetrachloroethane NC,VELAP,WVDEP 1.1,2-Trichloroethane NC,VELAP,WVDEP 1.1,2-Trichloroethane NC,VELAP,WVDEP 1.1,1-Dichloroethane NC,VELAP,WVDEP 1.1-Dichloroethane NC,VELAP,WVDEP 1.1-Dichloroethylene NC,VELAP,WVDEP 1.1-Dichloroethylene NC,VELAP,WVDEP 1.2,3-Trichlorobenzene NC,VELAP,WVDEP 1.2,3-Trichlorobenzene NC,VELAP,WVDEP 1.2,4-Trimethylbenzene NC,VELAP,WVDEP 1.2-Trimethylbenzene NC,VELAP,WVDEP 1.2-Dichloropropane (DBCP) NC,VELAP,WVDEP 1.2-Dichloroethane NC,VELAP,WVDEP 1.2-Dichloroethane NC,VELAP,WVDEP 1.2-Dichloropopane NC,VELAP,WVDEP 1.3-Dichlorobenzene NC,VELAP,WVDEP 1.3-	SW8082A in Solids		
PCB as Aroclor 1242 VELAP.NC PCB as Aroclor 1248 VELAP.NC PCB as Aroclor 1254 VELAP.NC PCB as Aroclor 1260 VELAP.NC SW8260B in Non-Potable Water 1.1,1.2-Tetrachloroethane NC,VELAP,WVDEP 1.1,1.7-Tichloroethane NC,VELAP,WVDEP 1.1,2-Trichloroethane NC,VELAP,WVDEP 1.1,1-Dichloroethane NC,VELAP,WVDEP 1.1-Dichloroethane NC,VELAP,WVDEP 1.1-Dichloroptopane NC,VELAP,WVDEP 1.1-Dichloroptopane NC,VELAP,WVDEP 1.1-Dichloroptopane NC,VELAP,WVDEP 1.2,3-Trichlorobenzene NC,VELAP,WVDEP 1.2,4-Trichloroptopane NC,VELAP,WVDEP 1.2,4-Trichloroptopane NC,VELAP,WVDEP 1.2-Dichloroptopane (DBCP) NC,VELAP,WVDEP 1.2-Dichloroptopane (DBCP) NC,VELAP,WVDEP 1.2-Dichloroptopane NC,VELAP,WVDEP 1.2-Dichloroptopane NC,VELAP,WVDEP 1.3-Dichloroptopane NC,VELAP,WVDEP 1.3-Dichloroptopane NC,VELAP,WVDEP 1.3-Dichloroptopane NC,VELAP,WVDEP	PCB as Aroclor 1016	VELAP,NC	
PCB as Aroclor 1242 VELAP.NC PCB as Aroclor 1254 VELAP.NC PCB as Aroclor 1254 VELAP.NC PCB as Aroclor 1260 VELAP.NC SW8260B in Non-Potable Water 1.1,1.2-Tetrachloroethane NC, VELAP,WVDEP 1,1.1-Trichloroethane NC, VELAP,WVDEP 1,1.2-Tetrachloroethane NC, VELAP,WVDEP 1,1.2-Trichloroethane NC, VELAP,WVDEP 1,1-Dichloroethane NC, VELAP,WVDEP 1,1-Dichloroethylene NC, VELAP,WVDEP 1,1-Dichloropropene NC, VELAP,WVDEP 1,2-3-Trichlorobenzene NC, VELAP,WVDEP 1,2,3-Trichloropropane NC, VELAP,WVDEP 1,2,4-Trimethylbenzene NC, VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC, VELAP,WVDEP 1,2-Dichlorobenzene NC, VELAP,WVDEP 1,2-Dichlorobenzene NC, VELAP,WVDEP 1,2-Dichloropropane NC, VELAP,WVDEP 1,3-5-Trimethylbenzene NC, VELAP,WVDEP 1,3-Dichlorobenzene NC, VELAP,WVDEP 1,3-Dichlorobenzene NC, VELAP,WVDEP 1,3-Dichlorobenzene NC, VELAP,WVDEP </td <td>PCB as Aroclor 1221</td> <td>VELAP,NC</td> <td></td>	PCB as Aroclor 1221	VELAP,NC	
PCB as Aroclor 1248 VELAP,NC PCB as Aroclor 1260 VELAP,NC SW8260B in Non-Potable Water 1,1,1,2-Tetrachloroethane NC,VELAP,WVDEP 1,1,1,2-Tichtoroethane NC,VELAP,WVDEP 1,1,2,2-Tetrachloroethane NC,VELAP,WVDEP 1,1,2-Trichloroethane NC,VELAP,WVDEP 1,1-Dichloroethane NC,VELAP,WVDEP 1,1-Dichloroethylene NC,VELAP,WVDEP 1,1-Dichloropropene NC,VELAP,WVDEP 1,2,3-Trichloropenzene NC,VELAP,WVDEP 1,2,3-Trichloropenzene NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,3-5-Trimethylbenzene NC,VELAP,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP </td <td>PCB as Aroclor 1232</td> <td>VELAP,NC</td> <td></td>	PCB as Aroclor 1232	VELAP,NC	
PCB as Aroclor 1254 VELAP,NC PCB as Aroclor 1260 VELAP,NC SW8260B in Non-Potable Water 1.1.1,2-Tertachloroethane NC,VELAP,WVDEP 1.1,1-Trichloroethane NC,VELAP,WVDEP 1.1,2-Trichloroethane NC,VELAP,WVDEP 1,1-Dichloroethane NC,VELAP,WVDEP 1,1-Dichloroethylene NC,VELAP,WVDEP 1,1-Dichloroptopene NC,VELAP,WVDEP 1,1-Dichloroptopene NC,VELAP,WVDEP 1,2-3-Trichlorobenzene NC,VELAP,WVDEP 1,2,3-Trichloroptopane NC,VELAP,WVDEP 1,2,4-Trindethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromoethane (EDB) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropenae NC,VELAP,WVDEP 1,3-5-Trimethylbenzene NC,VELAP,WVDEP 1,3-Dichloropenae NC,VELAP,WVDEP 1,3-Dichloropenae NC,VELAP,WVDEP 1,3-Dichloropenae NC,VELAP,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP	PCB as Aroclor 1242	VELAP,NC	
PCB as Aroclor 1260 SW8260B in Non-Potable Water 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane NC,VELAP,WVDEP 1,1,1-Trichloroethane NC,VELAP,WVDEP 1,1,2-Tetrachloroethane NC,VELAP,WVDEP 1,1,2-Tichloroethane NC,VELAP,WVDEP 1,1-Dichloroethane NC,VELAP,WVDEP 1,1-Dichloroethane NC,VELAP,WVDEP 1,1-Dichloroethylene NC,VELAP,WVDEP 1,1-Dichloropropene NC,VELAP,WVDEP 1,2,3-Trichloroptopane NC,VELAP,WVDEP 1,2,3-Trichloroptopane NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromo-dhane (EDB) NC,VELAP,WVDEP 1,2-Dichloroethane NC,VELAP,WVDEP 1,2-Dichloroethane NC,VELAP,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP	PCB as Aroclor 1248	VELAP,NC	
1,1,1,2-Tetrachloroethane 1,1,1,2-Tetrachloroethane 1,1,1,2-Tetrachloroethane 1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethylene 1,1-Dichloroethylene 1,1-Dichloropropene 1,2-Ja-Trichlorobenzene 1,2,3-Trichlorobenzene 1,2,3-Trichloropropane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,2,4-Trimethylbenzene 1,2,4-Trimethylbenzene 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromo-dethane (EDB) 1,2-Dichlorobenzene 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropenzene 1,3-Dichlorobenzene 1,3-Dichloropenzene 1,3-Dichloropenzene 1,3-Dichloropenzene 1,3-Dichloropenzene 1,3-Dichloropenzene 1,3-Dichloropenzene 1,3-Dichloropenzene 1,3-Dichloropenzene 1,3-Dichloropenzene 1,4-Dichloropenzene 1,5-Dichloropenzene 1,5-Dichloropenzene 1,5-Dichloropenzene 1,5-Dichloropenzene 1,5-Dichloropenzene 1,6-Dichloropenzene 1,6-Dichloropenzene 1,6-Dichloropenzene 1,6-Dichloropenzene 1,6-Dichloropenzene 1,6-Dichloropenzene 1,6-Dichloropenzene 1,6-Dichloropenzene 1,6-Dichloropenzene 1,7-Dichloropenzene 1,7-Dichloropenzene 1,8-Dichloropenzene 1,8-Dichlor	PCB as Aroclor 1254	VELAP,NC	
1,1,1,2-Tetrachloroethane NC,VELAP,WVDEP 1,1,1-Trichloroethane NC,VELAP,WVDEP 1,1,2-Tetrachloroethane NC,VELAP,WVDEP 1,1,2-Trichloroethane NC,VELAP,WVDEP 1,1-Dichloroethylene NC,VELAP,WVDEP 1,1-Dichloroethylene NC,VELAP,WVDEP 1,1-Dichloropropene NC,VELAP,WVDEP 1,2,3-Trichlorobenzene NC,VELAP,WVDEP 1,2,3-Trichloropropane NC,VELAP,WVDEP 1,2,4-Trinethylbenzene NC,VELAP,WVDEP 1,2,4-Trinethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromoethane (EDB) NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,	PCB as Aroclor 1260	VELAP,NC	
1,1,1-Trichloroethane NC,VELAP,WVDEP 1,1,2-Trichloroethane NC,VELAP,WVDEP 1,1,2-Trichloroethane NC,VELAP,WVDEP 1,1-Dichloroethane NC,VELAP,WVDEP 1,1-Dichloroethylene NC,VELAP,WVDEP 1,1-Dichloropropene NC,VELAP,WVDEP 1,2,3-Trichlorobenzene NC,VELAP,WVDEP 1,2,3-Trichloropropane NC,VELAP,WVDEP 1,2,4-Trichlorobenzene NC,VELAP,WVDEP 1,2,4-Trinchlorobenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromoethane (EDB) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP	SW8260B in Non-Potable Water		
1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethylene 1,1-Dichloropropene 1,1-Dichloropropene 1,2,3-Trichloropene 1,2,3-Trichloropene 1,2,3-Trichloropene 1,2,4-Trichloropene 1,2,4-Trichloropene 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) 1,2-Dibromoethane (EDB) 1,2-Dichloropenane 1,3-Dichloropenane 1,3-Di	1,1,1,2-Tetrachloroethane	NC,VELAP,WVDEP	
1,1,2-Trichloroethane NC,VELAP,WVDEP 1,1-Dichloroethylene NC,VELAP,WVDEP 1,1-Dichloropropene NC,VELAP,WVDEP 1,1-Dichloropropene NC,VELAP,WVDEP 1,2,3-Trichloropenzene NC,VELAP,WVDEP 1,2,3-Trichloropenzene NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2-A-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3,5-Trimethylbenzene NC,WDEP 1,3-Dichlorobenzene NC,WDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP	1,1,1-Trichloroethane	NC,VELAP,WVDEP	
1,1-Dichloroethane NC,VELAP,WVDEP 1,1-Dichloropropene NC,VELAP,WVDEP NC,VELAP,WVDEP 1,2,3-Trichlorobenzene NC,VELAP,WVDEP 1,2,3-Trichlorobenzene NC,VELAP,WVDEP 1,2,4-Trichlorobenzene NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromoethane (EDB) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-5-Trimethylbenzene NC,WDEP 1,3-5-Trimethylbenzene NC,WVDEP 1,3-Dichlorobenzene NC,VELAP,WVDEP	1,1,2,2-Tetrachloroethane	NC,VELAP,WVDEP	
1,1-Dichloroethylene 1,1-Dichloropropene 1,2,3-Trichlorobenzene 1,2,3-Trichloropropane 1,2,4-Trichloropropane 1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene 1,2,4-Trimethylbenzene 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,4-Dichloropropane 1,4-Dich	1,1,2-Trichloroethane	NC,VELAP,WVDEP	
1,1-Dichloropropene NC,VELAP,WVDEP 1,2,3-Trichlorobenzene NC,VELAP,WVDEP 1,2,3-Trichloropropane NC,VELAP,WVDEP 1,2,4-Trichlorobenzene NC,VELAP,WVDEP 1,2,4-Trimethylbenzene NC,VELAP,WVDEP 1,2-Dibromo-3-chloropropane (DBCP) NC,VELAP,WVDEP 1,2-Dibromoethane (EDB) NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichlorobenzene NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,2-Dichloropropane NC,VELAP,WVDEP 1,3-Trimethylbenzene NC,WVDEP 1,3-Dichlorobenzene NC,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,3-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP 1,4-Dichloropropane NC,VELAP,WVDEP	1,1-Dichloroethane	NC,VELAP,WVDEP	
1,2,3-Trichlorobenzene 1,2,3-Trichloropropane 1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene 1,2,4-Trimethylbenzene 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) 1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloropenane 1,2-Dichloropenane 1,2-Dichloropenane 1,2-Dichloropenane 1,2-Dichloropenane 1,3-Trimethylbenzene 1,3-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropenane 1,3-Dichloropenane 1,3-Dichloropenane 1,3-Dichloropenane 1,3-Dichloropenane 1,3-Dichloropenane 1,3-Dichloropenane 1,3-Dichloropenane 1,4-Dichloropenane 1,4-Dichloropenane 1,5-Dichloropenane 1,5-Dichloropenan	1,1-Dichloroethylene	NC,VELAP,WVDEP	
1,2,3-TrichloropropaneNC,VELAP,WVDEP1,2,4-TrichlorobenzeneNC,VELAP,WVDEP1,2,4-TrimethylbenzeneNC,VELAP,WVDEP1,2-Dibromo-3-chloropropane (DBCP)NC,VELAP,WVDEP1,2-Dibromoethane (EDB)NC,VELAP,WVDEP1,2-DichlorobenzeneNC,VELAP,WVDEP1,2-DichloroethaneNC,VELAP,WVDEP1,2-DichloropropaneNC,VELAP,WVDEP1,3-5-TrimethylbenzeneNC,WVDEP1,3-DichlorobenzeneNC,VELAP,WVDEP1,3-DichloropropaneNC,VELAP,WVDEP1,4-DichlorobenzeneNC,VELAP,WVDEP1,4-DichlorobenzeneNC,VELAP,WVDEP2,2-DichloropropaneNC,VELAP,WVDEP	1,1-Dichloropropene	NC,VELAP,WVDEP	
1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene 1,2,4-Trimethylbenzene 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) 1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Trimethylbenzene 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,4-Dichloropropane 1,4-Dichloropropane 1,5-Dichloropropane 1,6-Dichloropropane 1,7-Dichloropropane 1,7-Dichlorop	1,2,3-Trichlorobenzene	NC,VELAP,WVDEP	
1,2,4-Trimethylbenzene 1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromo-s-chloropropane (DBCP) 1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,4-Dichlorobenzene 1,4-Dichloropropane 1,5-Dichloropropane 1,6-Dichloropropane 1,7-Dichloropropane 1,7-Dichl	1,2,3-Trichloropropane	NC,VELAP,WVDEP	
1,2-Dibromo-3-chloropropane (DBCP) 1,2-Dibromoethane (EDB) 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,3-Dichloropropane 1,4-Dichloropropane 1,4-Dichloropropane 1,5-Dichloropropane 1,4-Dichloropropane 1,5-Dichloropropane 1,6-Dichloropropane 1,7-Dichloropropane 1,7-Dichlor	1,2,4-Trichlorobenzene	NC,VELAP,WVDEP	
1,2-Dibromoethane (EDB)NC,VELAP,WVDEP1,2-DichlorobenzeneNC,VELAP,WVDEP1,2-DichloroethaneNC,VELAP,WVDEP1,2-DichloropropaneNC,VELAP,WVDEP1,3,5-TrimethylbenzeneNC,WVDEP1,3-DichlorobenzeneNC,VELAP,WVDEP1,3-DichloropropaneNC,VELAP,WVDEP1,4-DichlorobenzeneNC,VELAP,WVDEP2,2-DichloropropaneNC,VELAP,WVDEP2,2-DichloropropaneNC,VELAP,WVDEP	1,2,4-Trimethylbenzene	NC,VELAP,WVDEP	
1,2-DichlorobenzeneNC,VELAP,WVDEP1,2-DichloroethaneNC,VELAP,WVDEP1,2-DichloropropaneNC,VELAP,WVDEP1,3,5-TrimethylbenzeneNC,WDEP1,3-DichlorobenzeneNC,VELAP,WVDEP1,3-DichloropropaneNC,VELAP,WVDEP1,4-DichlorobenzeneNC,VELAP,WVDEP2,2-DichloropropaneNC,VELAP,WVDEP	1,2-Dibromo-3-chloropropane (DBCP)	NC,VELAP,WVDEP	
1,2-DichloroethaneNC,VELAP,WVDEP1,2-DichloropropaneNC,VELAP,WVDEP1,3,5-TrimethylbenzeneNC,WDEP1,3-DichlorobenzeneNC,VELAP,WVDEP1,3-DichloropropaneNC,VELAP,WVDEP1,4-DichlorobenzeneNC,VELAP,WVDEP2,2-DichloropropaneNC,VELAP,WVDEP	1,2-Dibromoethane (EDB)	NC,VELAP,WVDEP	
1,2-DichloropropaneNC,VELAP,WVDEP1,3,5-TrimethylbenzeneNC,WVDEP1,3-DichlorobenzeneNC,VELAP,WVDEP1,3-DichloropropaneNC,VELAP,WVDEP1,4-DichlorobenzeneNC,VELAP,WVDEP2,2-DichloropropaneNC,VELAP,WVDEP	1,2-Dichlorobenzene	NC,VELAP,WVDEP	
1,3,5-Trimethylbenzene 1,3-Dichlorobenzene 1,3-Dichloropropane 1,3-Dichloropropane NC,VELAP,WVDEP NC,VELAP,WVDEP 1,4-Dichlorobenzene NC,VELAP,WVDEP NC,VELAP,WVDEP	1,2-Dichloroethane	NC,VELAP,WVDEP	
1,3-DichlorobenzeneNC,VELAP,WVDEP1,3-DichloropropaneNC,VELAP,WVDEP1,4-DichlorobenzeneNC,VELAP,WVDEP2,2-DichloropropaneNC,VELAP,WVDEP	1,2-Dichloropropane	NC,VELAP,WVDEP	
1,3-DichloropropaneNC,VELAP,WVDEP1,4-DichlorobenzeneNC,VELAP,WVDEP2,2-DichloropropaneNC,VELAP,WVDEP	1,3,5-Trimethylbenzene	NC,WVDEP	
1,4-Dichlorobenzene NC,VELAP,WVDEP 2,2-Dichloropropane NC,VELAP,WVDEP	1,3-Dichlorobenzene	NC,VELAP,WVDEP	
2,2-Dichloropropane NC,VELAP,WVDEP	1,3-Dichloropropane	NC,VELAP,WVDEP	
	1,4-Dichlorobenzene	NC,VELAP,WVDEP	
2-Butanone (MEK) NC,VELAP,WVDEP	2,2-Dichloropropane	NC,VELAP,WVDEP	
	2-Butanone (MEK)	NC,VELAP,WVDEP	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Analyte	Certifications	
2-Chlorotoluene	NC,VELAP,WVDEP	
2-Hexanone (MBK)	NC,VELAP,WVDEP	
4-Chlorotoluene	NC,VELAP,WVDEP	
4-Isopropyltoluene	NC,VELAP,WVDEP	
4-Methyl-2-pentanone (MIBK)	NC,VELAP,WVDEP	
Acetone	NC,VELAP,WVDEP	
Benzene	NC,VELAP,WVDEP	
Bromobenzene	NC,VELAP,WVDEP	
Bromochloromethane	NC,VELAP,WVDEP	
Bromodichloromethane	NC,VELAP,WVDEP	
Bromoform	NC,VELAP,WVDEP	
Bromomethane	NC,VELAP,WVDEP	
Carbon disulfide	NC,VELAP,WVDEP	
Carbon tetrachloride	NC,VELAP,WVDEP	
Chlorobenzene	NC,VELAP,WVDEP	
Chloroethane	NC,VELAP,WVDEP	
Chloroform	NC,VELAP,WVDEP	
Chloromethane	NC,VELAP,WVDEP	
cis-1,2-Dichloroethylene	NC,VELAP,WVDEP	
cis-1,3-Dichloropropene	NC,VELAP,WVDEP	
Dibromochloromethane	NC,VELAP,WVDEP	
Dibromomethane	NC,VELAP,WVDEP	
Dichlorodifluoromethane	NC,VELAP,WVDEP	
Di-isopropyl ether (DIPE)	NC,VELAP,WVDEP	
Ethylbenzene	NC,VELAP,WVDEP	
Hexachlorobutadiene	NC,VELAP,WVDEP	
lodomethane	NC,VELAP,WVDEP	
Isopropylbenzene	NC,VELAP,WVDEP	
m+p-Xylenes	NC,VELAP,WVDEP	
Methylene chloride	NC,VELAP,WVDEP	
Methyl-t-butyl ether (MTBE)	NC,VELAP,WVDEP	
Naphthalene	NC,VELAP,WVDEP	
n-Butylbenzene	NC,VELAP,WVDEP	
n-Propylbenzene	NC,VELAP,WVDEP	
o-Xylene	NC,VELAP,WVDEP	
sec-Butylbenzene	NC,VELAP,WVDEP	
Styrene	NC,VELAP,WVDEP	
tert-Butylbenzene	NC,VELAP,WVDEP	



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Analyte	Certifications	
Tetrachloroethylene (PCE)	NC,VELAP,WVDEP	
Toluene	NC,VELAP,WVDEP	
trans-1,2-Dichloroethylene	NC,VELAP,WVDEP	
trans-1,3-Dichloropropene	NC,VELAP,WVDEP	
Trichloroethylene	NC,VELAP,WVDEP	
Trichlorofluoromethane	NC,VELAP,WVDEP	
Vinyl acetate	NC,VELAP,WVDEP	
Vinyl chloride	NC,VELAP,WVDEP	
Xylenes, Total	NC,VELAP,WVDEP	
SW8260B in Solids		
1,1,1,2-Tetrachloroethane	NC,VELAP,WVDEP	
1,1,1-Trichloroethane	NC,VELAP,WVDEP	
1,1,2,2-Tetrachloroethane	NC,VELAP,WVDEP	
1,1,2-Trichloroethane	NC,VELAP,WVDEP	
1,1-Dichloroethane	NC,VELAP,WVDEP	
1,1-Dichloroethylene	NC,VELAP,WVDEP	
1,1-Dichloropropene	NC,VELAP,WVDEP	
1,2,3-Trichlorobenzene	NC,VELAP,WVDEP	
1,2,3-Trichloropropane	NC,VELAP,WVDEP	
1,2,4-Trichlorobenzene	NC,VELAP,WVDEP	
1,2,4-Trimethylbenzene	NC,VELAP,WVDEP	
1,2-Dibromo-3-chloropropane (DBCP)	NC,VELAP,WVDEP	
1,2-Dibromoethane (EDB)	NC,VELAP,WVDEP	
1,2-Dichlorobenzene	NC,VELAP,WVDEP	
1,2-Dichloroethane	NC,VELAP,WVDEP	
1,2-Dichloropropane	NC,VELAP,WVDEP	
1,3,5-Trimethylbenzene	NC,VELAP,WVDEP	
1,3-Dichlorobenzene	NC,VELAP,WVDEP	
1,3-Dichloropropane	NC,VELAP,WVDEP	
1,4-Dichlorobenzene	NC,VELAP,WVDEP	
2,2-Dichloropropane	NC,VELAP,WVDEP	
2-Butanone (MEK)	NC,VELAP,WVDEP	
2-Chlorotoluene	NC,VELAP,WVDEP	
2-Hexanone (MBK)	NC,VELAP,WVDEP	
4-Chlorotoluene	NC,VELAP,WVDEP	
4-Isopropyltoluene	NC,VELAP,WVDEP	
4-Methyl-2-pentanone (MIBK)	NC,VELAP,WVDEP	



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Acetone	NC,VELAP,WVDEP	
Benzene	NC,VELAP,WVDEP	
Bromobenzene	NC,VELAP,WVDEP	
Bromochloromethane	NC,VELAP,WVDEP	
Bromodichloromethane	NC,VELAP,WVDEP	
Bromoform	NC,VELAP,WVDEP	
Bromomethane	NC,VELAP,WVDEP	
Carbon disulfide	NC,VELAP,WVDEP	
Carbon tetrachloride	NC,VELAP,WVDEP	
Chlorobenzene	NC,VELAP,WVDEP	
Chloroethane	NC,VELAP,WVDEP	
Chloroform	NC,VELAP,WVDEP	
Chloromethane	NC,VELAP,WVDEP	
cis-1,2-Dichloroethylene	NC,VELAP,WVDEP	
cis-1,3-Dichloropropene	NC,VELAP,WVDEP	
Dibromochloromethane	NC,VELAP,WVDEP	
Dibromomethane	NC,VELAP,WVDEP	
Dichlorodifluoromethane	NC,VELAP,WVDEP	
Di-isopropyl ether (DIPE)	NC,VELAP,WVDEP	
Ethylbenzene	NC,VELAP,WVDEP	
Hexachlorobutadiene	NC,VELAP,WVDEP	
lodomethane	NC,VELAP,WVDEP	
Isopropylbenzene	NC,VELAP,WVDEP	
m+p-Xylenes	NC,VELAP,WVDEP	
Methylene chloride	NC,VELAP,WVDEP	
Methyl-t-butyl ether (MTBE)	NC,VELAP,WVDEP	
Naphthalene	NC,VELAP,WVDEP	
n-Butylbenzene	NC,VELAP,WVDEP	
n-Propylbenzene	NC,VELAP,WVDEP	
o-Xylene	NC,VELAP,WVDEP	
sec-Butylbenzene	NC,VELAP,WVDEP	
Styrene	NC,VELAP,WVDEP	
tert-Butylbenzene	NC,VELAP,WVDEP	
Tetrachloroethylene (PCE)	NC,VELAP,WVDEP	
Toluene	NC,VELAP,WVDEP	
trans-1,2-Dichloroethylene	NC,VELAP,WVDEP	
trans-1,3-Dichloropropene	NC,VELAP,WVDEP	
Trichloroethylene	NC,VELAP,WVDEP	



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Analyte	Certifications
Trichlorofluoromethane	NC,VELAP,WVDEP
Vinyl acetate	NC,VELAP,WVDEP
Vinyl chloride	NC,VELAP,WVDEP
Xylenes, Total	NC,VELAP,WVDEP
Dibromofluoromethane	VELAP
SW8270D in Non-Potable Water	
1,2,4,5-Tetrachlorobenzene	VELAP,WVDEP,NC
1,2,4-Trichlorobenzene	VELAP,WVDEP,NC
1,2-Dichlorobenzene	VELAP,WVDEP,NC
1,2-Diphenylhydrazine	VELAP,WVDEP,NC
1,3-Dichlorobenzene	VELAP,WVDEP,NC
1,3-Dinitrobenzene	VELAP,WVDEP,NC
1,4-Dichlorobenzene	VELAP,WVDEP,NC
1-Naphthylamine	VELAP,WVDEP,NC
2,3,4,6-Tetrachlorophenol	VELAP,WVDEP,NC
2,4,5-Trichlorophenol	VELAP,WVDEP,NC
2,4,6-Trichlorophenol	VELAP,WVDEP,NC
2,4-Dichlorophenol	VELAP,WVDEP,NC
2,4-Dimethylphenol	VELAP,WVDEP,NC
2,4-Dinitrophenol	VELAP,WVDEP,NC
2,4-Dinitrotoluene	VELAP,WVDEP,NC
2,6-Dichlorophenol	VELAP,WVDEP,NC
2,6-Dinitrotoluene	VELAP,WVDEP,NC
2-Chloronaphthalene	VELAP,WVDEP,NC
2-Chlorophenol	VELAP,WVDEP,NC
2-Methylnaphthalene	VELAP,WVDEP,NC
2-Naphthylamine	VELAP,WVDEP,NC
2-Nitroaniline	VELAP,WVDEP,NC
2-Nitrophenol	VELAP,WVDEP,NC
3,3'-Dichlorobenzidine	VELAP,WVDEP,NC
3-Methylcholanthrene	VELAP,WVDEP,NC
3-Nitroaniline	VELAP,WVDEP,NC
4,6-Dinitro-2-methylphenol	VELAP,WVDEP,NC
4-Aminobiphenyl	VELAP,WVDEP,NC
4-Bromophenyl phenyl ether	VELAP,WVDEP,NC
4-Chloroaniline	VELAP,WVDEP,NC
4-Chlorophenyl phenyl ether	VELAP,WVDEP,NC



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Client Site I.D.: Fulton Gasworks Purchase Order:

Analyte	Certifications	
4-Nitroaniline	VELAP,WVDEP,NC	
4-Nitrophenol	VELAP,WVDEP,NC	
7,12-Dimethylbenz (a) anthracene	VELAP,WVDEP,NC	
Acenaphthene	VELAP,WVDEP,NC	
Acenaphthylene	VELAP,WVDEP,NC	
Acetophenone	VELAP,WVDEP,NC	
Aniline	VELAP,WVDEP,NC	
Anthracene	VELAP,WVDEP,NC	
Benzidine	VELAP,WVDEP,NC	
Benzo (a) anthracene	VELAP,WVDEP,NC	
Benzo (a) pyrene	VELAP,WVDEP,NC	
Benzo (b) fluoranthene	VELAP,WVDEP,NC	
Benzo (g,h,i) perylene	VELAP,WVDEP,NC	
Benzo (k) fluoranthene	VELAP,WVDEP,NC	
Benzoic acid	VELAP,WVDEP,NC	
Benzyl alcohol	VELAP,WVDEP,NC	
bis (2-Chloroethoxy) methane	VELAP,WVDEP,NC	
bis (2-Chloroethyl) ether	VELAP,WVDEP,NC	
bis (2-Chloroisopropyl) ether	VELAP,WVDEP,NC	
bis (2-Ethylhexyl) phthalate	VELAP,WVDEP,NC	
Butyl benzyl phthalate	VELAP,WVDEP,NC	
Chrysene	VELAP,WVDEP,NC	
Dibenz (a,h) anthracene	VELAP,WVDEP,NC	
Dibenz (a,j) acridine	VELAP,WVDEP,NC	
Dibenzofuran	VELAP,WVDEP,NC	
Diethyl phthalate	VELAP,WVDEP,NC	
Dimethyl phthalate	VELAP,WVDEP,NC	
Di-n-butyl phthalate	VELAP,WVDEP,NC	
Di-n-octyl phthalate	VELAP,WVDEP,NC	
Diphenylamine	VELAP,WVDEP,NC	
Ethyl methanesulfonate	VELAP,WVDEP,NC	
Fluoranthene	VELAP,WVDEP,NC	
Fluorene	VELAP,WVDEP,NC	
Hexachlorobenzene	VELAP,WVDEP,NC	
Hexachlorobutadiene	VELAP,WVDEP,NC	
Hexachlorocyclopentadiene	VELAP,WVDEP,NC	
Hexachloroethane	VELAP,WVDEP,NC	
Indeno (1,2,3-cd) pyrene	VELAP,WVDEP,NC	



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Client Site I.D.: Fulton Gasworks Purchase Order:

Analyte	Certifications
Isophorone	VELAP,WVDEP,NC
m+p-Cresols	VELAP,WVDEP,NC
Methyl methanesulfonate	VELAP,WVDEP,NC
Naphthalene	VELAP,WVDEP,NC
Nitrobenzene	VELAP,WVDEP,NC
n-Nitrosodimethylamine	VELAP,WVDEP,NC
n-Nitrosodi-n-butylamine	VELAP,WVDEP,NC
n-Nitrosodi-n-propylamine	VELAP,WVDEP,NC
n-Nitrosodiphenylamine	VELAP,WVDEP,NC
n-Nitrosopiperidine	VELAP,WVDEP,NC
o+m+p-Cresols	WVDEP,NC
o-Cresol	VELAP,WVDEP,NC
p-(Dimethylamino) azobenzene	VELAP,WVDEP,NC
p-Chloro-m-cresol	VELAP,WVDEP,NC
Pentachloronitrobenzene (quintozene)	VELAP,WVDEP,NC
Pentachlorophenol	VELAP,WVDEP,NC
Phenacetin	VELAP,WVDEP,NC
Phenanthrene	VELAP,WVDEP,NC
Phenol	VELAP,WVDEP,NC
Pronamide	VELAP,WVDEP,NC
Pyrene	VELAP,WVDEP,NC
Pyridine	VELAP,WVDEP,NC
SW8270D in Solids	
1,2,4,5-Tetrachlorobenzene	NC,VELAP,WVDEP
1,2,4-Trichlorobenzene	NC,VELAP,WVDEP
1,2-Dichlorobenzene	NC,VELAP,WVDEP
1,2-Diphenylhydrazine	NC,VELAP,WVDEP
1,3-Dichlorobenzene	NC,VELAP,WVDEP
1,4-Dichlorobenzene	NC,VELAP,WVDEP
1-Chloronaphthalene	NC,VELAP,WVDEP
1-Naphthylamine	NC,VELAP,WVDEP
2,3,4,6-Tetrachlorophenol	NC,VELAP,WVDEP
2,4,5-Trichlorophenol	NC,VELAP,WVDEP
2,4,6-Trichlorophenol	NC,VELAP,WVDEP
2,4-Dichlorophenol	NC,VELAP,WVDEP
2,4-Dimethylphenol	NC,VELAP,WVDEP
2,4-Dinitrophenol	NC,VELAP,WVDEP



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Analyte	Certifications
2,4-Dinitrotoluene	NC,VELAP,WVDEP
2,6-Dichlorophenol	NC,VELAP,WVDEP
2,6-Dinitrotoluene	NC,VELAP,WVDEP
2-Chloronaphthalene	NC,VELAP,WVDEP
2-Chlorophenol	NC,VELAP,WVDEP
2-Methylnaphthalene	NC,VELAP,WVDEP
2-Naphthylamine	NC,VELAP,WVDEP
2-Nitroaniline	NC,VELAP,WVDEP
2-Nitrophenol	NC,VELAP,WVDEP
3-Methylcholanthrene	NC,VELAP,WVDEP
3-Nitroaniline	NC,VELAP,WVDEP
4,6-Dinitro-2-methylphenol	NC,VELAP,WVDEP
4-Aminobiphenyl	NC,VELAP,WVDEP
4-Bromophenyl phenyl ether	NC,VELAP,WVDEP
4-Chloroaniline	NC,VELAP,WVDEP
4-Chlorophenyl phenyl ether	NC,VELAP,WVDEP
4-Nitroaniline	NC,VELAP,WVDEP
4-Nitrophenol	NC,VELAP,WVDEP
7,12-Dimethylbenz (a) anthracene	NC,VELAP,WVDEP
Acenaphthene	NC,VELAP,WVDEP
Acenaphthylene	NC,VELAP,WVDEP
Acetophenone	NC,VELAP,WVDEP
Aniline	NC,VELAP,WVDEP
Anthracene	NC,VELAP,WVDEP
Benzidine	NC,VELAP,WVDEP
Benzo (a) anthracene	NC,VELAP,WVDEP
Benzo (a) pyrene	NC,VELAP,WVDEP
Benzo (b) fluoranthene	NC,VELAP,WVDEP
Benzo (g,h,i) perylene	NC,VELAP,WVDEP
Benzo (k) fluoranthene	NC,VELAP,WVDEP
Benzoic acid	NC,VELAP,WVDEP
Benzyl alcohol	NC,VELAP,WVDEP
bis (2-Chloroethoxy) methane	NC,VELAP,WVDEP
bis (2-Chloroethyl) ether	NC,VELAP,WVDEP
bis (2-Chloroisopropyl) ether	NC,VELAP,WVDEP
bis (2-Ethylhexyl) phthalate	NC,VELAP,WVDEP
Butyl benzyl phthalate	NC,VELAP,WVDEP
Chrysene	NC,VELAP,WVDEP



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Analyte	Certifications	
Dibenz (a,h) anthracene	NC,VELAP,WVDEP	
Dibenz (a,j) acridine	NC,VELAP,WVDEP	
Dibenzofuran	NC,VELAP,WVDEP	
Diethyl phthalate	NC,VELAP,WVDEP	
Dimethyl phthalate	NC,VELAP,WVDEP	
Di-n-butyl phthalate	NC,VELAP,WVDEP	
Di-n-octyl phthalate	NC,VELAP,WVDEP	
Diphenylamine	NC,VELAP,WVDEP	
Ethyl methanesulfonate	NC,VELAP,WVDEP	
Fluoranthene	NC,VELAP,WVDEP	
Fluorene	NC,VELAP,WVDEP	
Hexachlorobenzene	NC,VELAP,WVDEP	
Hexachlorobutadiene	NC,VELAP,WVDEP	
Hexachlorocyclopentadiene	NC,VELAP,WVDEP	
Hexachloroethane	NC,VELAP,WVDEP	
Indeno (1,2,3-cd) pyrene	NC,VELAP,WVDEP	
Isophorone	NC,VELAP,WVDEP	
m+p-Cresols	NC,VELAP,WVDEP	
Methyl methanesulfonate	NC,VELAP,WVDEP	
Naphthalene	NC,VELAP,WVDEP	
Nitrobenzene	NC,VELAP,WVDEP	
n-Nitrosodimethylamine	NC,VELAP,WVDEP	
n-Nitrosodi-n-butylamine	NC,VELAP,WVDEP	
n-Nitrosodi-n-propylamine	NC,VELAP,WVDEP	
n-Nitrosodiphenylamine	NC,VELAP,WVDEP	
n-Nitrosopiperidine	NC,VELAP,WVDEP	
o+m+p-Cresols	NC,VELAP,WVDEP	
o-Cresol	NC,VELAP,WVDEP	
p-(Dimethylamino) azobenzene	NC,VELAP,WVDEP	
p-Chloro-m-cresol	NC,VELAP,WVDEP	
Pentachloronitrobenzene (quintozene)	NC,WVDEP	
Pentachlorophenol	NC,VELAP,WVDEP	
Phenacetin	NC,VELAP,WVDEP	
Phenanthrene	NC,VELAP,WVDEP	
Phenol	NC,VELAP,WVDEP	
Pronamide	NC,VELAP,WVDEP	
Pyrene	NC,VELAP,WVDEP	
Pyridine	NC,VELAP,WVDEP	



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Certified Analyses included in this Report

Analyte Certifications

SW9012 in Non-Potable Water

Cyanide VELAP

SW9012 in Solids

Cyanide VELAP

SW9045D in Solids

pH VELAP,NC

Code	Description	Lab Number	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2016
NC	North Carolina DENR	495	12/31/2016
VELAP	NELAC-Virginia Certificate #8886	460021	06/15/2017



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Summary of Data Qualifiers

C Continuing calibarion verification response for this analyte is outside specifications.

CI Residual Chlorine or other oxidizing agent was detected in the container used to analyze this sample.

DND Not Detected

DS Surrogate concentration reflects a dilution factor.

E Estimated concentration, outside calibration range

LCS recovery is outside of established acceptance limits

M Matrix spike recovery is outside established acceptance limits

M2 Sample was diluted due to matrix interference.

Duplicate analysis does not meet the acceptance criteria for precision

PETID13 The sample does not match petroleum pattern.

S Surrogate recovery was outside acceptance criteria

RPD Relative Percent Difference

Qual Qualifers

-RE Denotes sample was re-analyzed

D.F. Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.

TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library .

A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated

and are calculated using an internal standard response factor of 1.

PCBs, Total Total PCBs are defined as the sum of detected Aroclors 1016, 1221, 1232, 1248, 1254, 1260, 1262, and 1268.



1941 REYMET ROAD RICHMOND, VIRGINIA 23237 (804) 358-8295 PHONE (804)358-8297 FAX Chain of Custody Form #: D1331 Rev. 1.0 Effective: Feb 14, 2014

CHAIN OF CUSTODY

LABORAT	ORIE	, II	NC.				O												FAGE F				
COMPANY NAME: TOMMON	5 (an	nu		IN	VOICE TO	: /n	id (amp	45			PR	PROJECT NAME/Quote #: Fulfon gas Works									
CONTACT: JULIA (A	mo	Yu	-		IN	VOICE CO	NTAC	Γ: η					SIT	ENAN	1E:		-1/6			Market 1			
ADDRESS: 1001 130	nla	ler	SP	Kny St	5301N	VOICE AD	DRESS	S: 1	mo				PR	OJECT	NUMI	BER:	361	56.0	115				
PHONE #: 604 201	150	19			IN	VOICE PH	ONE#	:					P.C). #:					5 11				
FAX #:		- 1		EMAIL:	*11	Alia-cov	mpus	af.	mm	ons	. Co.	n	Pretreatment Program:										
s sample for compliance reporti	ng?	YE	ES (NO	J	Is sample			YES	NO	NO PWS I.D. #:												
SAMPLER NAME (PRINT):	Mid	11	am	DUS	SA	SAMPLER SIGNATURE:											Turn	Around	d Time: St	d Day(s)			
Matrix Codes: WW=Waste Water/Storm Wa	ater G	W=G	round	Water DW=	Drinking	Water S=Soil	/Solids C	R=Orga	nic A=Ai	r WP=	Wipe O	T=Other_							COM	MENTS			
			(S)			HIL						AN	ALYSI	S / (PR	ESER	VATIVE	Ξ)			odes: N=Nitric Acid			
CLIENT SAMPLE I.D.	Grab	Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	SVOCS	nestivites	PPL MYAIS (HNOZ	cyanide/NaOH	VOGS/HCI	, 2, 3, 7, 8-TCDBIM			Acid Z=Zinc Ac Thiosulfate PLEASE NOTE F INTERFERENCE	roxide A=Ascorbic cetate T=Sodium M=Methanol PRESERVATIVE(S), CHECKS or PUMP E(L/min)			
1) MW-22	X					12/1/16	9:47		gw	2	×	X				X							
2) MW-22	X					12/1/16	11:25		OW	1		1	X										
3) MW-22	X					12/1/16	11:50		gw	1				X	,			1					
4) MW-22	X	2.43				17/1/16	10:30		gw	3			. ,		X				19				
5) MW-23	X					141/16	10:10		9W	7	X	X	X	+	X	X			1				
6) MW-24	X					12/1/16	12:50		OW	7	X	X	X	X	X	X							
7) MW-20	X					12/1/16	10:50		gw	2													
8) MW-29	X		\Box			12/1/16	12:00		9W	7	X	X	X	X	X	X			6,1	a			
9) MW-30	X		Н			12/1/16	11:40		giv	7	X	X	X	X	X	X			no	Jan Jahl			
10) RELINQUISHED:	DAT		TIME	RECEIV	D:	1 0		DATE /	TIME	000	Data D	aakaaa	LABI	105.01	11.37		0001	FD TE	1.6c65	°C (\$12.61)			
RELINQUISHED: RELINQUISHED:	2/1/1 DAT	b E/	TIME TIME		Date / Thach 12/16/6:07 Leve							ackage	LAB		G alton (Gaswo	orks	ER TE	16L0048 ne: 12/08/2016				
				1						Leve	IIV			K	eca: 1	2/01/2	010	Duc.	12/00/201				



1941 REYMET ROAD **RICHMOND, VIRGINIA 23237** (804) 358-8295 PHONE (804)358-8297 FAX **Chain of Custody** Form #: D1331 Rev. 1.0

Effective: Feb 14, 2014

LABORAT	ORIE	S, II	NC.				CHAI	N OF	CUS	TOI	ŊΥ								PAGE	_OF	
COMPANY NAME: TIMMON	110	m	vp	41	IN	VOICE TO	TIN	imo	ni	mo	vp		PR	OJECT	Г NAMI	E/Quot	te #: 7	WH	on gas	Worles	
CONTACT: JULIA (AM	nn	1			IN	VOICE CO	NTAC	T: Ju				5	SIT	E NAN	ΛE:		- 7		0	6/4	
ADDRESS: 1001 Boulder	()	OKI	W	He 30	O IN	VOICE AD	DRESS	S:	CAM	. 0	_		PR	OJECT	T NUM	BER:	361	56.6)15		
	INVOICE CONTACT: JULIA (MMM) SITE NAME: SS: 00 Town Jers PKW 12 300 INVOICE ADDRESS: PROJECT NUMBER: 36 5 5 5 5 5 5 5 5 5																				
FAX #:			E	MAIL:	MI	a. cam	puse	a ti	nno	ns.	(0 m	1	Pre	treatm	ent Pro	ogram:		37	V. Layer	10 1	
Is sample for compliance reporti	ng?	YE	ES A	10									NO	>			PWS I	.D. #:	F 44 1		
SAMPLER NAME (PRINT): Jol	hn	R	NSS	ell	SA	MPLER S	IGNAT	URE:	(Tole	W.	<u> </u>				- 17	Turn /	Around	d Time: SHL	Day(s)	
Matrix Codes: WW=Waste Water/Storm Wa	iter G	W=Gi	round \	Water DW=	Drinking	Water S=Soil	/Solids C	R=Orgai	nic A=Ai	WP=	Wipe O	T=Other_							COMM	ENTS	
			als)									AN	ALYSI	S/(PR	ESER	VATIV	E)		Preservative Code	d S=Sulfuric Acid	
			Met						/										 H=Sodium Hydrox Acid Z=Zinc Acet Thiosulfate M 	tate T=Sodium	
			ved	a)	n)	4)	m			S											
0. 15.15.04.15.15.15			ssol	Date	<u>i</u>	Date	Lim		(SS	iner			5			100					
CLIENT SAMPLE I.D.			Ö	art	art	do	do:	eq	ode	onta			to		5	16					
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This San 1	2/1	716	110:0		Jado	The -	1	1./16		Leve	11				G	Com					
RELINQUISHED	DAT	E /	- 0	RECEIVE	ED:	1 Mac	V 12	DATE /		Leve	Ш		Fulton Gasworks								
						•		1		Leve	IV			F	Recd:	12/01/	2016	Due:	: 12/08/2010	5	



Sample Preservation Log

Sample Preservation Log Form #: F1301 Rev # 6.0 Effective: Aug 31, 2016 Page 1 of 1

Date Performed: 12/1/16

Analyst Performing Check:

P/A = Present/Absent

	er 1D	Met	als	Cya	nide		Sulfic	ie	Aı	mmo	nia	ו	rkn		PI	nos, '	Tot	NO	D3+N	O2		DRO)		estic 081/6			SVO:		Pe	ł.I	.ρ.		
Sample ID	Container ID	pH as Received	Final pH (if adjust.)	pH as Receive > 12 Othe	Finel pH	(H adjust.)	Other	Final pH (If adjust.)	Rec	l as eived Other	Final pH (if adjust.)	pH a Receiv		Final pH (if adjust.)	Dan	l as eived Other	Final pH (If adjust.)	Pi Rec	l as eived Other	Final pH (if adjust.)	Rec < 2	H as eived Other	Final pH (if adjust.)	Res. Rece Present	Cl as ived Absent	Res.Cl P/A (If adjust.)	Res Rec Presen	CI as eived Absent	Res.Cl P/A (if adjust.)	PH Rece	as ived Other	Final pH (If adjust.)	pH as Received Othe	- 7 91
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08	B																							/		A	/		A					
08	C			M_{\perp}																														
NaOH ID:					_		HNO	3 ID:						_	1	CrVI	pres	erve	d dat	e/tim	e:	<u> </u>					_	Anal	yst Initi	ials: _				

NaOH ID:	HNO ₃ ID:	CrVI preserved date/time:	Analyst Initials:
H2SO4 ID:	Na2S2O3 ID: <u>6 K00 0 45</u>	Buffer Sol'n ID:	
HCL ID: <u>6F0/670</u>	Na2SO3 ID:	1N NaOH ID: 5	SN NaOH:



HCL ID:_

Sample Preservation Log

Analyst Performing Check: _

Sample Preservation Log Form #: F1301 Rev # 6.0 Effective: Aug 31, 2016 Page 1 of 1

Date Performed:	12/2/16	
		
	00	

P/A = Present/Absent

	e G	Met		Cya	nide		Sulfic	de	A	mmo	nia		TKN		P	hos,	Tot	N	O3+N	102		DRC		(8	estic 1081/6	(80	(8	SVO 3270/6	25)						
Sample ID	Container ID	pH as Received < 2 Othe	inal pH If adjust.)	pH as Receive	inal pH	f adjust.)	pH as eceived Other	inal pH If adjust.)	Pl Rec	H as eived	Final pH (if adjust.)	pH Rece	as rived	inal pH If adjust.)	P Rec	H as ceived Other	inal pH if adjust.)	Rec	H as eived Other	Inal pH if adjust.)	Rec	H as seived	inal pH Hadjust.}	Res. Rec	Clas sived	Res.Cl P/A (if adjust.)	Res Rec	CI as eived	les.Ci VA (if idjust.)	pH Rece	as ived Other	Final pH (If adjust.)	pH a Receiv	ed ther	Final pH (If adjust.)
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NaOH ID:					_		HNC)3 ID:					<u></u> .		1	CrVI	pres	erve	d da	te/tim	e:						_	Anal	yst Init	ials: _					
H2SO4 ID:							NazS	S2O3	ID:_	6 k	(00	04	5		_	Buffe	er So	ľn IC):							_									

1N NaOH ID:

Na₂SO₃ ID:_

5N NaOH: __



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/8/2016 16:26

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gasworks Purchase Order:

Sample Conditions Checklist

Samples Received at:	1.60°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	Yes
Are all volatile organic and TOX containers free of headspace?	Yes
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	Yes
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	No

As per John Russell: MW-26 is to be analyzed for DRO and Pet. ID. BAR 12/2/16 1018. MW-22 Pesticide container was received with only 800 ml. As per John Russell, composite soil samples in the lab. As per Julia Campus, groundwater samples to be analyzed for PCB in addition to Pesticides. MMB 12/2/16 10:36. Trip Blank received and added to WO, date and time (11/22/2016, 14:25) taken from sample label. MMB 12/2/16 15:49.



Certificate of Analysis

Final Report

Laboratory Order ID 16L0239

Client Name: Timmons Group

Date Received: December

December 7, 2016 14:38

1001 Boulders Parkway, Suite 300

Date Issued: December 14, 2016 16:49

Richmond, VA 23225

Project Number: 36156.015

Purchase Order:

Submitted To: Julia Campus

Client Site I.D.: Fulton Gas

Enclosed are the results of analyses for samples received by the laboratory on 12/07/2016 14:38. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

Mandy Mishra

Quality Assurance Manager

m.mish-

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

This report shall not be reproduced except in full without the expressed and written approval of an authorized representative of Air Water & Soil Laboratories, Inc.









Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

ANALYTICAL REPORT FOR SAMPLES Laboratory Order ID 16L0239

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Cumple 15	Editoriatory ID	Matrix	Date Gampied	Bute Necesiveu
MW-26	16L0239-01	Ground Water	12/07/2016 10:35	12/07/2016 14:38
MW-27	16L0239-02	Ground Water	12/07/2016 11:35	12/07/2016 14:38
MW-11	16L0239-03	Ground Water	12/07/2016 12:25	12/07/2016 14:38
Trip Blank	16L0239-04	Ground Water	11/22/2016 14:25	12/07/2016 14:38



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-26 Laboratory Sample ID: 16L0239-01

Date/Time Sampled: 12/07/2016 10:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	ries Method	s							
Silver	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:48	CWO
Beryllium	01RE1	EPA200.7 Rev 4.4	<0.0200 mg/L		0.0200	5	12/08/16 15:40	12/12/16 14:47	CWO
Cadmium	01	EPA200.7 Rev 4.4	0.0050 mg/L		0.0040	1	12/08/16 15:40	12/09/16 14:48	CWO
Chromium	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:48	CWO
Copper	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:48	CWO
Mercury	01	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	12/08/16 13:50	12/09/16 13:55	RCV
Nickel	01	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:48	CWO
Lead	01	EPA200.7 Rev 4.4	0.0119 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:48	CWO
Zinc	01	EPA200.7 Rev 4.4	0.0126 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:48	CWO
Metals (Total) by EPA 6000/7	000 Series N	1ethods							
Arsenic	01	SW7010	0.0060 mg/L		0.0050	1	12/08/16 15:40	12/12/16 16:53	MWL
Antimony	01	SW7010	<0.0050 mg/L		0.0050	1	12/08/16 15:40	12/13/16 17:45	MWL
Selenium	01	SW7010	<0.0030 mg/L		0.0030	1	12/08/16 15:40	12/14/16 12:25	MWL
Thallium	01	SW7010	<0.0020 mg/L		0.0020	1	12/08/16 15:40	12/14/16 16:08	MWL
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	01	SW8260B	<8.00 ug/L		8.00	20	12/08/16 20:56	12/08/16 20:56	KCS
1,1,1-Trichloroethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,1,2,2-Tetrachloroethane	01	SW8260B	<8.00 ug/L		8.00	20	12/08/16 20:56	12/08/16 20:56	KCS
1,1,2-Trichloroethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,1-Dichloroethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,1-Dichloroethylene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,1-Dichloropropene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,2,3-Trichlorobenzene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,2,3-Trichloropropane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,2,4-Trichlorobenzene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-26 Laboratory Sample ID: 16L0239-01

Date/Time Sampled: 12/07/2016 10:35

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2,4-Trimethylbenzene	01	SW8260B	103 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,2-Dibromo-3-chloropropane (DBCP)	01	SW8260B	<80.0 ug/L		80.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,2-Dibromoethane (EDB)	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,2-Dichlorobenzene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,2-Dichloroethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,2-Dichloropropane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,3,5-Trimethylbenzene	01	SW8260B	21.6 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,3-Dichlorobenzene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,3-Dichloropropane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
1,4-Dichlorobenzene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
2,2-Dichloropropane	01	SW8260B	<40.0 ug/L		40.0	20	12/08/16 20:56	12/08/16 20:56	KCS
2-Butanone (MEK)	01	SW8260B	<200 ug/L		200	20	12/08/16 20:56	12/08/16 20:56	KCS
2-Chlorotoluene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
2-Hexanone (MBK)	01	SW8260B	<100 ug/L		100	20	12/08/16 20:56	12/08/16 20:56	KCS
4-Chlorotoluene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
4-Isopropyltoluene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
4-Methyl-2-pentanone (MIBK)	01	SW8260B	<100 ug/L		100	20	12/08/16 20:56	12/08/16 20:56	KCS
Acetone	01	SW8260B	<200 ug/L		200	20	12/08/16 20:56	12/08/16 20:56	KCS
Benzene	01	SW8260B	1970 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Bromobenzene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Bromochloromethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Bromodichloromethane	01	SW8260B	<10.0 ug/L		10.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Bromoform	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Bromomethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Carbon disulfide	01	SW8260B	<200 ug/L		200	20	12/08/16 20:56	12/08/16 20:56	KCS
Carbon tetrachloride	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-26 Laboratory Sample ID: 16L0239-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chlorobenzene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Chloroethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Chloroform	01	SW8260B	<10.0 ug/L		10.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Chloromethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
cis-1,2-Dichloroethylene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
cis-1,3-Dichloropropene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Dibromochloromethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Dibromomethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Dichlorodifluoromethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Di-isopropyl ether (DIPE)	01	SW8260B	<100 ug/L		100	20	12/08/16 20:56	12/08/16 20:56	KCS
Ethylbenzene	01	SW8260B	602 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Hexachlorobutadiene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
lodomethane	01	SW8260B	<200 ug/L		200	20	12/08/16 20:56	12/08/16 20:56	KCS
Isopropylbenzene	01	SW8260B	48.4 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
m+p-Xylenes	01	SW8260B	126 ug/L		40.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Methylene chloride	01	SW8260B	<80.0 ug/L		80.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Methyl-t-butyl ether (MTBE)	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Naphthalene	01	SW8260B	3570 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
n-Butylbenzene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
n-Propylbenzene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
o-Xylene	01	SW8260B	112 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
sec-Butylbenzene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Styrene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
tert-Butylbenzene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Tetrachloroethylene (PCE)	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Toluene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS



Certificate of Analysis

Final Report

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Analytical Results

Sample I.D. MW-26 Laboratory Sample ID: 16L0239-01

Volatile Organic Compounds by GCMS trans-1,2-Dichloroethylene 01 SW8260B <20.0 ug/L 20.0 20 12/08/16 20:56 12/08/16 20:56 KCS Trichloroethylene 01 SW8260B <20.0 ug/L 20.0 20 12/08/16 20:56 12/08/16 20:56 KCS Trichlorofluoromethane 01 SW8260B <20.0 ug/L 20.0 20 12/08/16 20:56 12/08/16 20:56 KCS Vinyl acetate 01 SW8260B <20.0 ug/L 20.0 20 12/08/16 20:56 12/08/16 20:56 KCS Vinyl chloride 01 SW8260B <10.0 ug/L 10.0 20 12/08/16 20:56 12/08/16 20:56 KCS Xylenes, Total 01 SW8260B 238 ug/L 60.0 20 12/08/16 20:56 12/08/16 20:56 KCS Surr. Fluchere-de 01 SW8260B 96.7 % 75-720 12/08/16 20:56 12/08/16 20:56 KCS Surr. Flucheroethane-de 01 SW8260B 96.7 % 75-720 12/08/16 20:56 12/08/16 20:56 </th <th>Parameter</th> <th>Samp ID</th> <th>Method</th> <th>Result</th> <th>Qual</th> <th>Reporting Limit</th> <th>D.F.</th> <th>Sample Prep Date/Time</th> <th>Analysis Date/Time</th> <th>Analyst</th>	Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
trans-1,3-Dichloropropene 01 SW8260B <20.0 ug/L	Volatile Organic Compounds	by GCMS								
Trichloroethylene	trans-1,2-Dichloroethylene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Trichlorofilutoromethane	trans-1,3-Dichloropropene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Vinyl acetate	Trichloroethylene	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Vinyl chloride 01 SW8260B <10.0 ug/L 10.0 20 12/08/16 20:56 12/08/16 20:56 KCS Xylenes, Total 01 SW8260B 238 ug/L 60.0 20 12/08/16 20:56 12/08/16 20:56 KCS Surr: 1,2-Dichloroethane-d4 01 SW8260B 99.4 % 70-120 12/08/16 20:56 12/08/16 20:56 KCS Surr: Dibromofluoromethane 01 SW8260B 96.7 % 75-120 1 2/08/16 20:56 12/08/16 20:56 KCS Surr: Toluene-d8 01 SW8260B 98.6 % 80-119 1 2/08/16 20:56 12/08/16 20:56 KCS Surr: Toluene-d8 01 SW8260B 98.6 % 85-120 1 2/08/16 20:56 12/08/16 20:56 KCS Surr: Toluene-d8 01 SW8260B 98.6 % 85-120 1 2/08/16 20:56 12/08/16 20:56 KCS Surr: Toluene-d8 01 SW8260B 98.6 % 80-119 1 2/08/16 20:56 12/08/16 20:56 KCS Surr: Toluene-d9 01 SW8270D 22220 ug/L 2220	Trichlorofluoromethane	01	SW8260B	<20.0 ug/L		20.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Xylenes, Total 01 SW8260B 238 ug/L 60.0 20 12/08/16 20:56 12/08/16 20:56 KCS Surr. 1,2-Dichloroethane-d4 01 SW8260B 99.4 % 70-120 12/08/16 20:56 12/08/16 20:56 KCS Surr. 4-Bromofluorobenzene 01 SW8260B 96.7 % 75-120 12/08/16 20:56 12/08/16 20:56 KCS Surr. Toluene-d8 01 SW8260B 98.6 % 80-119 12/08/16 20:56 12/08/16 20:56 KCS Surr. Toluene-d8 01 SW8260B 98.6 % 85-120 12/08/16 20:56 12/08/16 20:56 KCS Surr. Toluene-d8 01 SW8260B 98.6 % 85-120 12/08/16 20:56 12/08/16 20:56 KCS Surr. Toluene-d8 01 SW8260B 98.6 % 80-119 12/08/16 20:56 12/08/16 20:56 KCS Surr. Toluene-d8 01 SW8260B 98.6 % 80-119 12/08/16 20:56 12/08/16 20:56 KCS Surr. Toluene-d8 01 SW8270D <22220 ug/L 2220 200 <td>Vinyl acetate</td> <td>01</td> <td>SW8260B</td> <td><200 ug/L</td> <td></td> <td>200</td> <td>20</td> <td>12/08/16 20:56</td> <td>12/08/16 20:56</td> <td>KCS</td>	Vinyl acetate	01	SW8260B	<200 ug/L		200	20	12/08/16 20:56	12/08/16 20:56	KCS
Surr: 1,2-Dichloroethane-d4 01 SW8260B 99.4 % 70-120 12/08/16 20:56 IZO8/16 20:56 KCS Surr: 4-Bromofluorobenzene 01 SW8260B 96.7 % 75-120 12/08/16 20:56 12/08/16 20:56 KCS Surr: Dibromofluoromethane 01 SW8260B 96.8 % 80-119 12/08/16 20:56 12/08/16 20:56 KCS Surr: Toluene-d8 01 SW8260B 98.6 % 85-120 12/08/16 20:56 12/08/16 20:56 KCS Semivolatile Organic Compounts by GCWS SURS 88-120 12/09/16 09:35 12/14/16 15:58 EWS 1,2,4,5-Tetrachlorobenzene 01 SW8270D <2220 ug/L	Vinyl chloride	01	SW8260B	<10.0 ug/L		10.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Surr: 4-Bromofluorobenzene 01 SW8260B 96.7 % 75-120 12/08/16 20:56 12/08/16 20:56 KCS Surr: Dibromofluoromethane 01 SW8260B 96.8 % 80-119 12/08/16 20:56 12/08/16 20:56 KCS Surr: Toluene-d8 01 SW8260B 98.6 % 85-120 12/08/16 20:56 12/08/16 20:56 KCS Semivolatile Organic Compounds by GCMS 2,3,7,8-TCDD (SIM) 01 EPA625 Not Detected 1 1 2/09/16 09:35 12/14/16 15:58 EWS 1,2,4-5-Tetrachlorobenzene 01 SW8270D <2220 ug/L	Xylenes, Total	01	SW8260B	238 ug/L		60.0	20	12/08/16 20:56	12/08/16 20:56	KCS
Surr: Dibromofluoromethane 01 SW8260B 96.8 % 80-119 12/08/16 20:56 12/08/16 20:56 KCS Surr: Toluene-d8 01 SW8260B 98.6 % 85-120 12/08/16 20:56 12/08/16 20:56 KCS Semivolatile Organic Compounds by GCMS EPA625 Not Detected 1 12/09/16 09:35 12/14/16 15:58 EWS 1,2,4,5-Tetrachlorobenzene 01 SW8270D <2220 ug/L	Surr: 1,2-Dichloroethane-d4	01	SW8260B	99.4 %		70-120		12/08/16 20:56	12/08/16 20:56	KCS
Surr: Toluene-d8 01 SW8260B 98.6 % 85-120 12/08/16 20:56 12/08/16 20:56 KCS Semivolatile Organic Compounds by GUNS 2,3,7,8-TCDD (SIM) 01 EPA625 Not Detected 1 12/09/16 09:35 12/14/16 15:58 EWS 1,2,4-Frichlorobenzene 01 SW8270D <2220 ug/L	Surr: 4-Bromofluorobenzene	01	SW8260B	96.7 %		75-120		12/08/16 20:56	12/08/16 20:56	KCS
Semivolatile Organic Compounds by GCMS 2,3,7,8-TCDD (SIM) 01 EPA625 Not Detected 1 12/09/16 09:35 12/14/16 15:58 EWS 1,2,4,5-Tetrachlorobenzene 01 SW8270D <2220 ug/L	Surr: Dibromofluoromethane	01	SW8260B	96.8 %		80-119		12/08/16 20:56	12/08/16 20:56	KCS
2,3,7,8-TCDD (SIM) 01 EPA625 Not Detected 1 12/09/16 09:35 12/14/16 15:58 EWS 1,2,4,5-Tetrachlorobenzene 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 1,2,4-Trichlorobenzene 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 1,2-Dichlorobenzene 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 1,2-Diphenylhydrazine 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 1,3-Dichlorobenzene 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 1,3-Dichlorobenzene 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 1,3-Dinitrobenzene 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 1,4-Dichlorobenzene 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 1-Naphthylamine 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,3,4,6-Tetrachlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4,5-Trichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4,6-Trichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4,6-Trichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4,6-Trichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4,6-Trichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4,6-Trichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4,6-Trichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4,6-Trichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4,6-Trichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4,6-Trichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4-Dichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4-Dichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 2,4-Dichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12	Surr: Toluene-d8	01	SW8260B	98.6 %		85-120		12/08/16 20:56	12/08/16 20:56	KCS
1,2,4,5-Tetrachlorobenzene 01 SW8270D <2220 ug/L	Semivolatile Organic Compo	unds by GC	MS							
1,2,4-Trichlorobenzene 01 SW8270D <2220 ug/L	2,3,7,8-TCDD (SIM)	01	EPA625	Not Detected			1	12/09/16 09:35	12/14/16 15:58	EWS
1,2-Dichlorobenzene 01 SW8270D <2220 ug/L	1,2,4,5-Tetrachlorobenzene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
1,2-Diphenylhydrazine 01 SW8270D <2220 ug/L	1,2,4-Trichlorobenzene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
1,3-Dichlorobenzene 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS 1,3-Dinitrobenzene 01 SW8270D <556 ug/L	1,2-Dichlorobenzene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
1,3-Dinitrobenzene 01 SW8270D <556 ug/L	1,2-Diphenylhydrazine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
1,4-Dichlorobenzene 01 SW8270D <2220 ug/L	1,3-Dichlorobenzene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
1-Naphthylamine 01 SW8270D <2220 ug/L	1,3-Dinitrobenzene	01	SW8270D	<556 ug/L		556	200	12/09/16 09:35	12/13/16 18:48	EWS
2,3,4,6-Tetrachlorophenol 01 SW8270D <2220 ug/L	1,4-Dichlorobenzene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
2,4,5-Trichlorophenol 01 SW8270D <2220 ug/L	1-Naphthylamine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
2,4,6-Trichlorophenol 01 SW8270D <2220 ug/L	2,3,4,6-Tetrachlorophenol	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
2,4-Dichlorophenol 01 SW8270D <2220 ug/L 2220 200 12/09/16 09:35 12/13/16 18:48 EWS	2,4,5-Trichlorophenol	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
	2,4,6-Trichlorophenol	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
2,4-Dimethylphenol 01 SW8270D <111 ug/L 111 200 12/09/16 09:35 12/13/16 18:48 EWS	2,4-Dichlorophenol	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
	2,4-Dimethylphenol	01	SW8270D	<111 ug/L		111	200	12/09/16 09:35	12/13/16 18:48	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14

12/14/2016 16:49

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

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36156.015

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Analytical Results

Sample I.D. MW-26 Laboratory Sample ID: 16L0239-01

Parameter	Samp ID	Method	Result Q)ual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
2,4-Dinitrophenol	01	SW8270D	<11100 ug/L		11100	200	12/09/16 09:35	12/13/16 18:48	EWS
2,4-Dinitrotoluene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
2,6-Dichlorophenol	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
2,6-Dinitrotoluene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
2-Chloronaphthalene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
2-Chlorophenol	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
2-Methylnaphthalene	01	SW8270D	898 ug/L		222	200	12/09/16 09:35	12/13/16 18:48	EWS
2-Naphthylamine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
2-Nitroaniline	01	SW8270D	<4440 ug/L		4440	200	12/09/16 09:35	12/13/16 18:48	EWS
2-Nitrophenol	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
3,3'-Dichlorobenzidine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
3-Methylcholanthrene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
3-Nitroaniline	01	SW8270D	<4440 ug/L		4440	200	12/09/16 09:35	12/13/16 18:48	EWS
4,6-Dinitro-2-methylphenol	01	SW8270D	<11100 ug/L		11100	200	12/09/16 09:35	12/13/16 18:48	EWS
4-Aminobiphenyl	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
4-Bromophenyl phenyl ether	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
4-Chloroaniline	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
4-Chlorophenyl phenyl ether	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
4-Nitroaniline	01	SW8270D	<4440 ug/L		4440	200	12/09/16 09:35	12/13/16 18:48	EWS
4-Nitrophenol	01	SW8270D	<11100 ug/L		11100	200	12/09/16 09:35	12/13/16 18:48	EWS
7,12-Dimethylbenz (a) anthracene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Acenaphthene	01	SW8270D	231 ug/L		222	200	12/09/16 09:35	12/13/16 18:48	EWS
Acenaphthylene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Acetophenone	01	SW8270D	<4440 ug/L		4440	200	12/09/16 09:35	12/13/16 18:48	EWS
Aniline	01	SW8270D	<11100 ug/L		11100	200	12/09/16 09:35	12/13/16 18:48	EWS
Anthracene	01	SW8270D	26.7 ug/L		22.2	200	12/09/16 09:35	12/13/16 18:48	EWS



Certificate of Analysis

Final Report

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Richmond VA, 23225

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Project Number: 36

36156.015

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Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-26 Laboratory Sample ID: 16L0239-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	nds by GC	MS							
Benzidine	01	SW8270D	<11100 ug/L		11100	200	12/09/16 09:35	12/13/16 18:48	EWS
Benzo (a) anthracene	01	SW8270D	<11.1 ug/L		11.1	200	12/09/16 09:35	12/13/16 18:48	EWS
Benzo (a) pyrene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Benzo (b) fluoranthene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Benzo (g,h,i) perylene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Benzo (k) fluoranthene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Benzoic acid	01	SW8270D	<11100 ug/L		11100	200	12/09/16 09:35	12/13/16 18:48	EWS
Benzyl alcohol	01	SW8270D	<4440 ug/L		4440	200	12/09/16 09:35	12/13/16 18:48	EWS
bis (2-Chloroethoxy) methane	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
bis (2-Chloroethyl) ether	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
bis (2-Chloroisopropyl) ether	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
bis (2-Ethylhexyl) phthalate	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Butyl benzyl phthalate	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Chrysene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Dibenz (a,h) anthracene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Dibenz (a,j) acridine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Dibenzofuran	01	SW8270D	<1110 ug/L		1110	200	12/09/16 09:35	12/13/16 18:48	EWS
Diethyl phthalate	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Dimethyl phthalate	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Di-n-butyl phthalate	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Di-n-octyl phthalate	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Diphenylamine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Ethyl methanesulfonate	01	SW8270D	<4440 ug/L		4440	200	12/09/16 09:35	12/13/16 18:48	EWS
Fluoranthene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Fluorene	01	SW8270D	97.8 ug/L		22.2	200	12/09/16 09:35	12/13/16 18:48	EWS
Hexachlorobenzene	01	SW8270D	<222 ug/L		222	200	12/09/16 09:35	12/13/16 18:48	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: **Fulton Gas** Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

16L0239-01 Sample I.D. MW-26 **Laboratory Sample ID:**

12/07/2016 10:35 Date/Time Sampled:

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Hexachlorobutadiene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Hexachlorocyclopentadiene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Hexachloroethane	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Indeno (1,2,3-cd) pyrene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Isophorone	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
m+p-Cresols	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Methyl methanesulfonate	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Naphthalene	01	SW8270D	3390 ug/L		1110	200	12/09/16 09:35	12/13/16 18:48	EWS
Nitrobenzene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
n-Nitrosodimethylamine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
n-Nitrosodi-n-butylamine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
n-Nitrosodi-n-propylamine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
n-Nitrosodiphenylamine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
n-Nitrosopiperidine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
o+m+p-Cresols	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
o-Cresol	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
p-(Dimethylamino) azobenzene	01	SW8270D	<556 ug/L		556	200	12/09/16 09:35	12/13/16 18:48	EWS
p-Chloro-m-cresol	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Pentachloronitrobenzene (quintozene)	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Pentachlorophenol	01	SW8270D	<4440 ug/L		4440	200	12/09/16 09:35	12/13/16 18:48	EWS
Phenacetin	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Phenanthrene	01	SW8270D	118 ug/L		22.2	200	12/09/16 09:35	12/13/16 18:48	EWS
Phenol	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Pronamide	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Pyrene	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

36156.015

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Julia Campus Project Number:

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-26 Laboratory Sample ID: 16L0239-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Pyridine	01	SW8270D	<2220 ug/L		2220	200	12/09/16 09:35	12/13/16 18:48	EWS
Surr: 2,4,6-Tribromophenol	01	SW8270D	87.6 %		40-125		12/09/16 09:35	12/13/16 18:48	EWS
Surr: 2-Fluorobiphenyl	01	SW8270D	%	DS	23-87		12/09/16 09:35	12/13/16 18:48	<i>EWS</i>
Surr: 2-Fluorophenol	01	SW8270D	36.0 %		14-52		12/09/16 09:35	12/13/16 18:48	EWS
Surr: Nitrobenzene-d5	01	SW8270D	%	DS	40-110		12/09/16 09:35	12/13/16 18:48	EWS
Surr: Phenol-d5	01	SW8270D	%	DS	5-33		12/09/16 09:35	12/13/16 18:48	EWS
Surr: p-Terphenyl-d14	01	SW8270D	%	DS	27-133		12/09/16 09:35	12/13/16 18:48	<i>EWS</i>
Organochlorine Pesticides an	nd PCBs by	GC/ECD							
PCB as Aroclor 1016	01	SW8082A	<0.222 ug/L		0.222	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1221	01	SW8082A	<0.222 ug/L		0.222	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1232	01	SW8082A	<0.222 ug/L		0.222	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1242	01	SW8082A	<0.222 ug/L		0.222	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1248	01	SW8082A	<0.222 ug/L		0.222	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1254	01	SW8082A	<0.222 ug/L		0.222	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1260	01	SW8082A	<0.222 ug/L		0.222	1	12/12/16 08:00	12/12/16 08:00	SKS
Surr: DCB	01	SW8082A	60.0 %		30-105		12/12/16 08:00	12/12/16 08:00	SKS
Surr: TCMX	01	SW8082A	120 %	S	30-105		12/12/16 08:00	12/12/16 08:00	SKS
4,4'-DDD	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
4,4'-DDE	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
4,4'-DDT	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
Aldrin	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
alpha-BHC	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
beta-BHC	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
Chlordane	01	SW8081B	<0.222 ug/L		0.222	1	12/09/16 14:08	12/12/16 21:05	SKS
delta-BHC	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
Dieldrin	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D.

MW-26 Laboratory Sample ID: 16L0239-01

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides a	and PCBs by	GC/ECD							
Endosulfan I	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
Endosulfan II	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
Endosulfan sulfate	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
Endrin	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
Endrin aldehyde	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
gamma-BHC (Lindane)	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
Heptachlor	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
Heptachlor epoxide	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
Methoxychlor	01	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:05	SKS
Toxaphene	01	SW8081B	<1.11 ug/L		1.11	1	12/09/16 14:08	12/12/16 21:05	SKS
Surr: TCMX	01	SW8081B	85.0 %		18-112	· · · · · · · · · · · · · · · · · · ·	12/09/16 14:08	12/12/16 21:05	SKS
Surr: DCB	01	SW8081B	20.0 %	s	27-131	1	12/09/16 14:08	12/12/16 21:05	SKS
Wet Chemistry Analysis									
Cyanide	01	SW9012	0.54 mg/L	CI	0.05	5	12/12/16 16:47	12/12/16 16:47	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3615

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-27 Laboratory Sample ID: 16L0239-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	eries Method	s							
Silver	02	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:50	CWO
Beryllium	02RE1	EPA200.7 Rev 4.4	<0.0200 mg/L		0.0200	5	12/08/16 15:40	12/12/16 14:48	CWO
Cadmium	02	EPA200.7 Rev 4.4	0.0151 mg/L		0.0040	1	12/08/16 15:40	12/09/16 14:50	CWO
Chromium	02	EPA200.7 Rev 4.4	0.142 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:50	CWO
Copper	02	EPA200.7 Rev 4.4	0.0569 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:50	CWO
Mercury	02	EPA245.1 R3.0	0.0008 mg/L		0.0002	1	12/08/16 13:50	12/09/16 14:02	RCV
Nickel	02	EPA200.7 Rev 4.4	0.0409 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:50	CWO
Lead	02	EPA200.7 Rev 4.4	0.212 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:50	CWO
Zinc	02	EPA200.7 Rev 4.4	0.464 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:50	CWO
Metals (Total) by EPA 6000/7	'000 Series N	1ethods							
Arsenic	02	SW7010	0.0346 mg/L		0.0050	1	12/08/16 15:40	12/12/16 16:59	MWL
Antimony	02	SW7010	<0.0050 mg/L		0.0050	1	12/08/16 15:40	12/13/16 17:51	MWL
Selenium	02	SW7010	<0.0030 mg/L		0.0030	1	12/08/16 15:40	12/14/16 12:31	MWL
Thallium	02	SW7010	<0.0020 mg/L		0.0020	1	12/08/16 15:40	12/14/16 16:14	MWL
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	02	SW8260B	<20.0 ug/L		20.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,1,1-Trichloroethane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,1,2,2-Tetrachloroethane	02	SW8260B	<20.0 ug/L		20.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,1,2-Trichloroethane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,1-Dichloroethane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,1-Dichloroethylene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,1-Dichloropropene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,2,3-Trichlorobenzene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,2,3-Trichloropropane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,2,4-Trichlorobenzene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-27 Laboratory Sample ID: 16L0239-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds b	y GCMS								
1,2,4-Trimethylbenzene	02	SW8260B	360 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,2-Dibromo-3-chloropropane (DBCP)	02	SW8260B	<200 ug/L		200	50	12/08/16 21:20	12/08/16 21:20	KCS
1,2-Dibromoethane (EDB)	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,2-Dichlorobenzene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,2-Dichloroethane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,2-Dichloropropane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,3,5-Trimethylbenzene	02	SW8260B	120 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,3-Dichlorobenzene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,3-Dichloropropane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
1,4-Dichlorobenzene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
2,2-Dichloropropane	02	SW8260B	<100 ug/L		100	50	12/08/16 21:20	12/08/16 21:20	KCS
2-Butanone (MEK)	02	SW8260B	<500 ug/L		500	50	12/08/16 21:20	12/08/16 21:20	KCS
2-Chlorotoluene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
2-Hexanone (MBK)	02	SW8260B	<250 ug/L		250	50	12/08/16 21:20	12/08/16 21:20	KCS
4-Chlorotoluene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
4-Isopropyltoluene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
4-Methyl-2-pentanone (MIBK)	02	SW8260B	<250 ug/L		250	50	12/08/16 21:20	12/08/16 21:20	KCS
Acetone	02	SW8260B	<500 ug/L		500	50	12/08/16 21:20	12/08/16 21:20	KCS
Benzene	02	SW8260B	469 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Bromobenzene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Bromochloromethane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Bromodichloromethane	02	SW8260B	<25.0 ug/L		25.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Bromoform	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Bromomethane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Carbon disulfide	02	SW8260B	<500 ug/L		500	50	12/08/16 21:20	12/08/16 21:20	KCS
Carbon tetrachloride	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-27 Laboratory Sample ID: 16L0239-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chlorobenzene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Chloroethane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Chloroform	02	SW8260B	<25.0 ug/L		25.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Chloromethane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
cis-1,2-Dichloroethylene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
cis-1,3-Dichloropropene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Dibromochloromethane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Dibromomethane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Dichlorodifluoromethane	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Di-isopropyl ether (DIPE)	02	SW8260B	<250 ug/L		250	50	12/08/16 21:20	12/08/16 21:20	KCS
Ethylbenzene	02	SW8260B	1040 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Hexachlorobutadiene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
lodomethane	02	SW8260B	<500 ug/L		500	50	12/08/16 21:20	12/08/16 21:20	KCS
Isopropylbenzene	02	SW8260B	77.3 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
m+p-Xylenes	02	SW8260B	469 ug/L		100	50	12/08/16 21:20	12/08/16 21:20	KCS
Methylene chloride	02	SW8260B	<200 ug/L		200	50	12/08/16 21:20	12/08/16 21:20	KCS
Methyl-t-butyl ether (MTBE)	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Naphthalene	02	SW8260B	11600 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
n-Butylbenzene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
n-Propylbenzene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
o-Xylene	02	SW8260B	317 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
sec-Butylbenzene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Styrene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
tert-Butylbenzene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Tetrachloroethylene (PCE)	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS
Toluene	02	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:20	12/08/16 21:20	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

16L0239-02

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Sample ID:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-27

Date/Time Sampled:

12/07/2016 11:35

Reporting Sample Prep Analysis Samp ID Limit Method Analyst Parameter Result Qual D.F. Date/Time Date/Time Volatile Organic Compounds by GCMS KCS trans-1,2-Dichloroethylene 02 SW8260B <50.0 ug/L 50.0 50 12/08/16 21:20 12/08/16 21:20 trans-1,3-Dichloropropene 02 SW8260B <50.0 ug/L 50.0 50 12/08/16 21:20 12/08/16 21:20 KCS Trichloroethylene 02 <50.0 ug/L 50.0 12/08/16 21:20 12/08/16 21:20 **KCS** SW8260B Trichlorofluoromethane 02 SW8260B <50.0 ug/L 50.0 50 12/08/16 21:20 12/08/16 21:20 KCS Vinyl acetate 02 SW8260B <500 ug/L 500 12/08/16 21:20 12/08/16 21:20 **KCS** 50 Vinyl chloride 02 SW8260B <25.0 ug/L 25.0 50 12/08/16 21:20 12/08/16 21:20 KCS 02 SW8260B 786 ug/L 150 12/08/16 21:20 12/08/16 21:20 **KCS** Xylenes, Total 70-120 12/08/16 21:20 12/08/16 21:20 KCS 02 SW8260B 98.3 % Surr: 1,2-Dichloroethane-d4 02 75-120 12/08/16 21:20 12/08/16 21:20 Surr: 4-Bromofluorobenzene SW8260B 98.0 % KCS Surr: Dibromofluoromethane 02 SW8260B 97.4 % 80-119 12/08/16 21:20 12/08/16 21:20 KCS Surr: Toluene-d8 02 SW8260B 99.3 % 85-120 12/08/16 21:20 12/08/16 21:20 KCS Semivolatile Organic Compounds by GCMS 2,3,7,8-TCDD (SIM) 02 FPA625 Not Detected 12/09/16 09:35 12/14/16 15:58 **EWS** 1,2,4,5-Tetrachlorobenzene 02 SW8270D <5050 ug/L 5050 500 12/09/16 09:35 12/13/16 19:25 **EWS** 1,2,4-Trichlorobenzene 02 SW8270D <5050 ug/L 5050 500 12/09/16 09:35 12/13/16 19:25 **EWS** 1,2-Dichlorobenzene 02 SW8270D <5050 ug/L 5050 12/09/16 09:35 12/13/16 19:25 **EWS** SW8270D <5050 ug/L 5050 12/09/16 09:35 12/13/16 19:25 1.2-Diphenvlhvdrazine 02 500 **EWS** 1,3-Dichlorobenzene 02 SW8270D <5050 ug/L 5050 500 12/09/16 09:35 12/13/16 19:25 **EWS** 1.3-Dinitrobenzene 02 SW8270D <1260 ug/L 1260 500 12/09/16 09:35 12/13/16 19:25 **EWS** 02 5050 1,4-Dichlorobenzene SW8270D <5050 ug/L 500 12/09/16 09:35 12/13/16 19:25 **EWS** 02 SW8270D 5050 12/13/16 19:25 **EWS** 1-Naphthylamine <5050 ug/L 500 12/09/16 09:35 02 SW8270D <5050 ug/L 5050 500 12/09/16 09:35 12/13/16 19:25 **EWS** 2,3,4,6-Tetrachlorophenol 5050 2,4,5-Trichlorophenol 02 SW8270D <5050 ug/L 500 12/09/16 09:35 12/13/16 19:25 **EWS** 2,4,6-Trichlorophenol 02 SW8270D <5050 ug/L 5050 12/09/16 09:35 12/13/16 19:25 **EWS** 2,4-Dichlorophenol 02 SW8270D <5050 ug/L 5050 12/09/16 09:35 12/13/16 19:25 **EWS** 2,4-Dimethylphenol 02 SW8270D <253 ug/L 253 12/09/16 09:35 12/13/16 19:25 **EWS**



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Date/Time Sampled:

Sample I.D. MW-27

12/07/2016 11:35

Laboratory Sample ID: 16L0239-02

Parameter	Samp ID	Method	Result	R Qual	eporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
- Talallielei		Wictilod	resuit	Quai		D.I .	Date/Time	Date/ Time	7
Semivolatile Organic Compo	unds by GC	MS							
2,4-Dinitrophenol	02	SW8270D	<25300 ug/L		25300	500	12/09/16 09:35	12/13/16 19:25	EWS
2,4-Dinitrotoluene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
2,6-Dichlorophenol	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
2,6-Dinitrotoluene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
2-Chloronaphthalene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
2-Chlorophenol	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
2-Methylnaphthalene	02	SW8270D	2800 ug/L		1010	500	12/09/16 09:35	12/13/16 19:25	EWS
2-Naphthylamine	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
2-Nitroaniline	02	SW8270D	<10100 ug/L		10100	500	12/09/16 09:35	12/13/16 19:25	EWS
2-Nitrophenol	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
3,3'-Dichlorobenzidine	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
3-Methylcholanthrene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
3-Nitroaniline	02	SW8270D	<10100 ug/L		10100	500	12/09/16 09:35	12/13/16 19:25	EWS
4,6-Dinitro-2-methylphenol	02	SW8270D	<25300 ug/L		25300	500	12/09/16 09:35	12/13/16 19:25	EWS
4-Aminobiphenyl	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
4-Bromophenyl phenyl ether	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
4-Chloroaniline	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
4-Chlorophenyl phenyl ether	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
4-Nitroaniline	02	SW8270D	<10100 ug/L		10100	500	12/09/16 09:35	12/13/16 19:25	EWS
4-Nitrophenol	02	SW8270D	<25300 ug/L		25300	500	12/09/16 09:35	12/13/16 19:25	EWS
7,12-Dimethylbenz (a)	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
anthracene									
Acenaphthene	02	SW8270D	601 ug/L		505	500	12/09/16 09:35	12/13/16 19:25	EWS
Acenaphthylene	02	SW8270D	60.6 ug/L		50.5	500	12/09/16 09:35	12/13/16 19:25	EWS
Acetophenone	02	SW8270D	<10100 ug/L		10100	500	12/09/16 09:35	12/13/16 19:25	EWS
Aniline	02	SW8270D	<25300 ug/L		25300	500	12/09/16 09:35	12/13/16 19:25	EWS
Anthracene	02	SW8270D	217 ug/L		50.5	500	12/09/16 09:35	12/13/16 19:25	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Laboratory Order ID: 16L0239

 Analytical Results MW-27

Sample I.D.

16L0239-02 **Laboratory Sample ID:**

Parameter	Samp ID	Method	Result	F Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	inds by GC	MS							
Benzidine	02	SW8270D	<25300 ug/L		25300	500	12/09/16 09:35	12/13/16 19:25	EWS
Benzo (a) anthracene	02	SW8270D	101 ug/L		25.3	500	12/09/16 09:35	12/13/16 19:25	EWS
Benzo (a) pyrene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Benzo (b) fluoranthene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Benzo (g,h,i) perylene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Benzo (k) fluoranthene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Benzoic acid	02	SW8270D	<25300 ug/L		25300	500	12/09/16 09:35	12/13/16 19:25	EWS
Benzyl alcohol	02	SW8270D	<10100 ug/L		10100	500	12/09/16 09:35	12/13/16 19:25	EWS
bis (2-Chloroethoxy) methane	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
bis (2-Chloroethyl) ether	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
bis (2-Chloroisopropyl) ether	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
bis (2-Ethylhexyl) phthalate	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Butyl benzyl phthalate	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Chrysene	02	SW8270D	50.5 ug/L		50.5	500	12/09/16 09:35	12/13/16 19:25	EWS
Dibenz (a,h) anthracene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Dibenz (a,j) acridine	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Dibenzofuran	02	SW8270D	<2530 ug/L		2530	500	12/09/16 09:35	12/13/16 19:25	EWS
Diethyl phthalate	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Dimethyl phthalate	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Di-n-butyl phthalate	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Di-n-octyl phthalate	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Diphenylamine	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Ethyl methanesulfonate	02	SW8270D	<10100 ug/L		10100	500	12/09/16 09:35	12/13/16 19:25	EWS
Fluoranthene	02	SW8270D	182 ug/L		50.5	500	12/09/16 09:35	12/13/16 19:25	EWS
Fluorene	02	SW8270D	298 ug/L		253	500	12/09/16 09:35	12/13/16 19:25	EWS
Hexachlorobenzene	02	SW8270D	<505 ug/L		505	500	12/09/16 09:35	12/13/16 19:25	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: Julia Campus

Project Number: 36156.015

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Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Client Site I.D.:

Sample I.D. MW-27 Laboratory Sample ID: 16L0239-02

Parameter	Samp ID	Method	Result	l Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Hexachlorobutadiene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Hexachlorocyclopentadiene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Hexachloroethane	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Indeno (1,2,3-cd) pyrene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Isophorone	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
m+p-Cresols	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Methyl methanesulfonate	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Naphthalene	02	SW8270D	16800 ug/L		2530	500	12/09/16 09:35	12/13/16 19:25	EWS
Nitrobenzene	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
n-Nitrosodimethylamine	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
n-Nitrosodi-n-butylamine	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
n-Nitrosodi-n-propylamine	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
n-Nitrosodiphenylamine	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
n-Nitrosopiperidine	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
o+m+p-Cresols	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
o-Cresol	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
p-(Dimethylamino) azobenzene	02	SW8270D	<1260 ug/L		1260	500	12/09/16 09:35	12/13/16 19:25	EWS
p-Chloro-m-cresol	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Pentachloronitrobenzene (quintozene)	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Pentachlorophenol	02	SW8270D	<10100 ug/L		10100	500	12/09/16 09:35	12/13/16 19:25	EWS
Phenacetin	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Phenanthrene	02	SW8270D	722 ug/L		505	500	12/09/16 09:35	12/13/16 19:25	EWS
Phenol	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Pronamide	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Pyrene	02	SW8270D	369 ug/L		50.5	500	12/09/16 09:35	12/13/16 19:25	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-27 Laboratory Sample ID: 16L0239-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	ounds by GC	MS							
Pyridine	02	SW8270D	<5050 ug/L		5050	500	12/09/16 09:35	12/13/16 19:25	EWS
Surr: 2,4,6-Tribromophenol	02	SW8270D	%	DS	40-125		12/09/16 09:35	12/13/16 19:25	EWS
Surr: 2-Fluorobiphenyl	02	SW8270D	%	DS	23-87		12/09/16 09:35	12/13/16 19:25	EWS
Surr: 2-Fluorophenol	02	SW8270D	68.0 %	DS	14-52		12/09/16 09:35	12/13/16 19:25	EWS
Surr: Nitrobenzene-d5	02	SW8270D	%	DS	40-110		12/09/16 09:35	12/13/16 19:25	EWS
Surr: Phenol-d5	02	SW8270D	%	DS	5-33		12/09/16 09:35	12/13/16 19:25	EWS
Surr: p-Terphenyl-d14	02	SW8270D	%	DS	27-133		12/09/16 09:35	12/13/16 19:25	EWS
Organochlorine Pesticides an	nd PCBs by (GC/ECD							
PCB as Aroclor 1016	02	SW8082A	<0.220 ug/L		0.220	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1221	02	SW8082A	<0.220 ug/L		0.220	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1232	02	SW8082A	<0.220 ug/L		0.220	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1242	02	SW8082A	<0.220 ug/L		0.220	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1248	02	SW8082A	<0.220 ug/L		0.220	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1254	02	SW8082A	<0.220 ug/L		0.220	1	12/12/16 08:00	12/12/16 08:00	SKS
PCB as Aroclor 1260	02	SW8082A	<0.220 ug/L		0.220	1	12/12/16 08:00	12/12/16 08:00	SKS
Surr: DCB	02	SW8082A	60.0 %		30-105		12/12/16 08:00	12/12/16 08:00	SKS
Surr: TCMX	02	SW8082A	100 %		30-105		12/12/16 08:00	12/12/16 08:00	SKS
4,4'-DDD	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
4,4'-DDE	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
4,4'-DDT	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
Aldrin	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
alpha-BHC	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
beta-BHC	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
Chlordane	02	SW8081B	<0.220 ug/L		0.220	1	12/09/16 14:08	12/12/16 21:24	SKS
delta-BHC	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
Dieldrin	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

MW-27

Sample I.D.

Laboratory Sample ID: 16L0239-02

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides a	nd PCBs by	GC/ECD							
Endosulfan I	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
Endosulfan II	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
Endosulfan sulfate	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
Endrin	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
Endrin aldehyde	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
gamma-BHC (Lindane)	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
Heptachlor	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
Heptachlor epoxide	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
Methoxychlor	02	SW8081B	<0.055 ug/L		0.055	1	12/09/16 14:08	12/12/16 21:24	SKS
Toxaphene	02	SW8081B	<1.10 ug/L		1.10	1	12/09/16 14:08	12/12/16 21:24	SKS
Surr: TCMX	02	SW8081B	120 %	S	18-112		12/09/16 14:08	12/12/16 21:24	SKS
Surr: DCB	02	SW8081B	35.0 %		27-131		12/09/16 14:08	12/12/16 21:24	SKS
Wet Chemistry Analysis									
Cyanide	02	SW9012	0.72 mg/L	CI	0.05	5	12/12/16 16:50	12/12/16 16:50	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3615

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-11 Laboratory Sample ID: 16L0239-03

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 200 Se	eries Method	s							
Silver	03	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:58	CWO
Beryllium	03RE1	EPA200.7 Rev 4.4	<0.0200 mg/L		0.0200	5	12/08/16 15:40	12/12/16 14:50	CWO
Cadmium	03	EPA200.7 Rev 4.4	0.0079 mg/L		0.0040	1	12/08/16 15:40	12/09/16 14:58	CWO
Chromium	03	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:58	CWO
Copper	03	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:58	CWO
Mercury	03	EPA245.1 R3.0	<0.0002 mg/L		0.0002	1	12/08/16 13:50	12/09/16 14:04	RCV
Nickel	03	EPA200.7 Rev 4.4	<0.0100 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:58	CWO
Lead	03	EPA200.7 Rev 4.4	0.0152 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:58	CWO
Zinc	03	EPA200.7 Rev 4.4	0.0563 mg/L		0.0100	1	12/08/16 15:40	12/09/16 14:58	CWO
Metals (Total) by EPA 6000/7	7000 Series N	1ethods							
Arsenic	03	SW7010	0.0072 mg/L		0.0050	1	12/08/16 15:40	12/12/16 17:04	MWL
Antimony	03	SW7010	<0.0050 mg/L		0.0050	1	12/08/16 15:40	12/13/16 17:57	MWL
Selenium	03	SW7010	<0.0030 mg/L		0.0030	1	12/08/16 15:40	12/14/16 12:37	MWL
Thallium	03	SW7010	<0.0020 mg/L		0.0020	1	12/08/16 15:40	12/14/16 16:20	MWL
Volatile Organic Compounds	s by GCMS								
1,1,1,2-Tetrachloroethane	03RE1	SW8260B	<20.0 ug/L		20.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,1,1-Trichloroethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,1,2,2-Tetrachloroethane	03RE1	SW8260B	<20.0 ug/L		20.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,1,2-Trichloroethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,1-Dichloroethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,1-Dichloroethylene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,1-Dichloropropene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,2,3-Trichlorobenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,2,3-Trichloropropane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,2,4-Trichlorobenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Client Site I.D.:

Sample I.D. MW-11 Laboratory Sample ID: 16L0239-03

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,2,4-Trimethylbenzene	03RE1	SW8260B	246 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,2-Dibromo-3-chloropropane (DBCP)	03RE1	SW8260B	<200 ug/L		200	50	12/08/16 21:43	12/08/16 21:43	KCS
1,2-Dibromoethane (EDB)	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,2-Dichlorobenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,2-Dichloroethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,2-Dichloropropane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,3,5-Trimethylbenzene	03RE1	SW8260B	73.4 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,3-Dichlorobenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,3-Dichloropropane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
1,4-Dichlorobenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
2,2-Dichloropropane	03RE1	SW8260B	<100 ug/L		100	50	12/08/16 21:43	12/08/16 21:43	KCS
2-Butanone (MEK)	03RE1	SW8260B	<500 ug/L		500	50	12/08/16 21:43	12/08/16 21:43	KCS
2-Chlorotoluene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
2-Hexanone (MBK)	03RE1	SW8260B	<250 ug/L		250	50	12/08/16 21:43	12/08/16 21:43	KCS
4-Chlorotoluene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
4-Isopropyltoluene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
4-Methyl-2-pentanone (MIBK)	03RE1	SW8260B	<250 ug/L		250	50	12/08/16 21:43	12/08/16 21:43	KCS
Acetone	03RE1	SW8260B	<500 ug/L		500	50	12/08/16 21:43	12/08/16 21:43	KCS
Benzene	03	SW8260B	45500 ug/L		500	500	12/08/16 20:33	12/08/16 20:33	KCS
Bromobenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Bromochloromethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Bromodichloromethane	03RE1	SW8260B	<25.0 ug/L		25.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Bromoform	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Bromomethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Carbon disulfide	03RE1	SW8260B	<500 ug/L		500	50	12/08/16 21:43	12/08/16 21:43	KCS
Carbon tetrachloride	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

16L0239-03 Sample I.D. MW-11 **Laboratory Sample ID:**

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Chlorobenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Chloroethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Chloroform	03RE1	SW8260B	<25.0 ug/L		25.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Chloromethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
cis-1,2-Dichloroethylene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
cis-1,3-Dichloropropene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Dibromochloromethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Dibromomethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Dichlorodifluoromethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Di-isopropyl ether (DIPE)	03RE1	SW8260B	<250 ug/L		250	50	12/08/16 21:43	12/08/16 21:43	KCS
Ethylbenzene	03RE1	SW8260B	1960 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Hexachlorobutadiene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
lodomethane	03RE1	SW8260B	<500 ug/L		500	50	12/08/16 21:43	12/08/16 21:43	KCS
Isopropylbenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
m+p-Xylenes	03RE1	SW8260B	1830 ug/L		100	50	12/08/16 21:43	12/08/16 21:43	KCS
Methylene chloride	03RE1	SW8260B	<200 ug/L		200	50	12/08/16 21:43	12/08/16 21:43	KCS
Methyl-t-butyl ether (MTBE)	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Naphthalene	03RE1	SW8260B	16800 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
n-Butylbenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
n-Propylbenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
o-Xylene	03RE1	SW8260B	825 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
sec-Butylbenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Styrene	03RE1	SW8260B	753 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
tert-Butylbenzene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Tetrachloroethylene (PCE)	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Toluene	03RE1	SW8260B	14100 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Purchase Orde

Laboratory Order ID: 16L0239

Analytical Results

Client Site I.D.:

Sample I.D. MW-11 Laboratory Sample ID: 16L0239-03

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
trans-1,2-Dichloroethylene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
trans-1,3-Dichloropropene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Trichloroethylene	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Trichlorofluoromethane	03RE1	SW8260B	<50.0 ug/L		50.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Vinyl acetate	03RE1	SW8260B	<500 ug/L		500	50	12/08/16 21:43	12/08/16 21:43	KCS
Vinyl chloride	03RE1	SW8260B	<25.0 ug/L		25.0	50	12/08/16 21:43	12/08/16 21:43	KCS
Xylenes, Total	03RE1	SW8260B	2650 ug/L		150	50	12/08/16 21:43	12/08/16 21:43	KCS
Surr: 1,2-Dichloroethane-d4	03	SW8260B	98.9 %		70-120		12/08/16 20:33	12/08/16 20:33	KCS
Surr: 4-Bromofluorobenzene	03	SW8260B	96.3 %		75-120		12/08/16 20:33	12/08/16 20:33	KCS
Surr: Dibromofluoromethane	03	SW8260B	95.9 %		80-119		12/08/16 20:33	12/08/16 20:33	KCS
Surr: Toluene-d8	03	SW8260B	102 %		85-120		12/08/16 20:33	12/08/16 20:33	KCS
Surr: 1,2-Dichloroethane-d4	03RE1	SW8260B	98.2 %		70-120		12/08/16 21:43	12/08/16 21:43	KCS
Surr: 4-Bromofluorobenzene	03RE1	SW8260B	97.7 %		75-120		12/08/16 21:43	12/08/16 21:43	KCS
Surr: Dibromofluoromethane	03RE1	SW8260B	96.7 %		80-119		12/08/16 21:43	12/08/16 21:43	KCS
Surr: Toluene-d8	03RE1	SW8260B	96.6 %		85-120		12/08/16 21:43	12/08/16 21:43	KCS
Semivolatile Organic Compou	inds by GC	MS							
2,3,7,8-TCDD (SIM)	03	EPA625	Not Detected			1	12/09/16 09:35	12/14/16 15:58	EWS
1,2,4,5-Tetrachlorobenzene	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
1,2,4-Trichlorobenzene	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
1,2-Dichlorobenzene	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
1,2-Diphenylhydrazine	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
1,3-Dichlorobenzene	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
1,3-Dinitrobenzene	03	SW8270D	<1370 ug/L		1370	500	12/09/16 09:35	12/13/16 20:01	EWS
1,4-Dichlorobenzene	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
1-Naphthylamine	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
2,3,4,6-Tetrachlorophenol	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 3

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-11 Laboratory Sample ID: 16L0239-03

Parameter	Samp ID	Method	Result	Reporting Qual Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS						
2,4,5-Trichlorophenol	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
2,4,6-Trichlorophenol	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
2,4-Dichlorophenol	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
2,4-Dimethylphenol	03	SW8270D	1690 ug/L	275	500	12/09/16 09:35	12/13/16 20:01	EWS
2,4-Dinitrophenol	03	SW8270D	<27500 ug/L	27500	500	12/09/16 09:35	12/13/16 20:01	EWS
2,4-Dinitrotoluene	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
2,6-Dichlorophenol	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
2,6-Dinitrotoluene	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
2-Chloronaphthalene	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
2-Chlorophenol	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
2-Methylnaphthalene	03	SW8270D	1400 ug/L	1100	500	12/09/16 09:35	12/13/16 20:01	EWS
2-Naphthylamine	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
2-Nitroaniline	03	SW8270D	<11000 ug/L	11000	500	12/09/16 09:35	12/13/16 20:01	EWS
2-Nitrophenol	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
3,3'-Dichlorobenzidine	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
3-Methylcholanthrene	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
3-Nitroaniline	03	SW8270D	<11000 ug/L	11000	500	12/09/16 09:35	12/13/16 20:01	EWS
4,6-Dinitro-2-methylphenol	03	SW8270D	<27500 ug/L	27500	500	12/09/16 09:35	12/13/16 20:01	EWS
4-Aminobiphenyl	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
4-Bromophenyl phenyl ether	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
4-Chloroaniline	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
4-Chlorophenyl phenyl ether	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
4-Nitroaniline	03	SW8270D	<11000 ug/L	11000	500	12/09/16 09:35	12/13/16 20:01	EWS
4-Nitrophenol	03	SW8270D	<27500 ug/L	27500	500	12/09/16 09:35	12/13/16 20:01	EWS
7,12-Dimethylbenz (a) anthracene	03	SW8270D	<5490 ug/L	5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Acenaphthene	03	SW8270D	65.9 ug/L	54.9	500	12/09/16 09:35	12/13/16 20:01	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-11 Laboratory Sample ID: 16L0239-03

Parameter	Samp ID	Method	Result		orting imit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compou	ınds by GC	MS							
Acenaphthylene	03	SW8270D	456 ug/L	5	4.9	500	12/09/16 09:35	12/13/16 20:01	EWS
Acetophenone	03	SW8270D	<11000 ug/L	11	000	500	12/09/16 09:35	12/13/16 20:01	EWS
Aniline	03	SW8270D	<27500 ug/L	27	7500	500	12/09/16 09:35	12/13/16 20:01	EWS
Anthracene	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Benzidine	03	SW8270D	<27500 ug/L	27	7500	500	12/09/16 09:35	12/13/16 20:01	EWS
Benzo (a) anthracene	03	SW8270D	<27.5 ug/L	2	7.5	500	12/09/16 09:35	12/13/16 20:01	EWS
Benzo (a) pyrene	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Benzo (b) fluoranthene	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Benzo (g,h,i) perylene	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Benzo (k) fluoranthene	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Benzoic acid	03	SW8270D	<27500 ug/L	27	7500	500	12/09/16 09:35	12/13/16 20:01	EWS
Benzyl alcohol	03	SW8270D	<11000 ug/L	11	1000	500	12/09/16 09:35	12/13/16 20:01	EWS
bis (2-Chloroethoxy) methane	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
bis (2-Chloroethyl) ether	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
bis (2-Chloroisopropyl) ether	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
bis (2-Ethylhexyl) phthalate	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Butyl benzyl phthalate	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Chrysene	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Dibenz (a,h) anthracene	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Dibenz (a,j) acridine	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Dibenzofuran	03	SW8270D	<2750 ug/L	2	750	500	12/09/16 09:35	12/13/16 20:01	EWS
Diethyl phthalate	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Dimethyl phthalate	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Di-n-butyl phthalate	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Di-n-octyl phthalate	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS
Diphenylamine	03	SW8270D	<5490 ug/L	5	490	500	12/09/16 09:35	12/13/16 20:01	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: Julia Campus

Project Number: 36156.015

Purchase Order:

Purchase Order

Laboratory Order ID: 16L0239

Analytical Results

Client Site I.D.:

Sample I.D. MW-11 Laboratory Sample ID: 16L0239-03

Parameter	Samp ID	Method	Result	R Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Ethyl methanesulfonate	03	SW8270D	<11000 ug/L		11000	500	12/09/16 09:35	12/13/16 20:01	EWS
Fluoranthene	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Fluorene	03	SW8270D	209 ug/L		54.9	500	12/09/16 09:35	12/13/16 20:01	EWS
Hexachlorobenzene	03	SW8270D	<549 ug/L		549	500	12/09/16 09:35	12/13/16 20:01	EWS
Hexachlorobutadiene	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Hexachlorocyclopentadiene	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Hexachloroethane	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Indeno (1,2,3-cd) pyrene	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Isophorone	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
m+p-Cresols	03	SW8270D	3340 ug/L		2750	500	12/09/16 09:35	12/13/16 20:01	EWS
Methyl methanesulfonate	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Naphthalene	03	SW8270D	35600 ug/L		2750	500	12/09/16 09:35	12/13/16 20:01	EWS
Nitrobenzene	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
n-Nitrosodimethylamine	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
n-Nitrosodi-n-butylamine	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
n-Nitrosodi-n-propylamine	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
n-Nitrosodiphenylamine	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
n-Nitrosopiperidine	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
o+m+p-Cresols	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
o-Cresol	03	SW8270D	<1370 ug/L		1370	500	12/09/16 09:35	12/13/16 20:01	EWS
p-(Dimethylamino) azobenzene	03	SW8270D	<1370 ug/L		1370	500	12/09/16 09:35	12/13/16 20:01	EWS
p-Chloro-m-cresol	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Pentachloronitrobenzene (quintozene)	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Pentachlorophenol	03	SW8270D	<11000 ug/L		11000	500	12/09/16 09:35	12/13/16 20:01	EWS
Phenacetin	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-11 Laboratory Sample ID: 16L0239-03

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Semivolatile Organic Compo	unds by GC	MS							
Phenanthrene	03	SW8270D	225 ug/L		54.9	500	12/09/16 09:35	12/13/16 20:01	EWS
Phenol	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Pronamide	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Pyrene	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Pyridine	03	SW8270D	<5490 ug/L		5490	500	12/09/16 09:35	12/13/16 20:01	EWS
Surr: 2,4,6-Tribromophenol	03	SW8270D	221 %	DS	40-125		12/09/16 09:35	12/13/16 20:01	EWS
Surr: 2-Fluorobiphenyl	03	SW8270D	%	DS	23-87		12/09/16 09:35	12/13/16 20:01	<i>EWS</i>
Surr: 2-Fluorophenol	03	SW8270D	86.0 %	DS	14-52		12/09/16 09:35	12/13/16 20:01	EWS
Surr: Nitrobenzene-d5	03	SW8270D	%	DS	40-110		12/09/16 09:35	12/13/16 20:01	EWS
Surr: Phenol-d5	03	SW8270D	%	DS	5-33		12/09/16 09:35	12/13/16 20:01	EWS
Surr: p-Terphenyl-d14	03	SW8270D	%	DS	27-133		12/09/16 09:35	12/13/16 20:01	EWS
Organochlorine Pesticides an	d PCBs by	GC/ECD							
4,4'-DDD	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
4,4'-DDE	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
4,4'-DDT	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Aldrin	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
alpha-BHC	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
beta-BHC	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Chlordane	03	SW8081B	<0.222 ug/L		0.222	1	12/09/16 14:08	12/12/16 21:43	SKS
delta-BHC	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Dieldrin	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Endosulfan I	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Endosulfan II	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Endosulfan sulfate	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Endrin	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Endrin aldehyde	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. MW-11 Laboratory Sample ID: 16L0239-03

<u> </u>									
Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Organochlorine Pesticides a	nd PCBs by	GC/ECD							
gamma-BHC (Lindane)	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Heptachlor	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Heptachlor epoxide	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Methoxychlor	03	SW8081B	<0.056 ug/L		0.056	1	12/09/16 14:08	12/12/16 21:43	SKS
Toxaphene	03	SW8081B	<1.11 ug/L		1.11	1	12/09/16 14:08	12/12/16 21:43	SKS
Surr: TCMX	03	SW8081B	85.0 %		18-112		12/09/16 14:08	12/12/16 21:43	SKS
Surr: DCB	03	SW8081B	25.0 %	S	27-131		12/09/16 14:08	12/12/16 21:43	SKS
Wet Chemistry Analysis									
Cyanide	03	SW9012	1.51 mg/L	CI	0.05	5	12/12/16 16:53	12/12/16 16:53	BBP



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D. Trip Blank Laboratory Sample ID: 16L0239-04

Date/Time Sampled: 11/22/2016 14:25

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
1,1,1,2-Tetrachloroethane	04	SW8260B	<0.40 ug/L		0.40	1	12/08/16 12:24	12/08/16 12:24	JDW
1,1,1-Trichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,1,2,2-Tetrachloroethane	04	SW8260B	<0.40 ug/L		0.40	1	12/08/16 12:24	12/08/16 12:24	JDW
1,1,2-Trichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,1-Dichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,1-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,1-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,2,3-Trichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,2,3-Trichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,2,4-Trichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,2,4-Trimethylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,2-Dibromo-3-chloropropane (DBCP)	04	SW8260B	<4.00 ug/L		4.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,2-Dibromoethane (EDB)	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,2-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,2-Dichloroethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,2-Dichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,3,5-Trimethylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,3-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,3-Dichloropropane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
1,4-Dichlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
2,2-Dichloropropane	04	SW8260B	<2.00 ug/L		2.00	1	12/08/16 12:24	12/08/16 12:24	JDW
2-Butanone (MEK)	04	SW8260B	<10.0 ug/L		10.0	1	12/08/16 12:24	12/08/16 12:24	JDW
2-Chlorotoluene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
2-Hexanone (MBK)	04	SW8260B	<5.00 ug/L		5.00	1	12/08/16 12:24	12/08/16 12:24	JDW
4-Chlorotoluene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
4-Isopropyltoluene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

Analytical Results

Sample I.D.

Trip Blank

Laboratory Sample ID:

16L0239-04

Date/Time Sampled: 11/22/2016 14:25

Parameter	Samp ID	Method	Result Q	(ual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
4-Methyl-2-pentanone (MIBK)	04	SW8260B	<5.00 ug/L		5.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Acetone	04	SW8260B	<10.0 ug/L		10.0	1	12/08/16 12:24	12/08/16 12:24	JDW
Benzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Bromobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Bromochloromethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Bromodichloromethane	04	SW8260B	<0.50 ug/L		0.50	1	12/08/16 12:24	12/08/16 12:24	JDW
Bromoform	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Bromomethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Carbon disulfide	04	SW8260B	<10.0 ug/L		10.0	1	12/08/16 12:24	12/08/16 12:24	JDW
Carbon tetrachloride	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Chlorobenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Chloroethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Chloroform	04	SW8260B	<0.50 ug/L		0.50	1	12/08/16 12:24	12/08/16 12:24	JDW
Chloromethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
cis-1,2-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
cis-1,3-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Dibromochloromethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Dibromomethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Dichlorodifluoromethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Di-isopropyl ether (DIPE)	04	SW8260B	<5.00 ug/L		5.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Ethylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Hexachlorobutadiene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
lodomethane	04	SW8260B	<10.0 ug/L		10.0	1	12/08/16 12:24	12/08/16 12:24	JDW
Isopropylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
m+p-Xylenes	04	SW8260B	<2.00 ug/L		2.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Methylene chloride	04	SW8260B	<4.00 ug/L		4.00	1	12/08/16 12:24	12/08/16 12:24	JDW



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Laboratory Order ID: 16L0239

- Analytical Results

Sample I.D. Trip Blank

Laboratory Sample ID:

16L0239-04

Date/Time Sampled: 11/22/2016 14:25

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Volatile Organic Compounds	by GCMS								
Methyl-t-butyl ether (MTBE)	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Naphthalene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
n-Butylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
n-Propylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
o-Xylene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
sec-Butylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Styrene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
tert-Butylbenzene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Tetrachloroethylene (PCE)	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Toluene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
trans-1,2-Dichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
trans-1,3-Dichloropropene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Trichloroethylene	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Trichlorofluoromethane	04	SW8260B	<1.00 ug/L		1.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Vinyl acetate	04	SW8260B	<10.0 ug/L		10.0	1	12/08/16 12:24	12/08/16 12:24	JDW
Vinyl chloride	04	SW8260B	<0.50 ug/L		0.50	1	12/08/16 12:24	12/08/16 12:24	JDW
Xylenes, Total	04	SW8260B	<3.00 ug/L		3.00	1	12/08/16 12:24	12/08/16 12:24	JDW
Surr: 1,2-Dichloroethane-d4	04	SW8260B	108 %		70-120		12/08/16 12:24	12/08/16 12:24	JDW
Surr: 4-Bromofluorobenzene	04	SW8260B	92.7 %		75-120		12/08/16 12:24	12/08/16 12:24	JDW
Surr: Dibromofluoromethane	04	SW8260B	104 %		80-119		12/08/16 12:24	12/08/16 12:24	JDW
Surr: Toluene-d8	04	SW8260B	99.9 %		85-120		12/08/16 12:24	12/08/16 12:24	JDW



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Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Fulton Gas

Submitted To: Julia Campus

Client Site I.D.:

Project Number: 36156.015

Purchase Order:

——— Analytical Summary

Preparation Method:

Preparation Method:

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID		
Metals (Total) by EPA	A 200 Series Methods	Preparation Method:	EPA200.2/R2.8				
16L0239-01	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0259	SZL0294	AL60044		
16L0239-01RE1	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0259	SZL0322	AL60052		
16L0239-02	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0259	SZL0294	AL60044		
16L0239-02RE1	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0259	SZL0322	AL60052		
16L0239-03	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0259	SZL0294	AL60044		
16L0239-03RE1	50.0 mL / 50.0 mL	EPA200.7 Rev 4.4	BZL0259	SZL0322	AL60052		
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID		
Metals (Total) by EPA	A 6000/7000 Series Methods	Preparation Method:	EPA200.9/R2.2				
16L0239-01	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0370	AL60063		
16L0239-01	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0397	AL60069		
16L0239-01	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0416	AL60071		
16L0239-01	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0418	AL60072		
16L0239-02	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0370	AL60063		
16L0239-02	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0397	AL60069		
16L0239-02	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0416	AL60071		
16L0239-02	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0418	AL60072		
16L0239-03	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0370	AL60063		
16L0239-03	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0397	AL60069		
16L0239-03	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0416	AL60071		
16L0239-03	50.0 mL / 50.0 mL	SW7010	BZL0324	SZL0418	AL60072		
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID		
Wet Chemistry Analy	ysis	Preparation Method:	No Prep Wet Ch	em			
16L0239-01	6.00 mL / 6.00 mL	SW9012	BZL0339	SZL0327	AL60054		
16L0239-02	6.00 mL / 6.00 mL	SW9012	BZL0339	SZL0327	AL60054		
16L0239-03	6.00 mL / 6.00 mL	SW9012	BZL0339	SZL0327	AL60054		



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Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Sample ID	Preparation Factors Initial / Final	· Mothod		Sequence ID	Calibration ID
-	Compounds by GCMS	Preparation Method:	SW3510C		
16L0239-01	900 mL / 1.00 mL	EPA625	BZL0273	SZL0437	AE60009
16L0239-02	990 mL / 1.00 mL	EPA625	BZL0273	SZL0437	AE60009
16L0239-03	910 mL / 1.00 mL	EPA625	BZL0273	SZL0437	AE60009
16L0239-01	900 mL / 1.00 mL	SW8270D	BZL0273	SZL0377	AE60009
16L0239-02	990 mL / 1.00 mL	SW8270D	BZL0273	SZL0377	AE60009
16L0239-03	910 mL / 1.00 mL	SW8270D	BZL0273	SZL0377	AE60009
Organochlorine Pest	ticides and PCBs by GC/ECD	Preparation Method:	SW3510C		
16L0239-01	900 mL / 1.00 mL	SW8081B	BZL0305	SZL0352	AL60021
16L0239-02	910 mL / 1.00 mL	SW8081B	BZL0305	SZL0352	AL60021
16L0239-03	900 mL / 1.00 mL	SW8081B	BZL0305	SZL0352	AL60021
16L0239-01	900 mL / 1.00 mL	SW8082A	BZL0305	SZL0376	AL60064
16L0239-02	910 mL / 1.00 mL	SW8082A	BZL0305	SZL0376	AL60064
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Volatile Organic Con	npounds by GCMS	Preparation Method:	SW5030B		
16L0239-04	5.00 mL / 5.00 mL	SW8260B	BZL0271	SZL0254	AL60043
Volatile Organic Con	npounds by GCMS	Preparation Method:	SW5030B		
16L0239-01	5.00 mL / 5.00 mL	SW8260B	BZL0294	SZL0279	AL60042
16L0239-02	5.00 mL / 5.00 mL	SW8260B	BZL0294	SZL0279	AL60042
16L0239-03	5.00 mL / 5.00 mL	SW8260B	BZL0294	SZL0279	AL60042
16L0239-03RE1	5.00 mL / 5.00 mL	SW8260B	BZL0294	SZL0279	AL60042
Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by FP/	A 200 Series Methods	Preparation Method:	SW7470A		
16L0239-01	20.0 mL / 20.0 mL	EPA245.1 R3.0	BZL0267	SZL0313	AL60051
16L0239-01	20.0 mL / 20.0 mL	EPA245.1 R3.0	BZL0267	SZL0313	AL60051
16L0239-02 16L0239-03	20.0 mL / 20.0 mL	EPA245.1 R3.0	BZL0267	SZL0313 SZL0313	AL60051 AL60051
10L0239-03	20.0 IIIL / 20.0 IIIL	EPA245.1 R3.0	DZLUZ01	SZLUSIS	ALOUUƏT



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gas

Purchase Order:

Source

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0259 - EPA200.2/R2.8										
Blank (BZL0259-BLK1)				Prepared	l: 12/08/201	6 Analyze	d: 12/09/2	.016		
Beryllium	<0.0040 mg/L	0.0040	mg/L							
Cadmium	<0.0040 mg/L	0.0040	mg/L							
Chromium	<0.0100 mg/L	0.0100	mg/L							
Copper	<0.0100 mg/L	0.0100	mg/L							
Lead	<0.0100 mg/L	0.0100	mg/L							
Nickel	<0.0100 mg/L	0.0100	mg/L							
Silver	<0.0100 mg/L	0.0100	mg/L							
Zinc	<0.0100 mg/L	0.0100	mg/L							
LCS (BZL0259-BS1)				Prepared	l: 12/08/201	6 Analyze	d: 12/09/2	016		
Beryllium	0.493 mg/L	0.0040	mg/L	0.500	mg/L	98.5	80-120			
Cadmium	0.497 mg/L	0.0040	mg/L	0.500	mg/L	99.4	80-120			
Chromium	0.499 mg/L	0.0100	mg/L	0.500	mg/L	99.8	80-120			
Copper	0.498 mg/L	0.0100	mg/L	0.500	mg/L	99.5	80-120			
Lead	0.505 mg/L	0.0100	mg/L	0.500	mg/L	101	80-120			
Nickel	0.499 mg/L	0.0100	mg/L	0.500	mg/L	99.9	80-120			
Silver	0.104 mg/L	0.0100	mg/L	0.100	mg/L	104	80-120			E
Zinc	0.493 mg/L	0.0100	mg/L	0.500	mg/L	98.7	80-120			
LCS Dup (BZL0259-BSD1)				Prepared	l: 12/08/201	6 Analyze	d: 12/09/2	016		
Beryllium	0.488 mg/L	0.0040	mg/L	0.500	mg/L	97.7	80-120	0.870	20	
Cadmium	0.494 mg/L	0.0040	mg/L	0.500	mg/L	98.7	80-120	0.684	20	
Chromium	0.489 mg/L	0.0100	mg/L	0.500	mg/L	97.8	80-120	2.03	20	
Copper	0.494 mg/L	0.0100	mg/L	0.500	mg/L	98.7	80-120	0.817	20	
Lead	0.497 mg/L	0.0100	mg/L	0.500	mg/L	99.5	80-120	1.48	20	
Nickel	0.487 mg/L	0.0100	mg/L	0.500	mg/L	97.4	80-120	2.57	20	
Silver	0.103 mg/L	0.0100	mg/L	0.100	mg/L	103	80-120	0.507	20	E
Zinc	0.490 mg/L	0.0100	mg/L	0.500	mg/L	98.0	80-120	0.707	20	



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Final Report

Client Name: Timmons Group Date Issued:

12/14/2016 16:49

RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: **Fulton Gas**

Purchase Order:

Source

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0259 - EPA200.2/R2.8										
Matrix Spike (BZL0259-MS1)	Sour	ce: 16L023	5-06	Prepared	: 12/08/2016	Analyze	d: 12/09/2	016		
Beryllium	0.519 mg/L	0.0040	mg/L	0.500	<0.0040 mg/L	104	75-125			
Cadmium	0.511 mg/L	0.0040	mg/L	0.500	<0.0040 mg/L	102	75-125			
Chromium	0.513 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	103	75-125			
Copper	0.529 mg/L	0.0100	mg/L	0.500 (0.0132 mg/L	103	75-125			
Lead	0.520 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	104	75-125			
Nickel	0.512 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	102	75-125			
Silver	0.110 mg/L	0.0100	mg/L	0.100	<0.0100 mg/L	110	75-125			E
Zinc	0.537 mg/L	0.0100	mg/L	0.500 (0.0177 mg/L	104	75-125			
Matrix Spike Dup (BZL0259-MSD1)	Sour	ce: 16L023	5-06	Prepared	: 12/08/2016	Analyze	d: 12/09/2	016		
Beryllium	0.506 mg/L	0.0040	mg/L	0.500	<0.0040 mg/L	101	75-125	2.55	20	
Cadmium	0.499 mg/L	0.0040	mg/L	0.500	<0.0040 mg/L	99.8	75-125	2.47	20	
Chromium	0.498 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	99.6	75-125	2.93	20	
Copper	0.517 mg/L	0.0100	mg/L	0.500 (0.0132 mg/L	101	75-125	2.32	20	
Lead	0.504 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	101	75-125	3.01	20	
Nickel	0.498 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	98.9	75-125	2.79	20	
Silver	0.106 mg/L	0.0100	mg/L	0.100	<0.0100 mg/L	106	75-125	3.44	20	E
Zinc	0.523 mg/L	0.0100	mg/L	0.500 (0.0177 mg/L	101	75-125	2.70	20	
Batch BZL0267 - SW7470A										

Blank (BZL0267-BLK1)				Prepared: 12/08/2016 An	nalyzed	l: 12/09/2016
Mercury	<0.0002 mg/L	0.0002	mg/L			
LCS (BZL0267-BS1)				Prepared: 12/08/2016 An	nalyzed	l: 12/09/2016



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Metals (Total) by EPA 200 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0267 - SW7470A										
LCS Dup (BZL0267-BSD1)				Prepared:	12/08/2016	S Analyze	d: 12/09/2	016		
Mercury	0.0022 mg/L	0.0002	mg/L	0.00250 m	ng/L	88.7	85-115	0.383	20	
Matrix Spike (BZL0267-MS1)	Source: 16L0145-01			Prepared: 12/08/2016 Analyzed: 12/09/2016						
Mercury	0.0023 mg/L	0.0002	mg/L	0.00250<0	0.0002 mg/L	93.8	70-130			
Matrix Spike (BZL0267-MS2)	Sour	ce: 16L0161	-03	Prepared: 12/08/2016 Analyzed: 12/09/2016						
Mercury	0.0003 mg/L	0.0002	mg/L	0.002500.	0002 mg/L	6.19	70-130			M
Matrix Spike Dup (BZL0267-MSD1)	Sour	ce: 16L0145	-01	Prepared:	12/08/2016	S Analyze	d: 12/09/2	016		
Mercury	0.0025 mg/L	0.0002	mg/L	0.00250<0	0.0002 mg/L	98.1	70-130	4.44	20	
Matrix Spike Dup (BZL0267-MSD2)	Sour	ce: 16L0161	-03	Prepared: 12/08/2016 Analyzed: 12/09/2016						
Mercury	0.0026 mg/L	0.0002	mg/L	0.002500.	0002 mg/L	97.1	70-130	153	20	Р



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12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0324 - EPA200.9/R2.2										
Blank (BZL0324-BLK1)				Prepared:	12/08/201	6 Analyze	d: 12/12/2	016		
Arsenic	<0.0050 mg/L	0.0050	mg/L							
Blank (BZL0324-BLK2)				Prepared:	12/08/201	6 Analyze	d: 12/13/2	016		
Antimony	<0.0050 mg/L	0.0050	mg/L							
Blank (BZL0324-BLK3)				Prepared:	12/08/201	6 Analyze	d: 12/14/2	016		
Thallium	<0.0020 mg/L	0.0020	mg/L							
Blank (BZL0324-BLK4)				Prepared:	12/08/201	6 Analyze	d: 12/14/2	016		
Selenium	<0.0030 mg/L	0.0030	mg/L							
LCS (BZL0324-BS1)				Prepared:	12/08/201	6 Analyze	d: 12/12/2	016		
Arsenic	0.0451 mg/L	0.0125	mg/L	0.0500 r	ng/L	90.2	80-120			
LCS (BZL0324-BS2)				Prepared:	12/08/201	6 Analyze	d: 12/14/2	016		
Antimony	0.0435 mg/L	0.0125	mg/L	0.0500 r	ng/L	86.9	80-120			
LCS (BZL0324-BS3)				Prepared:	12/08/201	6 Analyze	d: 12/14/2	016		
Thallium	0.0551 mg/L	0.0050	mg/L	0.0500 r	ng/L	110	80-120			
LCS (BZL0324-BS4)				Prepared:	12/08/201	6 Analyze	d: 12/14/2	016		
Selenium	0.0472 mg/L	0.0075	mg/L	0.0500 r	ng/L	94.5	75-125			
LCS Dup (BZL0324-BSD1)				Prepared:	12/08/201	6 Analyze	d: 12/12/2	016		
Arsenic	0.0441 mg/L	0.0125	mg/L	0.0500 r	ng/L	88.1	80-120	2.40	20	
LCS Dup (BZL0324-BSD2)				Prepared:	12/08/201	6 Analyze	d: 12/14/2	016		
Antimony	0.0436 mg/L	0.0125	mg/L	0.0500 r	ng/L	87.1	80-120	0.246	20	



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1001 Boulders Parkway, Suite 300 Richmond VA, 23225

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36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0324 - EPA200.9/R2.2										
LCS Dup (BZL0324-BSD3)				Prepared:	12/08/2016	Analyze	d: 12/14/2	016		
Thallium	0.0524 mg/L	0.0050	mg/L	0.0500 r	ng/L	105	80-120	4.94	20	
LCS Dup (BZL0324-BSD4)				Prepared:	12/08/2016	Analyze	d: 12/14/2	016		
Selenium	0.0470 mg/L	0.0075	mg/L	0.0500 r	ng/L	94.0	75-125	0.493	20	
Matrix Spike (BZL0324-MS1)	Sour	ce: 16L0235	-06	Prepared:	12/08/2016	Analyze	d: 12/12/2	016		
Arsenic	0.0429 mg/L	0.0125	mg/L	0.0500 <	0.0125 mg/L	85.8	75-125			
Matrix Spike (BZL0324-MS2)	Sour	ce: 16L0235	-06	Prepared:	12/08/2016	Analyze	d: 12/14/2	016		
Antimony	0.0397 mg/L	0.0125	mg/L	0.0500 <	0.0125 mg/L	79.4	75-125			
Matrix Spike (BZL0324-MS3)	Sour	ce: 16L0235	-06	Prepared:	12/08/2016	Analyze	d: 12/14/2	016		
Thallium	0.0519 mg/L	0.0050	mg/L	0.0500 <	0.0050 mg/L	104	75-125			
Matrix Spike (BZL0324-MS4)	Sour	ce: 16L0235	-06	Prepared:	12/08/2016	Analyze	d: 12/14/2	016		
Selenium	0.0487 mg/L	0.0075	mg/L	0.0500 <	0.0075 mg/L	97.3	75-125			
Matrix Spike Dup (BZL0324-MSD1)	Sour	ce: 16L0235	-06	Prepared:	12/08/2016	Analyze	d: 12/12/2	016		
Arsenic	0.0458 mg/L	0.0125	mg/L	0.0500 <	0.0125 mg/L	91.5	75-125	6.44	20	
Matrix Spike Dup (BZL0324-MSD2)	Sour	ce: 16L0235	-06	Prepared:	12/08/2016	Analyze	d: 12/14/2	016		
Antimony	0.0405 mg/L	0.0125	mg/L	0.0500 <	0.0125 mg/L	81.0	75-125	1.99	20	
Matrix Spike Dup (BZL0324-MSD3)	Sour	ce: 16L0235	-06	Prepared:	12/08/2016	Analyze	d: 12/14/2	016		
Thallium	0.0555 mg/L	0.0050	mg/L	0.0500 <	0.0050 mg/L	111	75-125	6.84	20	
Matrix Spike Dup (BZL0324-MSD4)	Sour	ce: 16L0235	-06	Prepared:	12/08/2016	Analyze	d: 12/14/2	016		
Selenium	0.0472 mg/L	0.0075	mg/L	0.0500 <	0.0075 mg/L	94.5	75-125	2.95	20	



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Julia Campus

Project Number:

36156.015

Client Site I.D.: **Fulton Gas**

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0271 - SW5030B

Submitted To:

Blank (BZL0271-BLK1)			Prepared & Analyzed: 12/08/2016
1,1,1,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L
1,2,3-Trichlorobenzene	<1.00 ug/L	1.00	ug/L
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L
1,2,4-Trimethylbenzene	<1.00 ug/L	1.00	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	<4.00 ug/L	4.00	ug/L
1,2-Dibromoethane (EDB)	<1.00 ug/L	1.00	ug/L
1,2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L
1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L
1,2-Dichloropropane	<1.00 ug/L	1.00	ug/L
1,3,5-Trimethylbenzene	<1.00 ug/L	1.00	ug/L
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L
2,2-Dichloropropane	<2.00 ug/L	2.00	ug/L
2-Butanone (MEK)	<10.0 ug/L	10.0	ug/L
2-Chlorotoluene	<1.00 ug/L	1.00	ug/L
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L
4-Chlorotoluene	<1.00 ug/L	1.00	ug/L
4-Isopropyltoluene	<1.00 ug/L	1.00	ug/L
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L
Acetone	<10.0 ug/L	10.0	ug/L
Benzene	<1.00 ug/L	1.00	ug/L
Bromobenzene	<1.00 ug/L	1.00	ug/L
Bromochloromethane	<1.00 ug/L	1.00	ug/L



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZL0271-BLK1)			Prepared & Analyzed: 12/08/2016
Bromodichloromethane	<0.50 ug/L	0.50	ug/L
Bromoform	<1.00 ug/L	1.00	ug/L
Bromomethane	<1.00 ug/L	1.00	ug/L
Carbon disulfide	<10.0 ug/L	10.0	ug/L
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L
Chlorobenzene	<1.00 ug/L	1.00	ug/L
Chloroethane	<1.00 ug/L	1.00	ug/L
Chloroform	<0.50 ug/L	0.50	ug/L
Chloromethane	<1.00 ug/L	1.00	ug/L
cis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L
cis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L
Dibromochloromethane	<1.00 ug/L	1.00	ug/L
Dibromomethane	<1.00 ug/L	1.00	ug/L
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L
Di-isopropyl ether (DIPE)	<5.00 ug/L	5.00	ug/L
Ethylbenzene	<1.00 ug/L	1.00	ug/L
Hexachlorobutadiene	<1.00 ug/L	1.00	ug/L
lodomethane	<10.0 ug/L	10.0	ug/L
Isopropylbenzene	<1.00 ug/L	1.00	ug/L
m+p-Xylenes	<2.00 ug/L	2.00	ug/L
Methylene chloride	<4.00 ug/L	4.00	ug/L
Methyl-t-butyl ether (MTBE)	<1.00 ug/L	1.00	ug/L
Naphthalene	<1.00 ug/L	1.00	ug/L
n-Butylbenzene	<1.00 ug/L	1.00	ug/L
n-Propylbenzene	<1.00 ug/L	1.00	ug/L
o-Xylene	<1.00 ug/L	1.00	ug/L
sec-Butylbenzene	<1.00 ug/L	1.00	ug/L
Styrene	<1.00 ug/L	1.00	ug/L
tert-Butylbenzene	<1.00 ug/L	1.00	ug/L
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L
Toluene	<1.00 ug/L	1.00	ug/L



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gas

Purchase Order:

Source

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0271 - SW5030B										
Blank (BZL0271-BLK1)				Prepared	l & Analyzed	d: 12/08/20	016			
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L							
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L							
Trichloroethylene	<1.00 ug/L	1.00	ug/L							
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L							
Vinyl acetate	<10.0 ug/L	10.0	ug/L							
Vinyl chloride	<0.50 ug/L	0.50	ug/L							
Xylenes, Total	<3.00 ug/L	3.00	ug/L							
Surr: 1,2-Dichloroethane-d4	51.7		ug/L	50.0		103	70-120			
Surr: 4-Bromofluorobenzene	48.4		ug/L	50.0		96.8	75-120			
Surr: Dibromofluoromethane	52.0		ug/L	50.0		104	80-119			
Surr: Toluene-d8	50.6		ug/L	50.0		101	85-120			
LCS (BZL0271-BS1)				Prepared	I & Analyzed	d: 12/08/20	016			
1,1,1,2-Tetrachloroethane	45.9 ug/L	0.4	ug/L	50.0	ug/L	91.9	80-130			
1,1,1-Trichloroethane	48.4 ug/L	1	ug/L	50.0	ug/L	96.9	65-130			
1,1,2,2-Tetrachloroethane	45.2 ug/L	0.4	ug/L	50.0	ug/L	90.3	65-130			
1,1,2-Trichloroethane	47.4 ug/L	1	ug/L	50.0	ug/L	94.7	75-125			
1,1-Dichloroethane	49.5 ug/L	1	ug/L	50.0	ug/L	98.9	70-135			
1,1-Dichloroethylene	46.8 ug/L	1	ug/L	50.0	ug/L	93.7	70-130			
1,1-Dichloropropene	46.2 ug/L	1	ug/L	50.0	ug/L	92.3	75-135			
1,2,3-Trichlorobenzene	50.2 ug/L	1	ug/L	50.0	ug/L	100	55-140			
1,2,3-Trichloropropane	45.3 ug/L	1	ug/L	50.0	ug/L	90.6	75-125			
1,2,4-Trichlorobenzene	50.7 ug/L	1	ug/L	50.0	ug/L	101	65-135			
1,2,4-Trimethylbenzene	52.5 ug/L	1	ug/L	50.0	ug/L	105	75-130			
1,2-Dibromo-3-chloropropane (DBCP)	47.3 ug/L	4	ug/L	50.0	ug/L	94.7	50-130			
1,2-Dibromoethane (EDB)	47.0 ug/L	1	ug/L	50.0	ug/L	94.0	80-120			
1,2-Dichlorobenzene	50.5 ug/L	1	ug/L	50.0	ug/L	101	70-120			
1,2-Dichloroethane	45.3 ug/L	1	ug/L	50.0	ug/L	90.6	70-130			
1,2-Dichloropropane	48.7 ug/L	1	ug/L	50.0	ug/L	97.5	75-125			
1,3,5-Trimethylbenzene	53.2 ug/L	1	ug/L	50.0	ug/L	106	75-125			
1,3-Dichlorobenzene	50.7 ug/L	1	ug/L	50.0	ug/L	101	75-125			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Isopropylbenzene

m+p-Xylenes

Purchase Order:

94.9

99.9

75-125

75-130

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0271 - SW5030B LCS (BZL0271-BS1) Prepared & Analyzed: 12/08/2016 1,3-Dichloropropane 45.9 ug/L 1 ug/L 50.0 ug/L 91.9 75-125 1,4-Dichlorobenzene 75-125 49.4 ug/L 1 ug/L 50.0 ug/L 98.7 2 50.0 70-135 2,2-Dichloropropane 52.3 ug/L ug/L 105 ug/L 2-Butanone (MEK) 43.5 ug/L 10 87.0 30-150 ug/L 50.0 ug/L 2-Chlorotoluene 53.2 ug/L 106 75-125 1 ug/L 50.0 ug/L 2-Hexanone (MBK) 49.5 ug/L 5 ug/L 50.0 ug/L 99.0 55-130 4-Chlorotoluene 50.6 ug/L ug/L 50.0 ug/L 101 75-130 1 4-Isopropyltoluene 53.4 ug/L 1 ug/L 50.0 ug/L 107 75-130 4-Methyl-2-pentanone (MIBK) 50.6 ug/L 5 ug/L 50.0 ug/L 101 60-135 Acetone 31.7 ug/L 10 ug/L 50.0 ug/L 63.4 40-140 80-120 Benzene 48.8 ug/L 1 ug/L 50.0 ug/L 97.6 97.0 75-125 Bromobenzene 48.5 ug/L 1 50.0 ug/L ug/L 48.0 ug/L 65-130 Bromochloromethane 1 ug/L 50.0 ug/L 96.0 Bromodichloromethane 52.6 ug/L 0.5 ug/L 50.0 ug/L 105 75-120 Bromoform 46.7 ug/L 1 ug/L 50.0 93.4 70-130 ug/L 50.0 88.2 Bromomethane 44.1 ug/L 30-145 1 ug/L ug/L Carbon disulfide 33.4 ug/L 10 ug/L 50.0 ug/L 66.9 35-160 Carbon tetrachloride 49.8 ug/L ug/L 50.0 99.6 65-140 1 ug/L Chlorobenzene 48.2 ug/L 1 ug/L 50.0 ug/L 96.5 80-120 Chloroethane 48.5 ug/L 1 ug/L 50.0 ug/L 97.0 60-135 Chloroform 48.9 ug/L 0.5 ug/L 50.0 ug/L 97.7 65-135 Chloromethane 40.6 ug/L 1 ug/L 50.0 ug/L 81.2 40-125 99.9 70-125 cis-1,2-Dichloroethylene 50.0 ug/L ug/L 50.0 ug/L 1 cis-1,3-Dichloropropene 44.3 ug/L ug/L 50.0 ug/L 88.5 70-130 Dibromochloromethane 50.0 102 60-135 51.2 ug/L ug/L ug/L Dibromomethane 48.8 ug/L ug/L 50.0 ug/L 97.7 75-125 Dichlorodifluoromethane 41.8 ug/L ug/L 83.7 30-155 50.0 ug/L Ethylbenzene 49.7 ug/L ug/L 50.0 ug/L 99.5 75-125 Hexachlorobutadiene 48.9 ug/L 1 ug/L 50.0 ug/L 97.7 50-140

ug/L

ug/L

2

50.0

100

ug/L

ug/L

47.4 ug/L

99.9 ug/L



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: Fulton Gas

Purchase Order:

Source

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qua
Batch BZL0271 - SW5030B										
LCS (BZL0271-BS1)				Prepare	d & Analyze	d: 12/08/20	016			
Methylene chloride	47.5 ug/L	4	ug/L	50.0	ug/L	95.0	55-140			
Methyl-t-butyl ether (MTBE)	55.6 ug/L	1	ug/L	50.0	ug/L	111	65-125			
Naphthalene	49.2 ug/L	1	ug/L	50.0	ug/L	98.5	55-140			
n-Butylbenzene	54.3 ug/L	1	ug/L	50.0	ug/L	109	70-135			
-Propylbenzene	53.6 ug/L	1	ug/L	50.0	ug/L	107	70-130			
-Xylene	50.4 ug/L	1	ug/L	50.0	ug/L	101	80-120			
ec-Butylbenzene	53.3 ug/L	1	ug/L	50.0	ug/L	107	70-125			
tyrene	50.5 ug/L	1	ug/L	50.0	ug/L	101	65-135			
ert-Butylbenzene	53.4 ug/L	1	ug/L	50.0	ug/L	107	70-130			
etrachloroethylene (PCE)	46.7 ug/L	1	ug/L	50.0	ug/L	93.3	45-150			
oluene	48.8 ug/L	1	ug/L	50.0	ug/L	97.5	75-120			
rans-1,2-Dichloroethylene	48.6 ug/L	1	ug/L	50.0	ug/L	97.2	60-140			
ans-1,3-Dichloropropene	50.1 ug/L	1	ug/L	50.0	ug/L	100	55-140			
richloroethylene	47.4 ug/L	1	ug/L	50.0	ug/L	94.7	70-125			
richlorofluoromethane	44.8 ug/L	1	ug/L	50.0	ug/L	89.6	60-145			
inyl chloride	45.2 ug/L	0.5	ug/L	50.0	ug/L	90.5	50-145			
Surr: 1,2-Dichloroethane-d4	50.6		ug/L	50.0	ug/L	101	70-120			
Surr: 4-Bromofluorobenzene	48.9		ug/L	50.0	ug/L	97.8	75-120			
Surr: Dibromofluoromethane	50.1		ug/L	50.0	ug/L	100	80-119			
Surr: Toluene-d8	50.1		ug/L	50.0	ug/L	100	85-120			
latrix Spike (BZL0271-MS1)	Sour	ce: 16L0242	2-01	Prepare	d & Analyze	d: 12/08/20	016			
,1,1,2-Tetrachloroethane	38.8 ug/L	0.4	ug/L	50.0	<0.4 ug/L	77.7	80-130			М
,1,1-Trichloroethane	40.7 ug/L	1	ug/L	50.0	<1 ug/L	81.4	65-130			
,1,2,2-Tetrachloroethane	39.9 ug/L	0.4	ug/L	50.0	<0.4 ug/L	79.9	65-130			
,1,2-Trichloroethane	41.5 ug/L	1	ug/L	50.0	<1 ug/L	82.9	75-125			
,1-Dichloroethane	41.0 ug/L	1	ug/L	50.0	<1 ug/L	82.0	70-135			
,1-Dichloroethylene	38.1 ug/L	1	ug/L	50.0	<1 ug/L	76.2	70-130			
,1-Dichloropropene	37.4 ug/L	1	ug/L	50.0	<1 ug/L	74.7	75-135			М
,2,3-Trichlorobenzene	39.7 ug/L	1	ug/L	50.0	<1 ug/L	79.4	55-140			
,2,3-Trichloropropane	40.6 ug/L	1	ug/L		<1 ug/L	81.3	75-125			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD		l
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual	l

Matrix Spike (BZL0271-MS1)	Source: 1	6L0242-	01	Prepare	ed & Analyzed	: 12/08/2	016	
1,2,4-Trichlorobenzene	38.3 ug/L	1	ug/L	50.0	<1 ug/L	76.5	65-135	
1,2,4-Trimethylbenzene	40.9 ug/L	1	ug/L	50.0	<1 ug/L	81.9	75-130	
1,2-Dibromo-3-chloropropane (DBCP)	40.0 ug/L	4	ug/L	50.0	<4 ug/L	80.0	50-130	
1,2-Dibromoethane (EDB)	40.7 ug/L	1	ug/L	50.0	<1 ug/L	81.4	80-120	
1,2-Dichlorobenzene	41.1 ug/L	1	ug/L	50.0	<1 ug/L	82.2	70-120	
1,2-Dichloroethane	39.2 ug/L	1	ug/L	50.0	<1 ug/L	78.3	70-130	
1,2-Dichloropropane	40.6 ug/L	1	ug/L	50.0	<1 ug/L	81.1	75-125	
1,3,5-Trimethylbenzene	42.0 ug/L	1	ug/L	50.0	<1 ug/L	84.0	75-125	
1,3-Dichlorobenzene	40.6 ug/L	1	ug/L	50.0	<1 ug/L	81.3	75-125	
1,3-Dichloropropane	39.5 ug/L	1	ug/L	50.0	<1 ug/L	79.0	75-125	
1,4-Dichlorobenzene	39.1 ug/L	1	ug/L	50.0	<1 ug/L	78.1	75-125	
2,2-Dichloropropane	41.2 ug/L	2	ug/L	50.0	<2 ug/L	82.4	70-135	
2-Butanone (MEK)	48.3 ug/L	10	ug/L	50.0	<10 ug/L	96.6	30-150	
2-Chlorotoluene	42.4 ug/L	1	ug/L	50.0	<1 ug/L	84.8	75-125	
2-Hexanone (MBK)	51.5 ug/L	5	ug/L	50.0	<5 ug/L	103	55-130	
4-Chlorotoluene	40.1 ug/L	1	ug/L	50.0	<1 ug/L	80.2	75-130	
4-Isopropyltoluene	40.8 ug/L	1	ug/L	50.0	<1 ug/L	81.6	75-130	
4-Methyl-2-pentanone (MIBK)	53.6 ug/L	5	ug/L	50.0	<5 ug/L	107	60-135	
Acetone	48.0 ug/L	10	ug/L	50.0	<10 ug/L	96.0	40-140	
Benzene	40.9 ug/L	1	ug/L	50.0	<1 ug/L	81.8	80-120	
Bromobenzene	41.2 ug/L	1	ug/L	50.0	<1 ug/L	82.4	75-125	
Bromochloromethane	40.6 ug/L	1	ug/L	50.0	<1 ug/L	81.1	65-130	
Bromodichloromethane	44.6 ug/L	0.5	ug/L	50.0	<0.5 ug/L	89.2	75-120	
Bromoform	41.1 ug/L	1	ug/L	50.0	<1 ug/L	82.2	70-130	
Bromomethane	33.9 ug/L	1	ug/L	50.0	<1 ug/L	67.8	30-145	
Carbon disulfide	35.8 ug/L	10	ug/L	50.0	<10 ug/L	71.7	35-160	
Carbon tetrachloride	40.4 ug/L	1	ug/L	50.0	<1 ug/L	80.9	65-140	
Chlorobenzene	39.8 ug/L	1	ug/L	50.0	<1 ug/L	79.7	80-120	M
Chloroethane	38.7 ug/L	1	ug/L	50.0	<1 ug/L	77.5	60-135	
Chloroform	40.2 ug/L	0.5	ug/L	50.0	<0.5 ug/L	80.3	65-135	
Chloromethane	32.9 ug/L	1	ug/L	50.0	<1 ug/L	65.8	40-125	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike (BZL0271-MS1)	Source:	16L0242-	01	Prepare	ed & Analyze	d: 12/08/2	016	
cis-1,2-Dichloroethylene	40.2 ug/L	1	ug/L	50.0	<1 ug/L	80.4	70-125	
cis-1,3-Dichloropropene	36.3 ug/L	1	ug/L	50.0	<1 ug/L	72.6	70-130	
Dibromochloromethane	44.8 ug/L	1	ug/L	50.0	<1 ug/L	89.5	60-135	
Dibromomethane	41.3 ug/L	1	ug/L	50.0	<1 ug/L	82.6	75-125	
Dichlorodifluoromethane	34.0 ug/L	1	ug/L	50.0	<1 ug/L	68.0	30-155	
Ethylbenzene	40.7 ug/L	1	ug/L	50.0	<1 ug/L	81.5	75-125	
Hexachlorobutadiene	37.4 ug/L	1	ug/L	50.0	<1 ug/L	74.9	50-140	
Isopropylbenzene	38.1 ug/L	1	ug/L	50.0	<1 ug/L	76.2	75-125	
m+p-Xylenes	81.3 ug/L	2	ug/L	100	<2 ug/L	81.3	75-130	
Methylene chloride	41.7 ug/L	4	ug/L	50.0	<4 ug/L	83.5	55-140	
Methyl-t-butyl ether (MTBE)	48.8 ug/L	1	ug/L	50.0	<1 ug/L	97.7	65-125	
Naphthalene	41.6 ug/L	1	ug/L	50.0	<1 ug/L	83.0	55-140	
n-Butylbenzene	41.4 ug/L	1	ug/L	50.0	<1 ug/L	82.9	70-135	
n-Propylbenzene	42.2 ug/L	1	ug/L	50.0	<1 ug/L	84.4	70-130	
o-Xylene	41.6 ug/L	1	ug/L	50.0	<1 ug/L	83.1	80-120	
sec-Butylbenzene	41.2 ug/L	1	ug/L	50.0	<1 ug/L	82.4	70-125	
Styrene	41.7 ug/L	1	ug/L	50.0	<1 ug/L	83.4	65-135	
tert-Butylbenzene	41.8 ug/L	1	ug/L	50.0	<1 ug/L	83.7	70-130	
Tetrachloroethylene (PCE)	37.4 ug/L	1	ug/L	50.0	<1 ug/L	74.9	45-150	
Toluene	39.7 ug/L	1	ug/L	50.0	<1 ug/L	79.4	75-120	
trans-1,2-Dichloroethylene	38.7 ug/L	1	ug/L	50.0	<1 ug/L	77.4	60-140	
trans-1,3-Dichloropropene	42.0 ug/L	1	ug/L	50.0	<1 ug/L	83.9	55-140	
Trichloroethylene	38.0 ug/L	1	ug/L	50.0	<1 ug/L	76.0	70-125	
Trichlorofluoromethane	38.0 ug/L	1	ug/L	50.0	<1 ug/L	76.1	60-145	
Vinyl chloride	35.7 ug/L	0.5	ug/L	50.0	<0.5 ug/L	71.4	50-145	
Surr: 1,2-Dichloroethane-d4	49.0		ug/L	50.0	ug/L	98.0	70-120	
Surr: 4-Bromofluorobenzene	50.3		ug/L	50.0	ug/L	101	75-120	
Surr: Dibromofluoromethane	50.0		ug/L	50.0	ug/L	99.9	80-119	
Surr: Toluene-d8	50.1		ug/L	50.0	ug/L	100	85-120	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZL0271-MSD1)	Source:	16L0242	-01	Prepare	ed & Analyzed	d: 12/08/2	016		
1,1,1,2-Tetrachloroethane	45.8 ug/L	0.4	ug/L	50.0	<0.4 ug/L	91.5	80-130	16.4	30
1,1,1-Trichloroethane	48.5 ug/L	1	ug/L	50.0	<1 ug/L	97.0	65-130	17.5	30
1,1,2,2-Tetrachloroethane	47.0 ug/L	0.4	ug/L	50.0	<0.4 ug/L	93.9	65-130	16.2	30
1,1,2-Trichloroethane	48.4 ug/L	1	ug/L	50.0	<1 ug/L	96.8	75-125	15.4	30
1,1-Dichloroethane	48.2 ug/L	1	ug/L	50.0	<1 ug/L	96.3	70-135	16.0	30
1,1-Dichloroethylene	44.8 ug/L	1	ug/L	50.0	<1 ug/L	89.7	70-130	16.3	30
1,1-Dichloropropene	44.4 ug/L	1	ug/L	50.0	<1 ug/L	88.8	75-135	17.2	30
1,2,3-Trichlorobenzene	48.6 ug/L	1	ug/L	50.0	<1 ug/L	97.3	55-140	20.2	30
1,2,3-Trichloropropane	46.8 ug/L	1	ug/L	50.0	<1 ug/L	93.6	75-125	14.1	30
1,2,4-Trichlorobenzene	46.2 ug/L	1	ug/L	50.0	<1 ug/L	92.3	65-135	18.7	30
1,2,4-Trimethylbenzene	49.0 ug/L	1	ug/L	50.0	<1 ug/L	97.9	75-130	17.9	30
1,2-Dibromo-3-chloropropane (DBCP)	46.3 ug/L	4	ug/L	50.0	<4 ug/L	92.5	50-130	14.5	30
1,2-Dibromoethane (EDB)	47.5 ug/L	1	ug/L	50.0	<1 ug/L	95.0	80-120	15.5	30
1,2-Dichlorobenzene	48.3 ug/L	1	ug/L	50.0	<1 ug/L	96.5	70-120	16.1	30
1,2-Dichloroethane	45.8 ug/L	1	ug/L	50.0	<1 ug/L	91.6	70-130	15.6	30
1,2-Dichloropropane	46.0 ug/L	1	ug/L	50.0	<1 ug/L	92.0	75-125	12.6	30
1,3,5-Trimethylbenzene	50.3 ug/L	1	ug/L	50.0	<1 ug/L	101	75-125	17.9	30
1,3-Dichlorobenzene	47.4 ug/L	1	ug/L	50.0	<1 ug/L	94.8	75-125	15.4	30
1,3-Dichloropropane	46.1 ug/L	1	ug/L	50.0	<1 ug/L	92.1	75-125	15.3	30
1,4-Dichlorobenzene	46.0 ug/L	1	ug/L	50.0	<1 ug/L	92.0	75-125	16.2	30
2,2-Dichloropropane	48.3 ug/L	2	ug/L	50.0	<2 ug/L	96.6	70-135	15.9	30
2-Butanone (MEK)	46.4 ug/L	10	ug/L	50.0	<10 ug/L	92.9	30-150	3.95	30
2-Chlorotoluene	49.2 ug/L	1	ug/L	50.0	<1 ug/L	98.4	75-125	14.8	30
2-Hexanone (MBK)	54.4 ug/L	5	ug/L	50.0	<5 ug/L	109	55-130	5.48	30
4-Chlorotoluene	46.2 ug/L	1	ug/L	50.0	<1 ug/L	92.5	75-130	14.2	30
4-Isopropyltoluene	48.5 ug/L	1	ug/L	50.0	<1 ug/L	97.1	75-130	17.3	30
4-Methyl-2-pentanone (MIBK)	57.2 ug/L	5	ug/L	50.0	<5 ug/L	114	60-135	6.44	30
Acetone	51.0 ug/L	10	ug/L	50.0	<10 ug/L	102	40-140	6.02	30
Benzene	47.8 ug/L	1	ug/L	50.0	<1 ug/L	95.5	80-120	15.5	30
Bromobenzene	48.3 ug/L	1	ug/L	50.0	<1 ug/L	96.6	75-125	15.9	30
Bromochloromethane	47.1 ug/L	1	ug/L	50.0	<1 ug/L	94.2	65-130	14.9	30



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZL0271-MSD1)	Source:	16L0242	-01	Prepare	ed & Analyzed	d: 12/08/2	016		
Bromodichloromethane	52.0 ug/L	0.5	ug/L	50.0	<0.5 ug/L	104	75-120	15.4	30
Bromoform	48.6 ug/L	1	ug/L	50.0	<1 ug/L	97.2	70-130	16.7	30
Bromomethane	43.0 ug/L	1	ug/L	50.0	<1 ug/L	86.0	30-145	23.7	30
Carbon disulfide	35.1 ug/L	10	ug/L	50.0	<10 ug/L	70.2	35-160	2.09	30
Carbon tetrachloride	48.7 ug/L	1	ug/L	50.0	<1 ug/L	97.4	65-140	18.6	30
Chlorobenzene	46.8 ug/L	1	ug/L	50.0	<1 ug/L	93.6	80-120	16.0	30
Chloroethane	47.5 ug/L	1	ug/L	50.0	<1 ug/L	95.0	60-135	20.4	30
Chloroform	47.8 ug/L	0.5	ug/L	50.0	<0.5 ug/L	95.5	65-135	17.3	30
Chloromethane	41.8 ug/L	1	ug/L	50.0	<1 ug/L	83.5	40-125	23.7	30
cis-1,2-Dichloroethylene	48.0 ug/L	1	ug/L	50.0	<1 ug/L	96.0	70-125	17.6	30
cis-1,3-Dichloropropene	42.2 ug/L	1	ug/L	50.0	<1 ug/L	84.5	70-130	15.2	30
Dibromochloromethane	52.0 ug/L	1	ug/L	50.0	<1 ug/L	104	60-135	15.0	30
Dibromomethane	48.7 ug/L	1	ug/L	50.0	<1 ug/L	97.4	75-125	16.4	30
Dichlorodifluoromethane	43.4 ug/L	1	ug/L	50.0	<1 ug/L	86.7	30-155	24.2	30
Ethylbenzene	47.7 ug/L	1	ug/L	50.0	<1 ug/L	95.4	75-125	15.7	30
Hexachlorobutadiene	44.8 ug/L	1	ug/L	50.0	<1 ug/L	89.7	50-140	18.0	30
Isopropylbenzene	45.6 ug/L	1	ug/L	50.0	<1 ug/L	91.3	75-125	18.1	30
m+p-Xylenes	95.6 ug/L	2	ug/L	100	<2 ug/L	95.6	75-130	16.2	30
Methylene chloride	49.0 ug/L	4	ug/L	50.0	<4 ug/L	98.1	55-140	16.1	30
Methyl-t-butyl ether (MTBE)	56.8 ug/L	1	ug/L	50.0	<1 ug/L	114	65-125	15.2	30
Naphthalene	50.4 ug/L	1	ug/L	50.0	<1 ug/L	100	55-140	19.0	30
n-Butylbenzene	48.8 ug/L	1	ug/L	50.0	<1 ug/L	97.7	70-135	16.3	30
n-Propylbenzene	50.2 ug/L	1	ug/L	50.0	<1 ug/L	100	70-130	17.4	30
o-Xylene	49.2 ug/L	1	ug/L	50.0	<1 ug/L	98.4	80-120	16.9	30
sec-Butylbenzene	49.4 ug/L	1	ug/L	50.0	<1 ug/L	98.8	70-125	18.1	30
Styrene	49.1 ug/L	1	ug/L	50.0	<1 ug/L	98.2	65-135	16.3	30
tert-Butylbenzene	50.0 ug/L	1	ug/L	50.0	<1 ug/L	100	70-130	17.8	30
Tetrachloroethylene (PCE)	45.0 ug/L	1	ug/L	50.0	<1 ug/L	90.0	45-150	18.4	30
Toluene	46.8 ug/L	1	ug/L	50.0	<1 ug/L	93.7	75-120	16.5	30
trans-1,2-Dichloroethylene	47.0 ug/L	1	ug/L	50.0	<1 ug/L	94.1	60-140	19.5	30
trans-1,3-Dichloropropene	48.6 ug/L	1	ug/L	50.0	<1 ug/L	97.1	55-140	14.6	30



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZL0271-MSD1)	Source:	Source: 16L0242-01			ed & Analyze	ed: 12/08/2	016			
Trichloroethylene	45.3 ug/L	1	ug/L	50.0	<1 ug/L	90.6	70-125	17.6	30	
Trichlorofluoromethane	44.5 ug/L	1	ug/L	50.0	<1 ug/L	88.9	60-145	15.6	30	
Vinyl chloride	45.0 ug/L	0.5	ug/L	50.0	<0.5 ug/L	89.9	50-145	23.0	30	
Surr: 1,2-Dichloroethane-d4	50.6		ug/L	50.0	ug/L	101	70-120			
Surr: 4-Bromofluorobenzene	51.1		ug/L	50.0	ug/L	102	75-120			
Surr: Dibromofluoromethane	50.1		ug/L	50.0	ug/L	100	80-119			
Surr: Toluene-d8	49.7		ug/L	50.0	ug/L	99.5	85-120			

Batch BZL0294 - SW5030B				
				Drangrad 9 Analyzady 12/08/2016
Blank (BZL0294-BLK1) 1.1.1.2-Tetrachloroethane	<0.40 ug/L	0.40	ua/l	Prepared & Analyzed: 12/08/2016
, , ,	•		ug/L	
1,1,1-Trichloroethane	<1.00 ug/L	1.00	ug/L	
1,1,2,2-Tetrachloroethane	<0.40 ug/L	0.40	ug/L	
1,1,2-Trichloroethane	<1.00 ug/L	1.00	ug/L	
1,1-Dichloroethane	<1.00 ug/L	1.00	ug/L	
1,1-Dichloroethylene	<1.00 ug/L	1.00	ug/L	
1,1-Dichloropropene	<1.00 ug/L	1.00	ug/L	
1,2,3-Trichlorobenzene	<1.00 ug/L	1.00	ug/L	
1,2,3-Trichloropropane	<1.00 ug/L	1.00	ug/L	
1,2,4-Trichlorobenzene	<1.00 ug/L	1.00	ug/L	
,2,4-Trimethylbenzene	<1.00 ug/L	1.00	ug/L	
,2-Dibromo-3-chloropropane (DBCP)	<4.00 ug/L	4.00	ug/L	
,2-Dibromoethane (EDB)	<1.00 ug/L	1.00	ug/L	
1,2-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	
1,2-Dichloroethane	<1.00 ug/L	1.00	ug/L	
1,2-Dichloropropane	<1.00 ug/L	1.00	ug/L	
1,3,5-Trimethylbenzene	<1.00 ug/L	1.00	ug/L	
1,3-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	
1,3-Dichloropropane	<1.00 ug/L	1.00	ug/L	
1,4-Dichlorobenzene	<1.00 ug/L	1.00	ug/L	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/

12/14/2016 16:49

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZL0294-BLK1)				Prepared & Analyzed: 12/08/2016
2,2-Dichloropropane	<2.00 ug/L	2.00	ug/L	
2-Butanone (MEK)	<10.0 ug/L	10.0	ug/L	
2-Chlorotoluene	<1.00 ug/L	1.00	ug/L	
2-Hexanone (MBK)	<5.00 ug/L	5.00	ug/L	
4-Chlorotoluene	<1.00 ug/L	1.00	ug/L	
4-Isopropyltoluene	<1.00 ug/L	1.00	ug/L	
4-Methyl-2-pentanone (MIBK)	<5.00 ug/L	5.00	ug/L	
Acetone	<10.0 ug/L	10.0	ug/L	
Benzene	<1.00 ug/L	1.00	ug/L	
Bromobenzene	<1.00 ug/L	1.00	ug/L	
Bromochloromethane	<1.00 ug/L	1.00	ug/L	
Bromodichloromethane	<0.50 ug/L	0.50	ug/L	
Bromoform	<1.00 ug/L	1.00	ug/L	
Bromomethane	<1.00 ug/L	1.00	ug/L	
Carbon disulfide	<10.0 ug/L	10.0	ug/L	
Carbon tetrachloride	<1.00 ug/L	1.00	ug/L	
Chlorobenzene	<1.00 ug/L	1.00	ug/L	
Chloroethane	<1.00 ug/L	1.00	ug/L	
Chloroform	<0.50 ug/L	0.50	ug/L	
Chloromethane	<1.00 ug/L	1.00	ug/L	
cis-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L	
cis-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L	
Dibromochloromethane	<1.00 ug/L	1.00	ug/L	
Dibromomethane	<1.00 ug/L	1.00	ug/L	
Dichlorodifluoromethane	<1.00 ug/L	1.00	ug/L	
Di-isopropyl ether (DIPE)	<5.00 ug/L	5.00	ug/L	
Ethylbenzene	<1.00 ug/L	1.00	ug/L	
Hexachlorobutadiene	<1.00 ug/L	1.00	ug/L	
lodomethane	<10.0 ug/L	10.0	ug/L	
Isopropylbenzene	<1.00 ug/L	1.00	ug/L	
m+p-Xylenes	<2.00 ug/L	2.00	ug/L	



Certificate of Analysis

Final Report

Client Name: **Timmons Group** Date Issued:

12/14/2016 16:49

RPD

RPD

Limit

Qual

1001 Boulders Parkway, Suite 300

Result

47.8 ug/L

51.2 ug/L

52.6 ug/L

51.3 ug/L

49.7 ug/L

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Limits

%REC

Client Site I.D.: **Fulton Gas**

1,1,2-Trichloroethane

1,1-Dichloroethane

1,1-Dichloroethylene

1,1-Dichloropropene

1,1,2,2-Tetrachloroethane

Purchase Order:

Source

Result

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Units

Spike

Level

Reporting

Limit

Blank (BZL0294-BLK1)				Prepare	d & Analyz	ed: 12/08/2	016	
Methylene chloride	<4.00 ug/L	4.00	ug/L					
Methyl-t-butyl ether (MTBE)	<1.00 ug/L	1.00	ug/L					
Naphthalene	<1.00 ug/L	1.00	ug/L					
n-Butylbenzene	<1.00 ug/L	1.00	ug/L					
n-Propylbenzene	<1.00 ug/L	1.00	ug/L					
o-Xylene	<1.00 ug/L	1.00	ug/L					
sec-Butylbenzene	<1.00 ug/L	1.00	ug/L					
Styrene	<1.00 ug/L	1.00	ug/L					
tert-Butylbenzene	<1.00 ug/L	1.00	ug/L					
Tetrachloroethylene (PCE)	<1.00 ug/L	1.00	ug/L					
Toluene	<1.00 ug/L	1.00	ug/L					
trans-1,2-Dichloroethylene	<1.00 ug/L	1.00	ug/L					
trans-1,3-Dichloropropene	<1.00 ug/L	1.00	ug/L					
Trichloroethylene	<1.00 ug/L	1.00	ug/L					
Trichlorofluoromethane	<1.00 ug/L	1.00	ug/L					
Vinyl acetate	<10.0 ug/L	10.0	ug/L					
Vinyl chloride	<0.50 ug/L	0.50	ug/L					
Xylenes, Total	<3.00 ug/L	3.00	ug/L					
Surr: 1,2-Dichloroethane-d4	50.8		ug/L	50.0		102	70-120	
Surr: 4-Bromofluorobenzene	48.2		ug/L	50.0		96.4	75-120	
Surr: Dibromofluoromethane	48.9		ug/L	50.0		97.7	80-119	
Surr: Toluene-d8	51.2		ug/L	50.0		102	85-120	
LCS (BZL0294-BS1)				Prepare	d & Analyz	ed: 12/08/2	016	
1,1,1,2-Tetrachloroethane	49.7 ug/L	0.4	ug/L	50.0	ug/L	99.5	80-130	
1,1,1-Trichloroethane	51.9 ug/L	1	ug/L	50.0	ug/L	104	65-130	

ug/L

ug/L

ug/L

ug/L

ug/L

0.4

ug/L

ug/L

ug/L

ug/L

ug/L

50.0

50.0

50.0

50.0

50.0

95.5

102

105

103

99.5

65-130

75-125

70-135

70-130

75-135



Certificate of Analysis

Final Report

Client Name: Timmons Group

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1001 Boulders Parkway, Suite 300 Richmond VA, 23225

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Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0294 - SW5030B LCS (BZL0294-BS1) Prepared & Analyzed: 12/08/2016 1,2,3-Trichlorobenzene 51.0 ug/L 1 ug/L 50.0 ug/L 102 55-140 46.1 ug/L 75-125 1,2,3-Trichloropropane ug/L 50.0 ug/L 92.1 1,2,4-Trichlorobenzene 50.8 ug/L ug/L 50.0 102 65-135 ug/L 1,2,4-Trimethylbenzene 109 75-130 54.3 ug/L ug/L 50.0 ug/L 98.8 1,2-Dibromo-3-chloropropane (DBCP) 49.4 ug/L 50-130 ug/L 50.0 ug/L 1,2-Dibromoethane (EDB) 49.3 ug/L ug/L 50.0 ug/L 98.5 80-120 1,2-Dichlorobenzene 52.7 ug/L ug/L 50.0 105 70-120 ug/L 1,2-Dichloroethane 45.7 ug/L ug/L 50.0 ug/L 91.4 70-130 1,2-Dichloropropane 49.9 ug/L ug/L 50.0 ug/L 99.7 75-125 1,3,5-Trimethylbenzene 54.0 ug/L ug/L 50.0 ug/L 108 75-125 75-125 1,3-Dichlorobenzene 51.8 ug/L ug/L 50.0 ug/L 104 75-125 49.3 ug/L 50.0 98.6 1,3-Dichloropropane ug/L ug/L 1,4-Dichlorobenzene 51.0 ug/L 1 ug/L 50.0 ug/L 102 75-125 2,2-Dichloropropane 54.6 ug/L 2 ug/L 50.0 ug/L 109 70-135 2-Butanone (MEK) 40.5 ug/L 10 ug/L 50.0 81.0 30-150 ug/L 50.0 2-Chlorotoluene 54.7 ug/L 109 75-125 1 ug/L ug/L 2-Hexanone (MBK) 50.1 ug/L 5 ug/L 50.0 ug/L 100 55-130 4-Chlorotoluene 52.4 ug/L ug/L 50.0 105 75-130 1 ug/L 4-Isopropyltoluene 54.2 ug/L 1 ug/L 50.0 ug/L 108 75-130 4-Methyl-2-pentanone (MIBK) 50.7 ug/L 5 ug/L 50.0 ug/L 101 60-135 Acetone 28.8 ug/L 10 ug/L 50.0 ug/L 57.7 40-140 Benzene 51.1 ug/L 1 ug/L 50.0 ug/L 102 80-120 ug/L Bromobenzene 49.7 ug/L 50.0 99.4 75-125 1 ug/L Bromochloromethane 51.1 ug/L 1 ug/L 50.0 ug/L 102 65-130 Bromodichloromethane 50.0 109 75-120 54.7 ug/L 0.5 ug/L ug/L Bromoform 51.1 ug/L ug/L 50.0 102 70-130 ug/L Bromomethane 47.7 ug/L 95.3 30-145 ug/L 50.0 ug/L 1 Carbon disulfide 36.9 ug/L 10 ug/L 50.0 ug/L 73.8 35-160 50.0 Carbon tetrachloride 53.2 ug/L 1 ug/L ug/L 106 65-140 97.6 80-120 Chlorobenzene 48.8 ug/L 1 ug/L 50.0 ug/L Chloroethane 46.5 ug/L ug/L 50.0 ug/L 93.0 60-135



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0294 - SW5030B LCS (BZL0294-BS1) Prepared & Analyzed: 12/08/2016 51.4 ug/L Chloroform 0.5 ug/L 50.0 ug/L 103 65-135 41.5 ug/L 40-125 Chloromethane 1 ug/L 50.0 ug/L 83.0 52.0 ug/L 50.0 104 70-125 cis-1,2-Dichloroethylene ug/L 1 ug/L 46.0 ug/L 92.0 70-130 cis-1,3-Dichloropropene ug/L 50.0 ug/L 60-135 Dibromochloromethane 55.3 ug/L ug/L 111 50.0 ug/L Dibromomethane 50.9 ug/L ug/L 50.0 ug/L 102 75-125 Dichlorodifluoromethane 43.6 ug/L ug/L 50.0 ug/L 87.2 30-155 Ethylbenzene 51.4 ug/L ug/L 50.0 ug/L 103 75-125 Hexachlorobutadiene 52.0 ug/L ug/L 50.0 ug/L 104 50-140 Isopropylbenzene 47.1 ug/L ug/L 50.0 ug/L 94.2 75-125 2 75-130 m+p-Xylenes 102 ug/L ug/L 100 ug/L 102 101 55-140 Methylene chloride 50.7 ug/L ug/L 50.0 ug/L Methyl-t-butyl ether (MTBE) 65-125 59.2 ug/L ug/L 50.0 ug/L 118 Naphthalene 52.9 ug/L ug/L 50.0 ug/L 106 55-140 n-Butylbenzene 55.6 ug/L ug/L 50.0 111 70-135 ug/L 50.0 70-130 n-Propylbenzene 56.3 ug/L 113 ug/L ug/L o-Xylene 50.3 ug/L ug/L 50.0 ug/L 101 80-120 sec-Butylbenzene 53.6 ug/L ug/L 50.0 107 70-125 ug/L Styrene 44.2 ug/L ug/L 50.0 ug/L 88.5 65-135 tert-Butylbenzene 54.0 ug/L ug/L 50.0 ug/L 108 70-130 Tetrachloroethylene (PCE) 47.6 ug/L ug/L 50.0 ug/L 95.1 45-150 Toluene 51.4 ug/L ug/L 50.0 ug/L 103 75-120 109 60-140 trans-1,2-Dichloroethylene 54.7 ug/L ug/L 50.0 ug/L trans-1,3-Dichloropropene 50.8 ug/L ug/L 50.0 ug/L 102 55-140 Trichloroethylene 49.8 ug/L 50.0 99.6 70-125 1 ug/L ug/L Trichlorofluoromethane 48.1 ug/L 1 ug/L 50.0 96.3 60-145 ug/L Vinyl chloride 85.3 50-145 42.6 ug/L 0.5 ug/L 50.0 ug/L Surr: 1,2-Dichloroethane-d4 51.1 50.0 102 70-120 ug/L ug/L 48.9 97.9 75-120 Surr: 4-Bromofluorobenzene 50.0 ug/L ug/L Surr: Dibromofluoromethane 50.6 ug/L 50.0 ug/L 101 80-119 Surr: Toluene-d8 50.2 50.0 ug/L 100 85-120 ug/L



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Batch BZL0294 - SW5030B Duplicate (R7L0294_DUP1) Source: 16L0126_06PE2 Prepared & Applyzed: 12/02

Duplicate (BZL0294-DUP1)	Source	: 16L0126	-06RE2	Prepared & Analyzed: 12/08/2016			
1,1,1,2-Tetrachloroethane	<8.00 ug/L	8.00	ug/L	<8.00 ug/L	NA	30	
1,1,1-Trichloroethane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,1,2,2-Tetrachloroethane	<8.00 ug/L	8.00	ug/L	<8.00 ug/L	NA	30	
1,1,2-Trichloroethane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,1-Dichloroethane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,1-Dichloroethylene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,1-Dichloropropene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,2,3-Trichlorobenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,2,3-Trichloropropane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,2,4-Trichlorobenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,2,4-Trimethylbenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	PJ
1,2-Dibromo-3-chloropropane (DBCP)	<80.0 ug/L	80.0	ug/L	<80.0 ug/L	NA	30	
1,2-Dibromoethane (EDB)	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,2-Dichlorobenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,2-Dichloroethane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,2-Dichloropropane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,3,5-Trimethylbenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,3-Dichlorobenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,3-Dichloropropane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
1,4-Dichlorobenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
2,2-Dichloropropane	<40.0 ug/L	40.0	ug/L	<40.0 ug/L	NA	30	
2-Butanone (MEK)	<200 ug/L	200	ug/L	<200 ug/L	NA	30	
2-Chlorotoluene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
2-Hexanone (MBK)	<100 ug/L	100	ug/L	<100 ug/L	NA	30	
4-Chlorotoluene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
4-Isopropyltoluene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
4-Methyl-2-pentanone (MIBK)	<100 ug/L	100	ug/L	<100 ug/L	NA	30	
Acetone	752 ug/L	200	ug/L	821 ug/L	8.79	30	
Benzene	26.8 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Bromobenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Bromochloromethane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Batch BZL0294 - SW5030B

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Duplicate (BZL0294-DUP1) Source: 16L0126-06RE2 Prepared & Analyzed: 12/08/2016

Duplicate (BZE0254-BOT 1)	Oddice	. IOLU120-0		1 Toparca a Analyzea. 12/00/2010			
Bromodichloromethane	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	NA	30	
Bromoform	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Bromomethane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Carbon disulfide	<200 ug/L	200	ug/L	<200 ug/L	NA	30	
Carbon tetrachloride	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Chlorobenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Chloroethane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Chloroform	<10.0 ug/L	10.0	ug/L	<10.0 ug/L	NA	30	
Chloromethane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
cis-1,2-Dichloroethylene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
cis-1,3-Dichloropropene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Dibromochloromethane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Dibromomethane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Dichlorodifluoromethane	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Di-isopropyl ether (DIPE)	<100 ug/L	100	ug/L	<100 ug/L	NA	30	
Ethylbenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	J
Hexachlorobutadiene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
lodomethane	<200 ug/L	200	ug/L	<200 ug/L	NA	30	
Isopropylbenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
m+p-Xylenes	<40.0 ug/L	40.0	ug/L	<40.0 ug/L	NA	30	
Methylene chloride	<80.0 ug/L	80.0	ug/L	<80.0 ug/L	NA	30	
Methyl-t-butyl ether (MTBE)	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Naphthalene	23.2 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	Р
n-Butylbenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
n-Propylbenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
o-Xylene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
sec-Butylbenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Styrene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	J
tert-Butylbenzene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Tetrachloroethylene (PCE)	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	
Toluene	<20.0 ug/L	20.0	ug/L	<20.0 ug/L	NA	30	J



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Volatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Duplicate (BZL0294-DUP1)	Source	Source: 16L0126-06RE2 F		Prepare	<u>d & Analyze</u>	d: 12/08/2	016		
trans-1,2-Dichloroethylene	<20.0 ug/L	20.0	ug/L		<20.0 ug/L			NA	30
trans-1,3-Dichloropropene	<20.0 ug/L	20.0	ug/L		<20.0 ug/L			NA	30
Trichloroethylene	<20.0 ug/L	20.0	ug/L		<20.0 ug/L			NA	30
Trichlorofluoromethane	<20.0 ug/L	20.0	ug/L		<20.0 ug/L			NA	30
Vinyl acetate	<200 ug/L	200	ug/L		<200 ug/L			NA	30
Vinyl chloride	<10.0 ug/L	10.0	ug/L		<10.0 ug/L			NA	30
Xylenes, Total	<60.0 ug/L	60.0	ug/L		<60.0 ug/L			NA	30
Surr: 1,2-Dichloroethane-d4	46.1		ug/L	50.0	ug/L	92.2	70-120		
Surr: 4-Bromofluorobenzene	48.6		ug/L	50.0	ug/L	97.2	75-120		
Surr: Dibromofluoromethane	47.6		ug/L	50.0	ug/L	95.2	80-119		
Surr: Toluene-d8	50.1		ug/L	50.0	ug/L	100	85-120		



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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

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36156.015

Client Site I.D.:

Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZL0273-BLK1)			Prepared: 12/09/2016 Analyzed: 12/13/2016
2,3,7,8-TCDD (SIM)			-
1,2,4,5-Tetrachlorobenzene	<10.0 ug/L	10.0	ug/L
1,2,4-Trichlorobenzene	<10.0 ug/L	10.0	ug/L
1,2-Dichlorobenzene	<10.0 ug/L	10.0	ug/L
1,2-Diphenylhydrazine	<10.0 ug/L	10.0	ug/L
1,3-Dichlorobenzene	<10.0 ug/L	10.0	ug/L
1,3-Dinitrobenzene	<2.50 ug/L	2.50	ug/L
1,4-Dichlorobenzene	<10.0 ug/L	10.0	ug/L
1-Naphthylamine	<10.0 ug/L	10.0	ug/L
2,3,4,6-Tetrachlorophenol	<10.0 ug/L	10.0	ug/L
2,4,5-Trichlorophenol	<10.0 ug/L	10.0	ug/L
2,4,6-Trichlorophenol	<10.0 ug/L	10.0	ug/L
2,4-Dichlorophenol	<10.0 ug/L	10.0	ug/L
2,4-Dimethylphenol	<0.50 ug/L	0.50	ug/L
2,4-Dinitrophenol	<50.0 ug/L	50.0	ug/L
2,4-Dinitrotoluene	<10.0 ug/L	10.0	ug/L
2,6-Dichlorophenol	<10.0 ug/L	10.0	ug/L
2,6-Dinitrotoluene	<10.0 ug/L	10.0	ug/L
2-Chloronaphthalene	<10.0 ug/L	10.0	ug/L
2-Chlorophenol	<10.0 ug/L	10.0	ug/L
2-Methylnaphthalene	<10.0 ug/L	10.0	ug/L
2-Naphthylamine	<10.0 ug/L	10.0	ug/L
2-Nitroaniline	<20.0 ug/L	20.0	ug/L
2-Nitrophenol	<10.0 ug/L	10.0	ug/L
3,3'-Dichlorobenzidine	<10.0 ug/L	10.0	ug/L
3-Methylcholanthrene	<10.0 ug/L	10.0	ug/L
3-Nitroaniline	<20.0 ug/L	20.0	ug/L
4,6-Dinitro-2-methylphenol	<50.0 ug/L	50.0	ug/L
4-Aminobiphenyl	<10.0 ug/L	10.0	ug/L
4-Bromophenyl phenyl ether	<10.0 ug/L	10.0	ug/L
4-Chloroaniline	<10.0 ug/L	10.0	ug/L



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Final Report

Client Name: Timmons Group

Date Issued:

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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZL0273-BLK1)				Prepared: 12/09/2016 Analyzed: 12/13/2016
4-Chlorophenyl phenyl ether	<10.0 ug/L	10.0	ug/L	
4-Nitroaniline	<20.0 ug/L	20.0	ug/L	
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	
7,12-Dimethylbenz (a) anthracene	<10.0 ug/L	10.0	ug/L	
Acenaphthene	<10.0 ug/L	10.0	ug/L	
cenaphthylene	<10.0 ug/L	10.0	ug/L	
cetophenone	<20.0 ug/L	20.0	ug/L	
niline	<50.0 ug/L	50.0	ug/L	
ithracene	<10.0 ug/L	10.0	ug/L	
nzidine	<50.0 ug/L	50.0	ug/L	
enzo (a) anthracene	<0.05 ug/L	0.05	ug/L	
enzo (a) pyrene	<10.0 ug/L	10.0	ug/L	
enzo (b) fluoranthene	<10.0 ug/L	10.0	ug/L	
nzo (g,h,i) perylene	<10.0 ug/L	10.0	ug/L	
nzo (k) fluoranthene	<10.0 ug/L	10.0	ug/L	
zoic acid	<50.0 ug/L	50.0	ug/L	
nzyl alcohol	<20.0 ug/L	20.0	ug/L	
(2-Chloroethoxy) methane	<10.0 ug/L	10.0	ug/L	
2-Chloroethyl) ether	<10.0 ug/L	10.0	ug/L	
(2-Chloroisopropyl) ether	<10.0 ug/L	10.0	ug/L	
(2-Ethylhexyl) phthalate	<10.0 ug/L	10.0	ug/L	
yl benzyl phthalate	<10.0 ug/L	10.0	ug/L	
ysene	<10.0 ug/L	10.0	ug/L	
enz (a,h) anthracene	<10.0 ug/L	10.0	ug/L	
enz (a,j) acridine	<10.0 ug/L	10.0	ug/L	
enzofuran	<5.00 ug/L	5.00	ug/L	
thyl phthalate	<10.0 ug/L	10.0	ug/L	
nethyl phthalate	<10.0 ug/L	10.0	ug/L	
n-butyl phthalate	<10.0 ug/L	10.0	ug/L	
-n-octyl phthalate	<10.0 ug/L	10.0	ug/L	
henylamine	<10.0 ug/L	10.0	ug/L	



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.:

Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZL0273-BLK1)				Prepared: 12/09/2016 Analyzed: 12/13/2016
Ethyl methanesulfonate	<20.0 ug/L	20.0	ug/L	
Fluoranthene	<10.0 ug/L	10.0	ug/L	
Fluorene	<10.0 ug/L	10.0	ug/L	
Hexachlorobenzene	<1.00 ug/L	1.00	ug/L	
Hexachlorobutadiene	<10.0 ug/L	10.0	ug/L	
Hexachlorocyclopentadiene	<10.0 ug/L	10.0	ug/L	
Hexachloroethane	<10.0 ug/L	10.0	ug/L	
Indeno (1,2,3-cd) pyrene	<10.0 ug/L	10.0	ug/L	
Isophorone	<10.0 ug/L	10.0	ug/L	
m+p-Cresols	<10.0 ug/L	10.0	ug/L	
Methyl methanesulfonate	<10.0 ug/L	10.0	ug/L	
Naphthalene	<5.00 ug/L	5.00	ug/L	
Nitrobenzene	<10.0 ug/L	10.0	ug/L	
n-Nitrosodimethylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosodi-n-butylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosodi-n-propylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosodiphenylamine	<10.0 ug/L	10.0	ug/L	
n-Nitrosopiperidine	<10.0 ug/L	10.0	ug/L	
o+m+p-Cresols	<10.0 ug/L	10.0	ug/L	
o-Cresol	<10.0 ug/L	10.0	ug/L	
p-(Dimethylamino) azobenzene	<2.50 ug/L	2.50	ug/L	
p-Chloro-m-cresol	<10.0 ug/L	10.0	ug/L	
Pentachloronitrobenzene (quintozene)	<10.0 ug/L	10.0	ug/L	
Pentachlorophenol	<20.0 ug/L	20.0	ug/L	
Phenacetin	<10.0 ug/L	10.0	ug/L	
Phenanthrene	<10.0 ug/L	10.0	ug/L	
Phenol	<10.0 ug/L	10.0	ug/L	
Pronamide	<10.0 ug/L	10.0	ug/L	
Pyrene	<10.0 ug/L	10.0	ug/L	
Pyridine	<10.0 ug/L	10.0	ug/L	
Surr: 2,4,6-Tribromophenol	67.8		ug/L	200 33.9 40-125 S



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

12/14/2016 16:49

RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: **Fulton Gas**

Purchase Order:

Source

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0273 - SW3510C										
Blank (BZL0273-BLK1)				Prepared	d: 12/09/201	6 Analyze	ed: 12/13/2	016		
Surr: 2-Fluorobiphenyl	36.2		ug/L	100		36.2	23-87			
Surr: 2-Fluorophenol	48.6		ug/L	200		24.3	14-52			
Surr: Nitrobenzene-d5	37.2		ug/L	100		37.2	40-110			S
Surr: Phenol-d5	29.4		ug/L	200		14.7	5-33			
Surr: p-Terphenyl-d14	36.5		ug/L	100		36.5	27-133			
LCS (BZL0273-BS1)				Prepared	d: 12/09/201	6 Analyze	ed: 12/13/2	016		
1,2,4-Trichlorobenzene	31.7 ug/L	10.0	ug/L	49.7	ug/L	63.8	21.8-66.7			
1,4-Dichlorobenzene	31.4 ug/L	10.0	ug/L	50.0	ug/L	62.7	20-124			
2,4-Dinitrotoluene	30.3 ug/L	10.0	ug/L	50.0	ug/L	60.6	39-139			
2-Chlorophenol	63.5 ug/L	10.0	ug/L	99.0	ug/L	64.2	35-105			
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	ug/L	30.5	0-125			J
Acenaphthene	30.9 ug/L	10.0	ug/L	49.8	ug/L	62.2	45-110			
n-Nitrosodi-n-propylamine	34.4 ug/L	10.0	ug/L	49.8	ug/L	69.1	35-130			
p-Chloro-m-cresol	65.2 ug/L	10.0	ug/L	100	ug/L	65.2	45-110			
Pentachlorophenol	63.4 ug/L	20.0	ug/L	99.0	ug/L	64.1	40-115			
Phenol	27.0 ug/L	10.0	ug/L	100	ug/L	27.0	0-115			
Pyrene	35.3 ug/L	10.0	ug/L	50.0	ug/L	70.6	50-130			
Surr: 2,4,6-Tribromophenol	69.0		ug/L	200	ug/L	34.5	40-125			S
Surr: 2-Fluorobiphenyl	32.8		ug/L	100	ug/L	32.8	23-87			
Surr: 2-Fluorophenol	44.5		ug/L	200	ug/L	22.3	14-52			
Surr: Nitrobenzene-d5	36.1		ug/L	100	ug/L	36.1	40-110			S
Surr: Phenol-d5	28.7		ug/L	200	ug/L	14.3	5-33			
Surr: p-Terphenyl-d14	30.3		ug/L	100	ug/L	30.3	27-133			
LCS (BZL0273-BS2)				Prepared	d: 12/09/201	6 Analyze	ed: 12/13/2	016		
1,2,4-Trichlorobenzene	41.4 ug/L	10.0	ug/L	100	ug/L	41.4	21.8-66.7			
1,4-Dichlorobenzene	39.2 ug/L	10.0	ug/L	100	ug/L	39.2	20-124			
2,4-Dinitrotoluene	61.6 ug/L	10.0	ug/L	100	ug/L	61.6	39-139			
2-Chlorophenol	44.2 ug/L	10.0	ug/L	100	ug/L	44.2	35-105			
4-Nitrophenol	<50.0 ug/L	50.0	ug/L	100	ug/L	30.8	0-125			J
Acenaphthene	47.6 ug/L	10.0	ug/L	100	ug/L	47.6	45-110			



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

12/14/2016 16:49

RPD

1001 Boulders Parkway, Suite 300 Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: **Fulton Gas**

Purchase Order:

Source

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0273 - SW3510C										
LCS (BZL0273-BS2)				Prepare	d: 12/09/201	6 Analyze	d: 12/13/2	016		
n-Nitrosodi-n-propylamine	48.1 ug/L	10.0	ug/L	100	ug/L	48.1	35-130			
p-Chloro-m-cresol	48.0 ug/L	10.0	ug/L	100	ug/L	48.0	45-110			
Pentachlorophenol	52.2 ug/L	20.0	ug/L	100	ug/L	52.2	40-115			
Phenol	22.1 ug/L	10.0	ug/L	101	ug/L	21.8	0-115			
Pyrene	81.1 ug/L	10.0	ug/L	100	ug/L	81.1	50-130			
Surr: 2,4,6-Tribromophenol	57.4		ug/L	200	ug/L	28.7	40-125			S
Surr: 2-Fluorobiphenyl	23.9		ug/L	100	ug/L	23.9	23-87			
Surr: 2-Fluorophenol	34.5		ug/L	200	ug/L	17.2	14-52			
Surr: Nitrobenzene-d5	25.9		ug/L	100	ug/L	25.9	40-110			S
Surr: Phenol-d5	23.5		ug/L	200	ug/L	11.7	5-33			
Surr: p-Terphenyl-d14	35.0		ug/L	100	ug/L	35.0	27-133			
Matrix Spike (BZL0273-MS1)	Sour	ce: 16L017	5-03	Prepare	d: 12/09/201	6 Analyze	d: 12/13/2	016		
1,2,4-Trichlorobenzene	64.7 ug/L	10.4	ug/L	104	<10.4 ug/L	62.1	44-142			
1,4-Dichlorobenzene	66.1 ug/L	10.4	ug/L	104	<10.4 ug/L	63.5	20-124			
2,4-Dinitrotoluene	71.5 ug/L	10.4	ug/L	104	<10.4 ug/L	68.6	39-139			
2-Chlorophenol	66.3 ug/L	10.4	ug/L	104	<10.4 ug/L	63.6	35-105			
4-Nitrophenol	<52.1 ug/L	52.1	ug/L	104	<52.1 ug/L	31.6	0-125			J
Acenaphthene	68.4 ug/L	10.4	ug/L	104	<10.4 ug/L	65.6	4-98			
n-Nitrosodi-n-propylamine	68.4 ug/L	10.4	ug/L	104	<10.4 ug/L	65.7	35-130			
p-Chloro-m-cresol	70.5 ug/L	10.4	ug/L	104	<10.4 ug/L	67.7	45-110			
Pentachlorophenol	65.1 ug/L	20.8	ug/L	104	<20.8 ug/L	62.5	40-115			
Phenol	29.8 ug/L	10.4	ug/L	105	<10.4 ug/L	28.3	0-115			
Pyrene	82.1 ug/L	10.4	ug/L	104	<10.4 ug/L	78.8	50-130			
Surr: 2,4,6-Tribromophenol	71.9		ug/L	208	ug/L	34.5	40-125			S
Surr: 2-Fluorobiphenyl	34.6		ug/L	104	ug/L	33.2	23-87			
Surr: 2-Fluorophenol	49.9		ug/L	208	ug/L	23.9	14-52			
Surr: Nitrobenzene-d5	38.2		ug/L	104	ug/L	36.6	40-110			S
Surr: Phenol-d5	31.5		ug/L	208	ug/L	15.1	5-33			
Surr: p-Terphenyl-d14	35.5		ug/L	104	ug/L	34.1	27-133			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Semivolatile Organic Compounds by GCMS - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZL0273-MSD1)	Source	: 16L0175	03	Dropare	ed: 12/09/2016	S Analyza	d. 12/12/2	016		
				-		,				
1,2,4-Trichlorobenzene	61.6 ug/L	10.6	ug/L	106	<10.6 ug/L	57.9	44-142	4.91	20	
1,4-Dichlorobenzene	64.1 ug/L	10.6	ug/L	106	<10.6 ug/L	60.3	20-124	3.11	20	
2,4-Dinitrotoluene	68.2 ug/L	10.6	ug/L	106	<10.6 ug/L	64.1	39-139	4.68	20	
2-Chlorophenol	64.4 ug/L	10.6	ug/L	106	<10.6 ug/L	60.5	35-105	2.91	20	
4-Nitrophenol	<53.2 ug/L	53.2	ug/L	106	<53.2 ug/L	29.6	0-125	4.55	20	J
Acenaphthene	67.3 ug/L	10.6	ug/L	106	<10.6 ug/L	63.3	4-98	1.53	20	
n-Nitrosodi-n-propylamine	68.4 ug/L	10.6	ug/L	106	<10.6 ug/L	64.3	35-130	0.115	20	
p-Chloro-m-cresol	68.8 ug/L	10.6	ug/L	106	<10.6 ug/L	64.7	45-110	2.41	20	
Pentachlorophenol	62.2 ug/L	21.3	ug/L	106	<21.3 ug/L	58.4	40-115	4.62	20	
Phenol	29.6 ug/L	10.6	ug/L	107	<10.6 ug/L	27.6	0-115	0.634	20	
Pyrene	78.2 ug/L	10.6	ug/L	106	<10.6 ug/L	73.6	50-130	4.76	20	
Surr: 2,4,6-Tribromophenol	71.7		ug/L	213	ug/L	33.7	40-125			S
Surr: 2-Fluorobiphenyl	32.7		ug/L	106	ug/L	30.7	23-87			
Surr: 2-Fluorophenol	49.0		ug/L	213	ug/L	23.0	14-52			
Surr: Nitrobenzene-d5	37.9		ug/L	106	ug/L	35.6	40-110			S
Surr: Phenol-d5	31.4		ug/L	213	ug/L	14.8	5-33			
Surr: p-Terphenyl-d14	33.4		ug/L	106	ug/L	31.4	27-133			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Blank (BZL0305-BLK1)				Prepared: 12/09/2016 Analyzed: 12/13/2016
PCB as Aroclor 1016	<0.200 ug/L	0.200	ug/L	
4,4'-DDD	<0.050 ug/L	0.050	ug/L	
PCB as Aroclor 1221	<0.200 ug/L	0.200	ug/L	
PCB as Aroclor 1232	<0.200 ug/L	0.200	ug/L	
4,4'-DDE	<0.050 ug/L	0.050	ug/L	
PCB as Aroclor 1242	<0.200 ug/L	0.200	ug/L	
PCB as Aroclor 1248	<0.200 ug/L	0.200	ug/L	
4,4'-DDT	<0.050 ug/L	0.050	ug/L	
PCB as Aroclor 1254	<0.200 ug/L	0.200	ug/L	
Aldrin	<0.050 ug/L	0.050	ug/L	
PCB as Aroclor 1260	<0.200 ug/L	0.200	ug/L	
alpha-BHC	<0.050 ug/L	0.050	ug/L	
beta-BHC	<0.050 ug/L	0.050	ug/L	
Chlordane	<0.200 ug/L	0.200	ug/L	
delta-BHC	<0.050 ug/L	0.050	ug/L	
Dieldrin	<0.050 ug/L	0.050	ug/L	
Endosulfan I	<0.050 ug/L	0.050	ug/L	
Endosulfan II	<0.050 ug/L	0.050	ug/L	
Endosulfan sulfate	<0.050 ug/L	0.050	ug/L	
Endrin	<0.050 ug/L	0.050	ug/L	
Endrin aldehyde	<0.050 ug/L	0.050	ug/L	
gamma-BHC (Lindane)	<0.050 ug/L	0.050	ug/L	
Heptachlor	<0.050 ug/L	0.050	ug/L	
Heptachlor epoxide	<0.050 ug/L	0.050	ug/L	
Methoxychlor	<0.050 ug/L	0.050	ug/L	
Toxaphene	<1.00 ug/L	1.00	ug/L	
Surr: DCB	0.200		ug/L	0.200 100 30-105
Surr: TCMX	0.140		ug/L	0.200 70.0 30-105
Surr: TCMX	0.130		ug/L	0.200 65.0 18-112
Surr: DCB	0.110		ug/L	0.200 55.0 27-131



Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued:

12/14/2016 16:49

RPD

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

%REC

Client Site I.D.: **Fulton Gas**

Purchase Order:

Source

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

Spike

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Batch BZL0305 - SW3510C										
LCS (BZL0305-BS1)				Prepared	d: 12/09/201	6 Analyze	d: 12/12/2	016		
4,4'-DDD	0.050 ug/L	0.050	ug/L	0.100	ug/L	50.0	23-134			
4,4'-DDE	0.050 ug/L	0.050	ug/L	0.100	ug/L	50.0	23-134			
4,4'-DDT	0.050 ug/L	0.050	ug/L	0.100	ug/L	50.0	23-134			
Aldrin	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134			
alpha-BHC	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134			
beta-BHC	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134			
delta-BHC	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134			
Dieldrin	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134			
Endosulfan I	0.050 ug/L	0.050	ug/L	0.100	ug/L	50.0	23-134			
Endosulfan II	0.050 ug/L	0.050	ug/L	0.100	ug/L	50.0	23-134			
Endosulfan sulfate	0.050 ug/L	0.050	ug/L	0.100	ug/L	50.0	23-134			
Endrin	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134			
Endrin aldehyde	0.050 ug/L	0.050	ug/L	0.100	ug/L	50.0	23-134			
gamma-BHC (Lindane)	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134			
Heptachlor	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134			
Heptachlor epoxide	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134			
Methoxychlor	0.060 ug/L	0.050	ug/L	0.100	ug/L	60.0	23-134			
Mirex	0.050 ug/L	0.050	ug/L	0.100	ug/L	50.0	23-134			
Surr: TCMX	0.120		ug/L	0.200	ug/L	60.0	18-112			
Surr: DCB	0.0800		ug/L	0.200	ug/L	40.0	27-131			
LCS (BZL0305-BS2)				Prepared	d & Analyze	d: 12/12/2	016			
PCB as Aroclor 1016	0.730 ug/L	0.200	ug/L	1.00	ug/L	73.0	40-120			
PCB as Aroclor 1260	0.730 ug/L	0.200	ug/L	1.00	ug/L	73.0	40-120			
Surr: DCB	0.120		ug/L	0.200	ug/L	60.0	30-105			
Surr: TCMX	0.120		ug/L	0.200	ug/L	60.0	30-105			
LCS (BZL0305-BS3)				Prepared	d: 12/09/201	6 Analyze	d: 12/12/2	016		
Toxaphene	1.43 ug/L	1.00	ug/L	2.50	ug/L	57.2	23-134			



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1001 Boulders Parkway, Suite 300

Richmond VA, 23225

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36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

LCS (BZL0305-BS4)				Prepared: 12/09/20	16 Analyze	ed: 12/12/2	016		
Chlordane	1.78 ug/L	0.200	ug/L	2.50 ug/L	71.2	23-134			
Matrix Spike (BZL0305-MS1)	Sourc	e: 16L0200	-02	Prepared: 12/09/20	16 Analyze	ed: 12/12/2	016		
4,4'-DDD	0.071 ug/L	0.051	ug/L	0.101 <0.051 ug/L	70.0	23-134			
4,4'-DDE	0.071 ug/L	0.051	ug/L	0.101 <0.051 ug/L	70.0	23-134			
4,4'-DDT	0.061 ug/L	0.051	ug/L	0.101 <0.051 ug/L	60.0	23-134			
Aldrin	0.071 ug/L	0.051	ug/L	0.101 <0.051 ug/L	70.0	23-134			
alpha-BHC	0.061 ug/L	0.051	ug/L	0.101 <0.051 ug/L	60.0	23-134			
beta-BHC	0.061 ug/L	0.051	ug/L	0.101 <0.051 ug/L	60.0	23-134			
delta-BHC	0.081 ug/L	0.051	ug/L	0.101 <0.051 ug/L	80.0	23-134			
Dieldrin	0.071 ug/L	0.051	ug/L	0.101 <0.051 ug/L	70.0	23-134			
Endosulfan I	0.081 ug/L	0.051	ug/L	0.101 <0.051 ug/L	80.0	23-134			
Endosulfan II	0.081 ug/L	0.051	ug/L	0.101 <0.051 ug/L	80.0	23-134			
Endosulfan sulfate	0.081 ug/L	0.051	ug/L	0.101 <0.051 ug/L	80.0	23-134			
Endrin	0.071 ug/L	0.051	ug/L	0.101 <0.051 ug/L	70.0	23-134			
Endrin aldehyde	0.051 ug/L	0.051	ug/L	0.101 <0.051 ug/L	50.0	23-134			
gamma-BHC (Lindane)	0.071 ug/L	0.051	ug/L	0.101 <0.051 ug/L	70.0	23-134			
Heptachlor	0.071 ug/L	0.051	ug/L	0.101 <0.051 ug/L	70.0	23-134			
Heptachlor epoxide	0.061 ug/L	0.051	ug/L	0.101 <0.051 ug/L	60.0	23-134			
Methoxychlor	0.081 ug/L	0.051	ug/L	0.101 <0.051 ug/L	80.0	23-134			
Mirex	0.061 ug/L	0.051	ug/L	0.101 <0.051 ug/L	60.0	23-134			
Surr: TCMX	0.121		ug/L	0.202 ug/L	60.0	18-112			
Surr: DCB	0.152		ug/L	0.202 ug/L	75.0	27-131			
Matrix Spike Dup (BZL0305-MSD1)	Sourc	e: 16L0200	-02	Prepared: 12/09/20	16 Analyze	ed: 12/12/2	016		
4,4'-DDD	0.111 ug/L	0.051	ug/L	0.101 <0.051 ug/L	110	23-134	44.4	20	Р
4,4'-DDE	0.081 ug/L	0.051	ug/L	0.101 <0.051 ug/L	80.0	23-134	13.3	20	
4,4'-DDT	0.091 ug/L	0.051	ug/L	0.101 <0.051 ug/L	90.0	23-134	40.0	20	Р
Aldrin	0.081 ug/L	0.051	ug/L	0.101 <0.051 ug/L	80.0	23-134	13.3	20	
alpha-BHC	0.081 ug/L	0.051	ug/L	0.101 <0.051 ug/L	80.0	23-134	28.6	20	Р
beta-BHC	0.111 ug/L	0.051	ug/L	0.101 <0.051 ug/L	110	23-134	58.8	20	Р
delta-BHC	0.101 ug/L	0.051	ug/L	0.101 <0.051 ug/L	100	23-134	22.2	20	Р



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Organochlorine Pesticides and PCBs by GC/ECD - Quality Control

Air Water and Soil Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual

Matrix Spike Dup (BZL0305-MSD1)	Source:	16L0200-	02	Prepared: 12/09/2016	Analyze	d: 12/12/20)16		
Dieldrin	0.101 ug/L	0.051	ug/L	0.101 <0.051 ug/L	100	23-134	35.3	20	Р
Endosulfan I	0.101 ug/L	0.051	ug/L	0.101 <0.051 ug/L	100	23-134	22.2	20	Р
Endosulfan II	0.111 ug/L	0.051	ug/L	0.101 <0.051 ug/L	110	23-134	31.6	20	Р
Endosulfan sulfate	0.101 ug/L	0.051	ug/L	0.101 <0.051 ug/L	100	23-134	22.2	20	Р
Endrin	0.091 ug/L	0.051	ug/L	0.101 <0.051 ug/L	90.0	23-134	25.0	20	Р
Endrin aldehyde	0.081 ug/L	0.051	ug/L	0.101 <0.051 ug/L	80.0	23-134	46.2	20	Р
gamma-BHC (Lindane)	0.091 ug/L	0.051	ug/L	0.101 <0.051 ug/L	90.0	23-134	25.0	20	Р
Heptachlor	0.091 ug/L	0.051	ug/L	0.101 <0.051 ug/L	90.0	23-134	25.0	20	Р
Heptachlor epoxide	0.081 ug/L	0.051	ug/L	0.101 <0.051 ug/L	80.0	23-134	28.6	20	Р
Methoxychlor	0.101 ug/L	0.051	ug/L	0.101 <0.051 ug/L	100	23-134	22.2	20	Р
Mirex	0.091 ug/L	0.051	ug/L	0.101 <0.051 ug/L	90.0	23-134	40.0	20	Р
Surr: TCMX	0.152		ug/L	0.202 ug/L	75.0	18-112			
Surr: DCB	0.172		ug/L	0.202 ug/L	85.0	27-131			



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued:

12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number:

36156.015

Client Site I.D.: Fulton Gas

Purchase Order:

Wet Chemistry Analysis - Quality Control

Air Water and Soil Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BZL0339 - No Prep Wet Chem										
Blank (BZL0339-BLK1)				Prepared	& Analyzed	: 12/12/2	016			
Cyanide	<0.01 mg/L	0.01	mg/L		-					
LCS (BZL0339-BS1)				Prepared	& Analyzed	: 12/12/2	016			
Cyanide	0.22 mg/L	0.01	mg/L	0.250 r	mg/L	89.4	80-120			
LCS Dup (BZL0339-BSD1)				Prepared	& Analyzed	: 12/12/2	016			
Cyanide	0.24 mg/L	0.01	mg/L	0.250 r	mg/L	96.0	80-120	7.12	20	
Matrix Spike (BZL0339-MS1)	Sour	ce: 16L0197	7-01	Prepared	& Analyzed	: 12/12/2	016			
Cyanide	0.24 mg/L	0.01	mg/L	0.250 <	0.01 mg/L	96.5	80-120			CI
Matrix Spike (BZL0339-MS2)	Sour	ce: 16L0272	2-01	Prepared	& Analyzed	: 12/12/2	016			
Cyanide	0.27 mg/L	0.01	mg/L	0.250 <	0.01 mg/L	108	80-120			CI
Matrix Spike Dup (BZL0339-MSD1)	Sour	ce: 16L0197	7-01	Prepared	& Analyzed	: 12/12/2	016			
Cyanide	0.25 mg/L	0.01	mg/L	0.250 <	0.01 mg/L	100	80-120	4.02	20	CI
Matrix Spike Dup (BZL0339-MSD2)	Sour	ce: 16L0272	2-01	Prepared	& Analyzed	: 12/12/2	016			
Cyanide	0.25 mg/L	0.01	mg/L	0.250 <	0.01 mg/L	99.6	80-120	7.68	20	CI



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Analyte	Certifications
EPA200.7 Rev 4.4 in Non-Potable Water	
Beryllium	VELAP,NC,WVDEP
Cadmium	VELAP,NC,WVDEP
Chromium	VELAP,NC,WVDEP
Copper	VELAP,NC,WVDEP
Lead	VELAP,NC,WVDEP
Nickel	VELAP,NC,WVDEP
Silver	VELAP,NC,WVDEP
Zinc	VELAP,NC,WVDEP
EPA245.1 R3.0 in Non-Potable Water	
Mercury	VELAP,NC,WVDEP
SW7010 in Non-Potable Water	
Antimony	VELAP,NC
Arsenic	VELAP,NC
Selenium	VELAP,NC
Thallium	VELAP,NC
SW8081B in Non-Potable Water	
4,4'-DDD	NC,VELAP,WVDEP
4,4'-DDE	NC,VELAP,WVDEP
4,4'-DDT	NC,VELAP,WVDEP
Aldrin	NC,VELAP,WVDEP
alpha-BHC	NC,VELAP,WVDEP
beta-BHC	NC,VELAP,WVDEP
Chlordane	NC,VELAP,WVDEP
delta-BHC	NC,VELAP,WVDEP
Dieldrin	NC,VELAP,WVDEP
Endosulfan I	NC,VELAP,WVDEP
Endosulfan II	NC,VELAP,WVDEP
Endosulfan sulfate	NC,VELAP,WVDEP
Endrin	NC,VELAP,WVDEP
Endrin aldehyde	NC,VELAP,WVDEP
gamma-BHC (Lindane)	NC,VELAP,WVDEP
Heptachlor	NC,VELAP,WVDEP
Heptachlor epoxide	NC,VELAP,WVDEP
Methoxychlor	NC,VELAP,WVDEP
Toxaphene	NC,VELAP,WVDEP



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Analyte	Certifications
SW8082A in Non-Potable Water	
PCB as Aroclor 1016	VELAP,NC,WVDEP
PCB as Aroclor 1221	VELAP,NC,WVDEP
PCB as Aroclor 1232	VELAP,NC,WVDEP
PCB as Aroclor 1242	VELAP,NC,WVDEP
PCB as Aroclor 1248	VELAP,NC,WVDEP
PCB as Aroclor 1254	VELAP,NC,WVDEP
PCB as Aroclor 1260	VELAP,NC,WVDEP
SW8260B in Non-Potable Water	
1,1,1,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1,1-Trichloroethane	NC,VELAP,WVDEP
1,1,2,2-Tetrachloroethane	NC,VELAP,WVDEP
1,1,2-Trichloroethane	NC,VELAP,WVDEP
1,1-Dichloroethane	NC,VELAP,WVDEP
1,1-Dichloroethylene	NC,VELAP,WVDEP
1,1-Dichloropropene	NC,VELAP,WVDEP
1,2,3-Trichlorobenzene	NC,VELAP,WVDEP
1,2,3-Trichloropropane	NC,VELAP,WVDEP
1,2,4-Trichlorobenzene	NC,VELAP,WVDEP
1,2,4-Trimethylbenzene	NC,VELAP,WVDEP
1,2-Dibromo-3-chloropropane (DBCP)	NC,VELAP,WVDEP
1,2-Dibromoethane (EDB)	NC,VELAP,WVDEP
1,2-Dichlorobenzene	NC,VELAP,WVDEP
1,2-Dichloroethane	NC,VELAP,WVDEP
1,2-Dichloropropane	NC,VELAP,WVDEP
1,3,5-Trimethylbenzene	NC,WVDEP
1,3-Dichlorobenzene	NC,VELAP,WVDEP
1,3-Dichloropropane	NC,VELAP,WVDEP
1,4-Dichlorobenzene	NC,VELAP,WVDEP
2,2-Dichloropropane	NC,VELAP,WVDEP
2-Butanone (MEK)	NC,VELAP,WVDEP
2-Chlorotoluene	NC,VELAP,WVDEP
2-Hexanone (MBK)	NC,VELAP,WVDEP
4-Chlorotoluene	NC,VELAP,WVDEP
4-Isopropyltoluene	NC,VELAP,WVDEP
4-Methyl-2-pentanone (MIBK)	NC,VELAP,WVDEP
Acetone	NC,VELAP,WVDEP



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Berzene NC_VELAP_WVDEP	Analyte	Certifications
Bromochloromethane NC,VELAP,WVDEP Bromodichloromethane NC,VELAP,WVDEP Bromoderm NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Carbon totrachloride NC,VELAP,WVDEP Chronoteme NC,VELAP,WVDEP Chlorobenzene NC,VELAP,WVDEP Chloroteme NC,VELAP,WVDEP Chloroteme NC,VELAP,WVDEP Chloroteme NC,VELAP,WVDEP Chlorotemethane NC,VELAP,WVDEP Chlorotemethane NC,VELAP,WVDEP Dibromomethane NC,VELAP,WVDEP Dibromomethane NC,VELAP,WVDEP Dichlorodifluoromethane NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Hepsyloenese NC,VELAP,WVDEP <td>Benzene</td> <td>NC,VELAP,WVDEP</td>	Benzene	NC,VELAP,WVDEP
Bromodichloromethane NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Carbon disulfide NC,VELAP,WVDEP Carbon tetrachloride NC,VELAP,WVDEP Chloroberzene NC,VELAP,WVDEP Chlorobethane NC,VELAP,WVDEP Chlorodethane NC,VELAP,WVDEP Chlorodethane NC,VELAP,WVDEP Chlorodethane NC,VELAP,WVDEP Chloromethane NC,VELAP,WVDEP Cis-1,2-Dichloropropene NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Di-lisopropyl ether (DIPE) NC,VELAP,WVDEP Ethyloenzene NC,VELAP,WVDEP Di-lisopropyl ether (DIPE) NC,VELAP,WVDEP Idomethane NC,VELAP,WVDEP Idomethane NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methyl-bulyl ether (MTBE) NC,VELAP,WVDEP Naphthalene NC,VELAP,WVDEP N-Bulylbenzene NC,VELAP,WVDEP	Bromobenzene	NC,VELAP,WVDEP
Bromoform NC,VELAP,WVDEP Bromomethane NC,VELAP,WVDEP Carbon disulfide NC,VELAP,WVDEP Carbon tetrachloride NC,VELAP,WVDEP Chlorobenzene NC,VELAP,WVDEP Chloroform NC,VELAP,WVDEP Chloroform NC,VELAP,WVDEP Chloromethane NC,VELAP,WVDEP Chloromethane NC,VELAP,WVDEP cis-1,3-Dichloropropene NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromomethane NC,VELAP,WVDEP Dichlorodifluoromethane NC,VELAP,WVDEP Di-baycopyl ether (DIPE) NC,VELAP,WVDEP Hexablorobutadiene NC,VELAP,WVDEP <td>Bromochloromethane</td> <td>NC,VELAP,WVDEP</td>	Bromochloromethane	NC,VELAP,WVDEP
Bromomethane NC,VELAP,WVDEP Carbon disulfide NC,VELAP,WVDEP Carbon tetrachloride NC,VELAP,WVDEP Chlorobenzene NC,VELAP,WVDEP Chlorofethane NC,VELAP,WVDEP Chloroform NC,VELAP,WVDEP Chloromethane NC,VELAP,WVDEP cis-1,2-Dichloropropene NC,VELAP,WVDEP cis-1,3-Dichloropropene NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dichlorodiffuroromethane NC,VELAP,WVDEP Dichlorodiffuromethane NC,VELAP,WVDEP Dichlorodiffuromethane NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Naphthalene NC,VELAP,WVDEP N-Propylbenzene NC,VELAP,WVD	Bromodichloromethane	NC,VELAP,WVDEP
Carbon disulfide NC,VELAP,WVDEP Carbon tetrachloride NC,VELAP,WVDEP Chlorobenzene NC,VELAP,WVDEP Chloroethane NC,VELAP,WVDEP Chloroethane NC,VELAP,WVDEP Chloroethane NC,VELAP,WVDEP cis-1,2-Dichloroethylene NC,VELAP,WVDEP cis-1,2-Dichloropropene NC,VELAP,WVDEP Dibromchoromethane NC,VELAP,WVDEP Dibromchoromethane NC,VELAP,WVDEP Dibromcolifluoromethane NC,VELAP,WVDEP Dishorozdiffuoromethane NC,VELAP,WVDEP Dishorozdiffuoromethane NC,VELAP,WVDEP Dishorozdiffuoromethane NC,VELAP,WVDEP Dishorozdiffuoromethane NC,VELAP,WVDEP Bispropyl berzene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Naphthalene NC,VELAP,WVDEP Naphthalene NC,VELAP,WVDEP NC,VELAP,WVDEP	Bromoform	NC,VELAP,WVDEP
Carbon letrachloride NC,VELAP,WVDEP Chlorobenzene NC,VELAP,WVDEP Chloroethane NC,VELAP,WVDEP Chloromthane NC,VELAP,WVDEP Chloromethane NC,VELAP,WVDEP Chloromethane NC,VELAP,WVDEP cis-1,2-Dichlorothylene NC,VELAP,WVDEP cis-1,2-Dichlorothylene NC,VELAP,WVDEP cis-1,2-Dichloromethane NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Disopropyl ether (DIPE) NC,VELAP,WVDEP Disopropyl ether (DIPE) NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Iodomethane NC,VELAP,WVDEP NEthylene schoride NC,VELAP,WVDEP Methyl-butyl ether (MTBE) NC,VELAP,WVDEP Methylene schoride NC,VELAP,WVDEP NSphthalene NC,VELAP,WVDEP	Bromomethane	NC,VELAP,WVDEP
Chlorobenzene NC,VELAP,WVDEP Chloroform NC,VELAP,WVDEP Chloroform NC,VELAP,WVDEP Chloromethane NC,VELAP,WVDEP cis-1,2-Dichloroethylene NC,VELAP,WVDEP cis-1,3-Dichloropropene NC,VELAP,WVDEP Dibromochtomethane NC,VELAP,WVDEP Dibromodethane NC,VELAP,WVDEP Dichlorodfluoromethane NC,VELAP,WVDEP Di-isopropyl ether (DIPE) NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Iodomethane NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP m+p-Xylenes NC,VELAP,WVDEP Methyl-budy ether (MTBE) NC,VELAP,WVDEP Methyl-budy ether (MTBE) NC,VELAP,WVDEP Methyl-budy ether (MTBE) NC,VELAP,WVDEP n-Propybenzene NC,VELAP,WVDEP n-Propybenzene NC,VELAP,WVDEP sec-Butylbenzene NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP Etta-Bloroethylene (PCE) NC,VELAP,WVDEP Toluene NC,VELAP,WVDEP	Carbon disulfide	NC,VELAP,WVDEP
Chloroethane Chloroform NC,VELAP,WVDEP Chloroform NC,VELAP,WVDEP cis-1,2-Dichloroethylene cis-1,2-Dichloropropene NC,VELAP,WVDEP cis-1,3-Dichloropropene NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dichlorodifluoromethane NC,VELAP,WVDEP Dichlorodifluoromethane NC,VELAP,WVDEP Dichlorobiddiner NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Hodenthane NC,VELAP,WVDEP NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP NSylmene NBulylbenzene NC,VELAP,WVDEP NSylmene NC,VELAP,WVDEP NSylmene NC,VELAP,WVDEP NC,VELAP,WVDEP NSylmene NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP Tetra-bloroethylene (PCE) NC,VELAP,WVDEP Tolluene NC,VELAP,WVDEP Trans-1,3-Dichloroethylene Trans-1,2-Dichloroethylene Trans-1,2-Dichloroperpoene NC,VELAP,WVDEP Trichloroethylene Trichloroethylene NC,VELAP,WVDEP Trichloroethylene Trichloroethylene NC,VELAP,WVDEP NC,VELAP,WVDEP	Carbon tetrachloride	NC,VELAP,WVDEP
Chloroform NC,VELAP,WVDEP Chloromethane NC,VELAP,WVDEP cis-1,2-Dichloroethylene NC,VELAP,WVDEP cis-1,3-Dichloropropene NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromomethane NC,VELAP,WVDEP Dichlorodifluoromethane NC,VELAP,WVDEP Dichlorodifluoromethane NC,VELAP,WVDEP Disporpoyle ether (DIPE) NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Isogropylbenzene NC,VELAP,WVDEP Methylenese NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methyl-butyl ether (MTBE) NC,VELAP,WVDEP Naphthalene NC,VELAP,WVDEP N-Butylbenzene NC,VELAP,WVDEP N-Propylbenzene NC,VELAP,WVDEP N-Propylbenzene NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP Tetrachloroethylene (PCE) NC,VELAP,WVDEP Toluene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP <	Chlorobenzene	NC,VELAP,WVDEP
Chloromethane NC,VELAP,WVDEP cis-1,2-Dichloroethylene NC,VELAP,WVDEP cis-1,3-Dichloropropene NC,VELAP,WVDEP Dibromochtoromethane NC,VELAP,WVDEP Dibromodifluoromethane NC,VELAP,WVDEP Di-isopropyl ether (DIPE) NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Iodomethane NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP Methylenes NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Naphthalene NC,VELAP,WVDEP Naphthalene NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP <td>Chloroethane</td> <td>NC,VELAP,WVDEP</td>	Chloroethane	NC,VELAP,WVDEP
cis-1,2-Dichloroethylene NC,VELAP,WVDEP cis-1,3-Dichloropropene NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromomethane NC,VELAP,WVDEP Dichlorodifluoromethane NC,VELAP,WVDEP Di-bisopropyl ether (DIPE) NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Iodomethane NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP m+p-Xylenes NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Naphthalene NC,VELAP,WVDEP N-Butylbenzene NC,VELAP,WVDEP N-Butylbenzene NC,VELAP,WVDEP 0-Xylene NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP Tetrachloroethylene (PCE) NC,VELAP,WVDEP Tetrachloroethylene (PCE) NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP	Chloroform	NC,VELAP,WVDEP
cis-1,3-Dichloropropene NC,VELAP,WVDEP Dibromochloromethane NC,VELAP,WVDEP Dibromomethane NC,VELAP,WVDEP Dichlorodifluoromethane NC,VELAP,WVDEP Di-siopropyl ether (DIPE) NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Idodmethane NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP m+p-Xylenes NC,VELAP,WVDEP Methyl-t-butyl ether (MTBE) NC,VELAP,WVDEP Methyl-t-butyl ether (MTBE) NC,VELAP,WVDEP N-Butylbenzene NC,VELAP,WVDEP n-Propylbenzene NC,VELAP,WVDEP n-Propylbenzene NC,VELAP,WVDEP sec-Butylbenzene NC,VELAP,WVDEP sec-Butylbenzene NC,VELAP,WVDEP tert-Butylbenzene NC,VELAP,WVDEP Tetrachloroethylene (PCE) NC,VELAP,WVDEP Toluene NC,VELAP,WVDEP Trans-1,2-Dichloropropene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP	Chloromethane	NC,VELAP,WVDEP
Dibromoethane Dibromoethane NC,VELAP,WVDEP Dichlorodifluoromethane NC,VELAP,WVDEP Dichlorodifluoromethane NC,VELAP,WVDEP Disbopropyl ether (DIPE) Ethylbenzene NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Isbopropylbenzene Mc,VELAP,WVDEP Isbopropylbenzene Methylenes NC,VELAP,WVDEP Methylenes NC,VELAP,WVDEP Methyl-t-butyl ether (MTBE) NC,VELAP,WVDEP Naphthalene NC,VELAP,WVDEP NC,VELAP,WVDEP N-Butylbenzene NC,VELAP,WVDEP NC,VELAP,WVDEP N-Propylbenzene NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP Tetrachloroethylene(PCE) Toluene Trichloroethylene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP	cis-1,2-Dichloroethylene	NC,VELAP,WVDEP
Dibromomethane NC,VELAP,WVDEP Dichlorodifluoromethane NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP Tetra-Stlylbenzene NC,VELAP,WVDEP Tetra-Stlylbenzene NC,VELAP,WVDEP Toluene NC,VELAP,WVDEP Trans-1,2-Dichloroethylene Trichloroethylene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP	cis-1,3-Dichloropropene	NC,VELAP,WVDEP
Dichlorodifluoromethane NC,VELAP,WVDEP Di-isopropyl ether (DIPE) NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Iodomethane NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP m+p-Xylenes NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methyl-t-butyl ether (MTBE) NC,VELAP,WVDEP Naphthalene NC,VELAP,WVDEP n-Butylbenzene NC,VELAP,WVDEP n-Propylbenzene NC,VELAP,WVDEP o-Xylene NC,VELAP,WVDEP sec-Butylbenzene NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP tert-Butylbenzene NC,VELAP,WVDEP Tetrachloroethylene (PCE) NC,VELAP,WVDEP Toluene NC,VELAP,WVDEP trans-1,2-Dichloropropene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP	Dibromochloromethane	NC,VELAP,WVDEP
Di-isopropyl ether (DIPE) NC,VELAP,WVDEP Ethylbenzene NC,VELAP,WVDEP Hexachlorobutadiene NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP Isopropylbenzene NC,VELAP,WVDEP m+p-Xylenes NC,VELAP,WVDEP Methylene chloride NC,VELAP,WVDEP Methyl-t-butyl ether (MTBE) NC,VELAP,WVDEP Naphthalene NC,VELAP,WVDEP n-Butylbenzene NC,VELAP,WVDEP n-Propylbenzene NC,VELAP,WVDEP sec-Butylbenzene NC,VELAP,WVDEP sec-Butylbenzene NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP tert-Butylbenzene NC,VELAP,WVDEP Toluene NC,VELAP,WVDEP Trans-1,2-Dichloroethylene NC,VELAP,WVDEP trans-1,2-Dichloroethylene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP	Dibromomethane	NC,VELAP,WVDEP
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n-Butylbenzene n-Propylbenzene NC,VELAP,WVDEP NC,VELAP,WVDEP sec-Butylbenzene NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP tert-Butylbenzene NC,VELAP,WVDEP Tetrachloroethylene (PCE) NC,VELAP,WVDEP Toluene NC,VELAP,WVDEP trans-1,2-Dichloroethylene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP	Methyl-t-butyl ether (MTBE)	NC, VELAP, WVDEP
n-Propylbenzene o-Xylene NC,VELAP,WVDEP sec-Butylbenzene NC,VELAP,WVDEP Styrene NC,VELAP,WVDEP tert-Butylbenzene NC,VELAP,WVDEP Tetrachloroethylene (PCE) NC,VELAP,WVDEP Toluene NC,VELAP,WVDEP trans-1,2-Dichloroethylene NC,VELAP,WVDEP trans-1,3-Dichloropropene NC,VELAP,WVDEP Trichloroethylene NC,VELAP,WVDEP NC,VELAP,WVDEP NC,VELAP,WVDEP	Naphthalene	NC,VELAP,WVDEP
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Trichloroethylene NC,VELAP,WVDEP	trans-1,3-Dichloropropene	NC,VELAP,WVDEP
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Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Vinyl acetate Vinyl chloride NC,VELAP,WVDEP Xylenes, Total NC,VELAP,WVDEP SW8270D in Non-Potable Water 1,2,4,5-Tetrachlorobenzene VELAP,WVDEP,NC 1,2-Dichlorobenzene VELAP,WVDEP,NC 1,2-Diphenylhydrazine VELAP,WVDEP,NC 1,3-Dichlorobenzene VELAP,WVDEP,NC 1,3-Dinitrobenzene VELAP,WVDEP,NC 1,3-Dinitrobenzene VELAP,WVDEP,NC 1,3-Dinitrobenzene VELAP,WVDEP,NC
Xylenes, Total NC,VELAP,WVDEP SW8270D in Non-Potable Water 1,2,4,5-Tetrachlorobenzene VELAP,WVDEP,NC 1,2,4-Trichlorobenzene VELAP,WVDEP,NC 1,2-Dichlorobenzene VELAP,WVDEP,NC 1,2-Diphenylhydrazine VELAP,WVDEP,NC 1,3-Dichlorobenzene VELAP,WVDEP,NC 1,3-Dinitrobenzene VELAP,WVDEP,NC 1,4-Dichlorobenzene VELAP,WVDEP,NC 1,4-Dichlorobenzene VELAP,WVDEP,NC 1,4-Dichlorobenzene VELAP,WVDEP,NC 1,4-Dichlorobenzene VELAP,WVDEP,NC 2,3,4,6-Tetrachlorophenol VELAP,WVDEP,NC 2,4,5-Trichlorophenol VELAP,WVDEP,NC
SW8270D in Non-Potable Water 1,2,4,5-Tetrachlorobenzene VELAP,WVDEP,NC 1,2,4-Trichlorobenzene VELAP,WVDEP,NC 1,2-Dichlorobenzene VELAP,WVDEP,NC 1,2-Diphenylhydrazine VELAP,WVDEP,NC 1,3-Dichlorobenzene VELAP,WVDEP,NC 1,3-Dinitrobenzene VELAP,WVDEP,NC 1,4-Dichlorobenzene VELAP,WVDEP,NC 1-Naphthylamine VELAP,WVDEP,NC 2,3,4,6-Tetrachlorophenol VELAP,WVDEP,NC 2,4,5-Trichlorophenol VELAP,WVDEP,NC
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2,4,5-Trichlorophenol VELAP,WVDEP,NC
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2,4-Dichlorophenol VELAP,WVDEP,NC
2,4-Dimethylphenol VELAP,WVDEP,NC
2,4-Dinitrophenol VELAP,WVDEP,NC
2,4-Dinitrotoluene VELAP,WVDEP,NC
2,6-Dichlorophenol VELAP,WVDEP,NC
2,6-Dinitrotoluene VELAP,WVDEP,NC
2-Chloronaphthalene VELAP,WVDEP,NC
2-Chlorophenol VELAP,WVDEP,NC
2-Methylnaphthalene VELAP,WVDEP,NC
2-Naphthylamine VELAP,WVDEP,NC
2-Nitroaniline VELAP,WVDEP,NC
2-Nitrophenol VELAP,WVDEP,NC
3,3'-Dichlorobenzidine VELAP,WVDEP,NC
3-Methylcholanthrene VELAP,WVDEP,NC
3-Nitroaniline VELAP,WVDEP,NC
4,6-Dinitro-2-methylphenol VELAP,WVDEP,NC
4-Aminobiphenyl VELAP,WVDEP,NC
4-Bromophenyl phenyl ether VELAP,WVDEP,NC
4-Chloroaniline VELAP,WVDEP,NC
4-Chlorophenyl phenyl ether VELAP,WVDEP,NC
4-Nitroaniline VELAP,WVDEP,NC
4-Nitrophenol VELAP,WVDEP,NC



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Analyte	Certifications
7,12-Dimethylbenz (a) anthracene	VELAP,WVDEP,NC
Acenaphthene	VELAP,WVDEP,NC
Acenaphthylene	VELAP,WVDEP,NC
Acetophenone	VELAP,WVDEP,NC
Aniline	VELAP,WVDEP,NC
Anthracene	VELAP,WVDEP,NC
Benzidine	VELAP,WVDEP,NC
Benzo (a) anthracene	VELAP,WVDEP,NC
Benzo (a) pyrene	VELAP,WVDEP,NC
Benzo (b) fluoranthene	VELAP,WVDEP,NC
Benzo (g,h,i) perylene	VELAP,WVDEP,NC
Benzo (k) fluoranthene	VELAP,WVDEP,NC
Benzoic acid	VELAP,WVDEP,NC
Benzyl alcohol	VELAP,WVDEP,NC
bis (2-Chloroethoxy) methane	VELAP,WVDEP,NC
bis (2-Chloroethyl) ether	VELAP,WVDEP,NC
bis (2-Chloroisopropyl) ether	VELAP,WVDEP,NC
bis (2-Ethylhexyl) phthalate	VELAP,WVDEP,NC
Butyl benzyl phthalate	VELAP,WVDEP,NC
Chrysene	VELAP,WVDEP,NC
Dibenz (a,h) anthracene	VELAP,WVDEP,NC
Dibenz (a,j) acridine	VELAP,WVDEP,NC
Dibenzofuran	VELAP,WVDEP,NC
Diethyl phthalate	VELAP,WVDEP,NC
Dimethyl phthalate	VELAP,WVDEP,NC
Di-n-butyl phthalate	VELAP,WVDEP,NC
Di-n-octyl phthalate	VELAP,WVDEP,NC
Diphenylamine	VELAP,WVDEP,NC
Ethyl methanesulfonate	VELAP,WVDEP,NC
Fluoranthene	VELAP,WVDEP,NC
Fluorene	VELAP,WVDEP,NC
Hexachlorobenzene	VELAP,WVDEP,NC
Hexachlorobutadiene	VELAP,WVDEP,NC
Hexachlorocyclopentadiene	VELAP,WVDEP,NC
Hexachloroethane	VELAP,WVDEP,NC
Indeno (1,2,3-cd) pyrene	VELAP,WVDEP,NC
Isophorone	VELAP,WVDEP,NC
m+p-Cresols	VELAP,WVDEP,NC
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Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: **Fulton Gas** Purchase Order:

Analyte		Certifications	
Methyl methanesulfonate		VELAP,WVDEP,NC	
Naphthalene		VELAP,WVDEP,NC	
Nitrobenzene		VELAP,WVDEP,NC	
n-Nitrosodimethylamine		VELAP,WVDEP,NC	
n-Nitrosodi-n-butylamine		VELAP,WVDEP,NC	
n-Nitrosodi-n-propylamine		VELAP,WVDEP,NC	
n-Nitrosodiphenylamine		VELAP,WVDEP,NC	
n-Nitrosopiperidine		VELAP,WVDEP,NC	
o+m+p-Cresols		WVDEP,NC	
o-Cresol		VELAP,WVDEP,NC	
p-(Dimethylamino) azobenzene		VELAP,WVDEP,NC	
p-Chloro-m-cresol		VELAP,WVDEP,NC	
Pentachloronitrobenzene (quintozene)		VELAP,WVDEP,NC	
Pentachlorophenol		VELAP,WVDEP,NC	
Phenacetin		VELAP,WVDEP,NC	
Phenanthrene		VELAP,WVDEP,NC	
Phenol		VELAP,WVDEP,NC	
Pronamide		VELAP,WVDEP,NC	
Pyrene		VELAP,WVDEP,NC	
Pyridine		VELAP,WVDEP,NC	
SW9012 in Non-Potable Water			
Cyanide		VELAP	
Code	Description	Lab Number	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2016
NC	North Carolina DENR	495	12/31/2016
VELAP	NELAC-Virginia Certificate #8886	460021	06/15/2017

Code	Description	Lab Number	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2016
NC	North Carolina DENR	495	12/31/2016
VELAP	NELAC-Virginia Certificate #8886	460021	06/15/2017



Certificate of Analysis

Final Report

Client Name: Timmons Group

Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus

Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Summary of Data Qualifiers

Cl Residual Chlorine or other oxidizing agent was detected in the container used to analyze this sample.

DND Not Detected

DS Surrogate concentration reflects a dilution factor.

E Estimated concentration, outside calibration range

M Matrix spike recovery is outside established acceptance limits

P Duplicate analysis does not meet the acceptance criteria for precision

S Surrogate recovery was outside acceptance criteria

RPD Relative Percent Difference

Qual Qualifers

-RE Denotes sample was re-analyzed

D.F. Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.

TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library .

A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated

and are calculated using an internal standard response factor of 1.

PCBs, Total Total PCBs are defined as the sum of detected Aroclors 1016, 1221, 1232, 1248, 1254, 1260, 1262, and 1268.



1941 REYMET ROAD **RICHMOND, VIRGINIA 23237** (804) 358-8295 PHONE (804)358-8297 FAX Chain of Custody Form #: D1331

Rev. 1.0 Effective: Feb 14, 2014

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Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organic A=Air WP=Wipe OT=Other															COMMENTS										
			(S)	-								ANA	ALYSI	S/(PR	ESER	VATIVI	Ε)		Preservative Codes: C=Hydrochloric Acid S						
CLIENT SAMPLE I.D.				ite Start Date	ite Start Time	te or Ite Stop Date	Grab Time or Composite Stop Time	served	Matrix (See Codes)	Number of Containers			Metals		tes		2,3,70-TUDD (SIM)	ر ر ک	H=Sodium Hydroxide Acid Z=Zinc Acetate Thiosulfate M=N	: T=Sodium					
	Grab	Composite	Field Filt	Field Filt	Field Filtered (Dissolved Metals)	Field Filt	Field Filt	Composite	Composite	Grab Date or Composite S		Time Preserved		Number	1105	SVIDES	ML	S	pertudes	Sgod			PLEASE NOTE PRES INTERFERENCE CHE RATE (L/m	CKS or PUMP	
1) MW-26	X					12/7/16	10:35	138 10:45 GW			Χ	У	$X X \times X$				X		product						
2) MW-27	Х	Ш				12/7/10	11:35	11.45	62	1	入	٧	X	X	X	X	X	,	"henry pm	anet_					
3) MW-11	Χ	Ш		_		12/4/16	12:25	12:30	6W	1	<u>×</u>	×	X	×	×		× manut								
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10)							\Box									NO SECOL									
RELINQUISHED;		E/		RECEIVE	<i>P.</i>	///	1/2	DATE /	TIME	QC	Data P	ackage	LAB (AB USE ONLY COOLER TEMP 8.9 °C											
Julie Com 12/7/		2!			<u> Di-1</u>	(til)	<u> </u>		1438	Leve	el I														
RELINQUISHED:	E / 1	IIME	RECEIVE	:ט:		/	DATE /	IIME	Leve	el II -			TG 16L0239												
RELINQUISHED:	DAT	E / 1	TIME	RECEIVE	D:			DATE /	TIME	Leve	el 111		Fulton Gasworks												
	_									Leve	i IV		Recd: 12/07/2016 Due: 12/14/2016 vis Page 75 of 77												
																			v₁₃ Page	130111					



Sample Preservation Log

Sample Preservation Log Form #: F1301 Rev # 6.0 Effective: Aug 31, 2016 Page 1 of 1

Date Performed: 8 DEC 2016

,																				Ana	alyst I	Perfo	rmir	ng Ch	eck:		T			 -	P/A = Present/Absent									
	er ID	N	Vleta	ıls	,	Cyanide			Sulfid	le	A	mmo	nonia		TKN	ı	P	hos,	Tot	N	O3+N	102	DRO)	P	estic 081/6	ide	SV(~ <u>-</u>				
Sample ID	Container ID	pH Rece	as eived Other	Final pH (If adjust.)	p Re: > 12	H as ceived Other	Final pH (If adjust.)	Pl Red	H as eived Other	Final pH (If adjust.)	pH as Received () < 2 Othe		Final pH (If adjust.)	Rec < 2	pH as eccived Hd adjust		Re	H as ceived Other	Final pH (If adjust.)	pH as Received		Final pH (If adjust.)	P Res	H as ceived Other	Final pH (If adjust.)	Res.Cl as Received Present Absen		Res.Cl P/A (If adjust.)	Res. Rece Present	CI as rived Absent	Res.Cl P/A (If adjust.)	pH Rece	as ived Other	Final pH (If adjust.)	pH Rece	as eived Other	Final pH (If adjust.)			
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HCI ·ID·									Na ₂ S	O3 IF	١٠							1 N N	IaOH	in.									5N N	م∩⊔.										

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F1301 Sample Preservation Lo

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Certificate of Analysis

Final Report

Client Name: Timmons Group Date Issued: 12/14/2016 16:49

1001 Boulders Parkway, Suite 300

Richmond VA, 23225

Submitted To: Julia Campus Project Number: 36156.015

Client Site I.D.: Fulton Gas Purchase Order:

Sample Conditions Checklist

Samples Received at:	8.90°C
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits? (above freezing to 6°C) or received on ice and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	Yes
Are all volatile organic and TOX containers free of headspace?	Yes
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	Yes
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis.	Yes

Received Trip Blank (22 Nov 2016/14.25) added to work order; Julia Campus was notified by email. THM 8 Dec 2016/9.04 $\,$