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Addendum 1 Data Report

Paerdegat Basin

Brooklyn, New York

NYSDEC Site No. 224167

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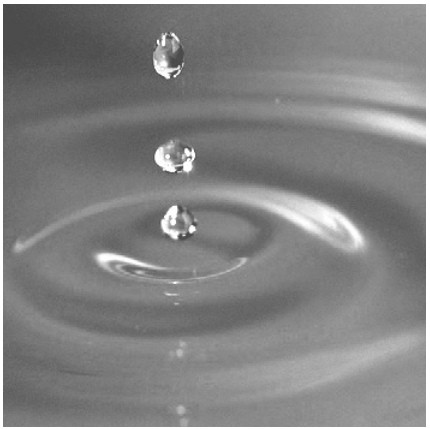
January 2016
Project # 129600



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Abbreviations and Acronyms

CSO	Combined Sewer Overflow
º C	Degrees Celsius
DUSRs	Data Usability Reports
GEI	GEI Consultants, Inc., P.C.
IDW	Investigation Derived Waste
MLW	Mean Low Water
mg/kg	Milligrams per kilograms
MS/MSD	Matrix Spike and Matrix Spike Duplicate
NYCDEP	New York City Department Of Environmental Protection
NYSASP	New York State Analytical Services Protocol
NYSDEC	New York State Department Of Environmental Conservation
PCB	Polychlorinated Biphenyl
QA/QC	Quality Assurance/Quality Control
SVOC	Semi-Volatile Organic Compound
TPH	Total Petroleum Hydrocarbon
µg/100 cm^2	Micrograms per 100 square centimeters
µg/kg	Micrograms per kilogram
USDOT	United States Department Of Transportation
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

Executive Summary

On behalf of National Grid, GEI Consultants, Inc., P.C. (GEI) conducted an additional investigation within Paerdegat Basin in response to a 2012 release of gas condensate. The purpose of the investigation was to address concerns raised by the New York City Department of Environmental Protection (NYCDEP) regarding potential impacts to tide gates at their combined sewer overflow (CSO) facility and sewer structures near the release area at the corner of Seaview Avenue and Paerdegat Avenue North, and to determine whether PCBs associated with the gas condensate release can be detected in materials associated with the concrete bulkhead at the CSO facility. Paerdegat Basin is located in Brooklyn, New York.

Field work was conducted in accordance with the March 2015 Work Plan Addendum 1 between September 21 and 25, 2015. The work plan was approved by the New York State Department of Environmental Conservation (NYSDEC) on June 19, 2015. Sampling included the collection of seven drilled samples from the wooden tide gates, ten chip samples from the concrete bulkhead, and one wipe sample from the steel bulkhead at the NYCDEP CSO facility at the head of the basin, as well as four wipe samples from sewer structures on Paerdegat Avenue North. One of the tide gate wood samples, i.e. the reference sample, was collected at an elevation above the high tide line that had not likely been impacted by the condensate release. All samples were analyzed for polychlorinated biphenyl (PCB) Aroclors according to United State Environmental Protection Agency (USEPA) Method 8082A. In addition, a subset of wood samples was also analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and total petroleum hydrocarbon (TPH).

PCB Aroclors 1242, 1248, and 1260 were detected in tide gate and bulkhead samples. In general, total PCB concentrations were higher on structures at the head of the basin and decreased to a concentration below one mg/kg with movement down the shoreline to the southeast. PCB Aroclor 1242 was the only PCB Aroclor detected in the gas condensate samples analyzed during the spill response. Aroclor 1242 was detected in three bulkhead and two tide gate samples including the reference tide gate sample. The low frequency of detections and low concentrations of PCB Aroclor 1242 and higher frequency of detections of PCB Aroclors 1248 and 1260 suggest that the Aroclor 1242 has been substantially depleted through environmental degradation and that a significant portion of the remaining PCBs detected originated from sources other than the gas condensate release.

Vertical delineation samples were collected from above and below previously collected bulkhead samples where PCBs were detected at elevated concentrations. PCBs were not detected from the high tide delineation samples and concentrations of total PCBs in the low

tide samples were significantly lower than the previously detected values, suggesting that PCB concentrations are degrading over time and indicating that the vertical extent of PCB contamination is limited to the tidal fluctuation zone.

VOCs, comprised primarily p-cymene, and methyl acetate, as well as TPH were detected in tide gate structures including the reference sample location. These parameters are not associated with the gas condensate release and are from unrelated sources, which indicates that sources other than the condensate release have impacted the structures.

PCBs were not detected on the metal sanitary sewer manhole covers tested. Low concentrations (0.45 to 1.2 mg/kg) of PCB Aroclor 1248 were detected in wipe samples collected from two metal storm water catch basins located at the intersection of Paerdegat Avenue North and Seaview Avenue. None of the wipe concentrations exceeded the EPA decontamination standard for metal (non-porous) surfaces of 10 ug/100 cm^2. No further actions are recommended regarding the nonporous structures.

Based on the data from analysis of samples collected over time from structures at Paerdegat Basin, it appears that PCBs from sources other than the gas condensate release have affected the structures, and that Aroclor 1242 concentrations potentially associated with the condensate release are declining over time. A significant portion of PCBs appear to be related to other sources than the condensate release given that Aroclors 1242, 1248, and 1260 were detected. Only 1242 is associated with the condensate release. Aroclor 1242 was also detected in a reference sample collected above the high tide line suggesting that CSO effluent or other sources beyond the condensate release have also contributed to the detections of Aroclor 1242. Overall PCB concentrations are highest on structures near the head of the basin. It is anticipated that the gas condensate PCBs will continue to decline, to levels below the cleanup standard of 1 mg/kg within a reasonable time frame.

1. Introduction

On behalf of National Grid, GEI Consultants, Inc., P.C. (GEI) conducted an additional investigation within Paerdegat Basin. The purpose of the investigation was to evaluate whether PCBs associated with the 2012 gas condensate release can be detected in structural materials associated with the New York City Department of Environmental Protection (NYCDEP) combined sewer overflow (CSO) facility in Paerdegat Basin and structures associated with the storm and sanitary sewers in Paerdegat Avenue North. Paerdegat Basin is located in Brooklyn, New York. A site location map is provided in Figure 1.

The investigations and findings described in this report were based on implementation of the March 2015 Work Plan Addendum 1. The work plan was approved by the New York State Department of Environmental Conservation (NYSDEC) on June 19, 2015. Appendix A provides letters of approval from the NYSDEC.

1.1 Site Description and Background

On September 27, 2012, during the abandonment of a gas transmission main, which consists of a 30" diameter main on the landsides of Paerdegat Basin and transitions into dual 24" mains under Paerdegat Basin, there was a release of gas condensate from a temporary standpipe pit that was initially installed as part of the abandonment action. The New York City Fire Department hosed the released material off the street to storm water catch basins that flowed to an outfall located at the approximate center of the northeast basin shoreline.

Information regarding the gas condensate release is provided in the original Site Characterization Work Plan dated October 22, 2012 and revised as of April 2, 2013. The results of the investigations completed under the original Work Plan are presented in the Draft Site Characterization Data Report prepared by GEI and dated September 2013. Work Plan Addendum 1 and the associated field work, sampling, and analytical results discussed in this report were intended to address concerns raised by the NYCDEP regarding potential impacts to tide gates at their CSO facility and sewer structures near the release area at the corner of Seaview Avenue and Paerdegat Avenue North, and to determine the extent of potential impacts to the concrete bulkhead at the CSO facility. During the initial investigation two samples of the concrete bulkhead at the CSO facility were collected and polychlorinated biphenyls (PCBs) were detected at 7.78 milligrams per kilogram (mg/kg) at location PB-PS-CSO-01 and 146.6 mg/kg at PB-PS-CSO-02. These previous sample locations are indicated in Figure 2. The tide gates and sewer structures were not tested during previous investigations.

In addition to the gas condensate release, there are other sources of PCB discharges to Paerdegat Basin. Paerdegat Basin was dredged to 16 feet below mean low water (MLW) in the 1930s and bulkheads were placed along shoreline resulting in in its present configuration. Untreated sewage was likely discharged directly to the basin prior to 1935, when the Coney Island sewage treatment plant was built. The Coney Island sewage treatment plant did not have the capacity to treat all the storm water and sanitary wastewaters collected during larger precipitation events and large quantities of combined sewer wastewaters routinely overflowed into Paerdegat Basin. The current CSO retention facility went online in 2011. From 1935 until 2011 there was no treatment of the CSO discharges to Paerdegat Basin other than the removal of gross solids. The presence of PCBs and other chemicals in the CSO discharges is well documented by sediment chemical analytical results in reports prepared for the NYCDEP to support the recent dredging and capping work and in the Draft Site Characterization Data Report prepared by GEI and dated September 2013. The analytical results indicate a long history of untreated industrial sewage discharges to Paerdegat Basin. Currently, based on the baseline flows used to design the current CSO retention facility, which closely represent existing conditions, a total of 75 million gallons (MG) per year of untreated CSO wastewaters discharge to the basin and 971 MG per year of CSO wastewater, which only receives primary treatment, discharges to the basin. The quantity of CSO wastewater discharged to the basin each year is significantly greater than the estimated 820 to 1420 gallons of gas condensate released. Current discharges from the CSOs are likely less contaminated than they were historically due to ban on PCB sales and pretreatment of industrial discharges, but still these discharges likely contain residual low levels of PCBs as well as other potentially toxic chemicals.

2. Site Field Investigations

The field work was conducted between September 21 and 25, 2015, in accordance with the NYSDEC-approved March 2015 Work Plan Addendum 1. The field effort included the collection of seven wood samples from the tide gates, ten chip samples from the bulkhead, and one wipe sample from the bulkhead of the NYCDEP CSO facility at the head of the basin, as well as four wipe samples from and sewer structures on Paerdegat Avenue North.

Photo documentation of field activities is included in **Appendix B.**

2.1 Sampling and Analysis

2.1.1 Sampling Methods

The objective of sampling was to determine whether PCBs associated with the gas condensate release can be detected in materials associate with the tide gates, concrete bulkhead, and sewer structures. Sample locations are shown in Figures 2 and 3.

2.1.1.1 Tide gates

A wood sample was collected from one tide gate in each of six sets of tide gates. In addition, a reference wood sample (NG-PB-WD-108) was collected above the extreme high tide level to obtain a sample representative of wood impacted by CSO discharges but not the condensate release. A total of seven wood samples were collected (NG-PB-108 through 110 and NG-PB-WD-112 through 115). Appendix B included photographs of the sampling activities.

Wood samples were collected according to USEPA sampling protocols for collection of porous materials for PCB analysis (USEPA, 2011). A handheld rotary drill with a spade bit was used to collect surface samples from the porous material. The depth of sampling did not exceed 1/2 inch into the surface sampled. Samples were collected at low tide and were composed of a composite of three subsamples from locations representative of approximate heights of low tide, mid tide, and high tide. Holes created during sample collection were patched with marine epoxy.

2.1.1.2 Bulkhead

Six chip samples and one wipe sample were collected at approximate 100-foot intervals along the bulkheads. The chip samples were collected using a concrete hammer. Five of the samples collected (NG-PB-CN-101, NG-PB-CN-104 through 107) were of concrete material and one sample (NG-PB-CN-100) was composed of granite. The bulkhead of one of the proposed locations was constructed of steel, and therefore, could not be chip sampled;

instead a wipe sample was collected (NG-PB-WP-102). In addition, vertical delineation samples were collected at the two locations (NG-PB-PS-CSO-01 and 02) where PCBs were previously detected during the site characterization investigation. Vertical delineations samples were collected from concrete above and below the previously sampled location. A total of 10 chip samples and one wipe sample were collected and analyzed.

The chip samples were collected using USEPA sampling protocols for collection of porous materials for PCB analysis (USEPA, 2011). The depth of sampling did not exceed 1/2 inch into the surface sampled. Vertical delineation samples were discrete samples; the other samples were collected at low tide and were composed of a composite of three subsamples from locations representative of approximate heights of low tide, mid tide, and high tide. Holes created during sample collection were patched with marine epoxy. The wipe sample was collected in accordance with USEPA sampling protocols in 40 CFR 761.123. A gauze pad saturated in hexane was used to swab a 100 square centimeter area.

2.1.1.3 Sanitary Manholes

Four wipe samples were collected from two sanitary manhole covers (SMH-1 and SMH-2) and two storm water catch basin grate covers (CB-1 and CB-2) near the release area at the corner of Seaview Avenue and Paerdegat Avenue North. Samples were collected in accordance with USEPA sampling protocols in 40 CFR 761.123. A gauze pad saturated in hexane was used to swab a 100 square centimeter area. The sample area was selected based on the location with the highest likelihood of having been affected by the release.

2.1.2 Analytical Analysis

Concrete samples, wood samples, and wipe samples were analyzed for PCB Aroclors according to USEPA Method 8082A. In addition, two wood (NG-PB-110 and 112) samples and the reference wood sample (NG-PB-WD-108) from the tide gates were also analyzed for the following substances associated with CSO effluent:

- Volatile organic compounds (VOCs) according to USEPA Method 8260.
- Semi volatile organic compounds according to USEPA Method 8270.
- Total Petroleum Hydrocarbons (TPH) according to USEPA Method 8015.

Test America of Edison, New Jersey, a New York State Analytical Services Protocol (NYSASP)-certified laboratory, completed the sample analyses.

2.2 Sample Quality Assurance/Quality Control

2.2.1 Sample Handling

All samples were collected in certified clean bottles provided by the laboratories. After collection, all samples were packed in coolers and immediately chilled with ice to approximately 4 °C. Samples were then transported via courier to the laboratories.

2.2.2 Quality Assurance/Quality Control Sampling

Quality assurance/quality control (QA/QC) samples were collected in the field including blind duplicate samples; matrix spike and matrix spike duplicate (MS/MSD) samples, trip blank samples, and equipment rinsate blank samples. QA/QC samples were collected at a targeted frequency of one set of QA/QC samples per 20 samples collected for each matrix.

2.2.3 Data Validation

All analytical data were validated per appropriate USEPA guidance, consistent with NYSASP Category B guidance. The validated analytical results are provided in Tables 1 through 3. All data usability reports (DUSRs) and Form 1s are provided in Appendix C.

2.3 Decontamination

All reusable sampling equipment was decontaminated between each sample location. Visible contamination and dirt was removed using Alconox solution and potable water rinse. Equipment was then decontaminated with hexane and rinsed with de-ionized water.

2.4 Investigation Derived Wastes

Decontamination fluids, personal protective equipment, and other investigation derived waste (IDW) were contained within United States Department of Transportation (USDOT) 55-gallon drums and will be disposed of at an appropriate facility complying with USEPA off-site rule requirements.

2.5 Work Plan Deviations

The follow deviations from the approved Paerdegat Basin Investigation Work Plan occurred due to field conditions and scenarios that required field-based decisions.

One tide gate structure, which was proposed to be sampled, was indicated to be northwest of the NYCDEP dome building along the southwest boundary of the basin in a drawing provided by the NYCDEP. This tide gate structure does not exist and was erroneously indicated in the drawing. As a result proposed NG-PB-CN-103 bulkhead sample and NG-PB-WD-109 tide gate sample were not collected.

The bulkhead at the head of the basin, along the southwest portion was constructed of steel rather than concrete. As a result, a chip sample was unable to be collected; instead, a wipe sample was collected (NG-PB-WP-102).

3. Analytical Results

This section presents a summary of observations and analytical results. Analytical sampling results are summarized in Tables 1 through 3. Detected compounds are shown in bold font. The sample locations are shown in Figures 2 through 5 with analytical summary call out boxes provided in Figures 4 and 5.

3.1 Tide Gates

As described in Section 2.1, seven wood samples were collected from tide gates within the NYCDEP Paerdegat Basin CSO Facility. One of the tide gate wood samples, i.e. the reference sample, was collected at an elevation above the high tide line that had not potentially been affected by the condensate release. All seven samples were analyzed for PCB Aroclors. PCB results are presented in Table 1. In addition, three of the samples were analyzed for a full suite of analyses including VOCs, SVOCs, and TPH. Table 2 presents the full suite sample results. Sample locations are shown in Figures 2 and 4.

PCB Aroclors were detected in six of the seven wood tide gate samples. Detected total PCB Aroclor concentrations ranged from 0.089 mg/kg (NG-PB-WD-108) to 6.58 mg/kg (NG-PB-WD-109). PCB Aroclors 1242, 1248, and 1260 were detected. Aroclor 1242 was detected in two of seven sample stations, including NG-PB-WD-108 which was the reference sample and NG-PB-WD-112. Aroclor 1248 was detected in four samples and Aroclor 1260 was detected in three. PCB Aroclor 1242 was the only PCB Aroclor detected in the gas condensate samples analyzed during the spill response.

The low frequency of detections and low concentrations of PCB Aroclor 1242 and higher frequency of detections of PCB Aroclors 1248 and 1260, suggest that the Aroclor 1242 has been substantially depleted through environmental degradation and that a significant portion of the remaining PCBs detected originated from sources other than the gas condensate release. Total PCB concentrations were less that one mg/kg in the three tide gates located at the southeastern portion of the CSO structure with total higher PCB concentrations limited to structures at the head of the basin. Specific cleanup standards have not been approved by NYSDEC for the tide gates or bulkheads; however, it is anticipated that the same cleanup standard of 1 mg/kg established for the wooden elements of the marinas will be applicable. Appendix A includes a copy of the NYSDEC letter dated October 4, 2013 referencing the 1 mg/kg cleanup standard.

VOCs were detected in all three of the tide gate samples run for the full suite of analyses. Total VOC concentrations ranged from 3,830 µg/kg in NG-PB-WD-112 to 10,000 µg/kg in NG-PB-WD-108. The total VOCs were comprised primarily of p-cymene, and methyl

acetate, which are not associated with the condensate release. Low concentrations of toluene, o-xylene, and chloromethane were also detected in sample NG-PB-WD-110. Toluene and xylene were detected in the gas condensate, but are also common constituents in many fuels and petroleum products known to be associated with CSO effluent and associated with basins with marinas such as Paerdegat Basin.

SVOCs were not detected in any of the samples run for the full suite of analyses.

TPH was detected in two of the three samples and the data was rejected from the third. TPH concentrations ranged from 16 mg/kg in NG-PB-WD-108 to 520 mg/kg in NG-PB-WD-110. The detections of VOCs and TPH in the reference sample indicate that the CSO discharges, or sources other than the condensate release, have impacted the CSO structures.

3.2 Bulkhead

As described in Section 2.1, ten chip samples and one wipe sample were collected from the bulkhead within the NYCDEP Paerdegat Basin CSO Facility as part of the Addendum 1 investigation. All samples were analyzed for PCB Aroclors. Analytical results are presented in Table 1 for bulk samples and Table 3 for the one wipe sample. Sample locations are shown in Figures 2 and 4.

A trace level of Aroclor 1260 was the only PCB detected in the wipe sample from the steel bulkhead and is not associated with the condensate release. The concentration detected was below the EPA cleanup concentration of 10 ug/100 cm^2 for high occupancy areas.

From Table 1, PCBs were detected in five of the ten chip samples. Total PCB concentrations did not exceed 2.73 mg/kg. PCB Aroclors 1242, 1248, and 1260 were detected. Aroclor 1242 was only detected in three of the ten samples, Aroclor 1248 was detected in two samples, and Aroclor 1260 was detected in four samples.

The similar or lower frequency of detections of PCB Aroclor 1242 compared to Aroclors 1248 and 1260 suggest that the Aroclor 1242 has been substantially depleted through environmental degradation and that a significant portion of the remaining PCBs detected originate from sources other than the gas condensate release. Total PCB concentrations were less that one mg/kg in the four concrete bulkhead samples located at the southeastern portion of the CSO structure. Consistent with the wood analytic data the bulkhead sampling data indicates that the overall higher PCB concentrations are limited to structures at the head of the basin.

NG-PB-PS-CSO-01H / NG-PB-PS-CSO-01L and NG-PB-PS-CSO-02H / NG-PB-PS-CSO-02L were samples collected from above and below, respectively, the previously collected NG-PB-PS-CSO-01 and NG-PB-PS-CSO-02 locations were elevated concentrations of PCBs

were detected. PCBs were not detected in the samples collected above the high tide elevation indicating that concrete above this elevation was not impacted by the condensate release or any other sources of PCBs. The low tide samples could not be collected from significantly below the normal low tide line because such locations were underwater and could not be sampled. Concrete further below the low tide elevation is not likely to contain PCBs.

The significantly reduced concentrations of total PCBs from the previous samples (NG-PB-PS-CSO-01 [7.78 mg/kg], NG-PB-PS-CSO-02 [146.6 mg/kg]) to the low tide samples (NG-PB-PS-CSO-01L [2.58 mg/kg], NG-PB-PS-CSO-02L [2.64 mg/kg]) suggests that PCB concentrations are declining rapidly over time due to environmental degradation processes. The generally low levels detected in all the samples, i.e. less than 10 mg/kg, also suggest that the bulkhead PCB concentrations have declined over time. Both PCB Aroclors 1248 and 1260 were detected in these samples indicating the presence of PCBs that originate from sources other than the gas condensate release.

3.3 Sanitary Manholes

As described in Section 2.1, four wipe samples, two from metal sanitary manhole covers and two from metal storm water catch basins, were collected near the release area at the corner of Seaview Avenue and Paerdegat Avenue North. All samples were analyzed for PCB Aroclors. Sample locations are shown in Figure 3 and analytical results are presented in Table 3.

Aroclor 1248 was the only PCB detected in the metal sewer structure wipe samples. These detections were associated with samples collected from the two catch basins at concentrations of 0.45 and 1.2 µg/100 cm^2, both well below the EPA metal (non-porous) decontamination standard of 10 ug/100 cm^2. PCBs were not detected in either of the sanitary manholes sampled.

4. Conclusions and Recommendations

The purpose of the investigation was to determine if PCBs associated with the 2012 gas condensate release had affected the NYCDEP Paerdegat Basin CSO facility or structures associated with the sanitary sewers in Paerdegat Avenue North.

Samples were collected from tide gate and bulkhead structures within the NYCDEP CSO facility and sewer structures, including catch basins and manholes, within Paerdegat Avenue North. All samples were analyzed for PCB Aroclors. Three tide gate samples, including one high tide reference sample, were also analyzed for VOCs, SVOCs, and TPH.

PCB Aroclors 1242, 1248, and 1260 were detected in tide gate and bulkhead samples. In general, total PCB concentrations were higher on structures at the head of the basin and decreased to a concentration below one mg/kg with movement down the shoreline to the southeast. Aroclor 1242 (the gas condensate Aroclor) was detected in three bulkhead and two tide gate samples including the reference tide gate sample. The low frequency of detections and low concentrations of PCB Aroclor 1242 and higher frequency of detections of PCB Aroclors 1248 and 1260, suggest that the Aroclor 1242 has been substantially depleted by environmental processes, and that PCBs originated from sources other than the gas condensate release have impacted the structures. In addition, the detection of PCB Aroclor 1242 in the reference sample indicates that there could be another source, which has resulted in the release of this Aroclor to the basin.

Vertical delineation samples were collected from above and below previously collected bulkhead samples where PCBs were detected at elevated concentrations. PCBs were not detected from the high tide delineation samples and concentrations of total PCBs in the low tide samples were significantly lower than the previously detected values, suggesting that PCB associated with the gas condensate release are declining over time and indicating that the vertical extent of PCB contamination is limited to the tidal fluctuation zone. The generally low levels detected in all the samples, i.e. less than 10 mg/kg, also suggest that the bulkhead PCB concentrations have declined over time.

VOCs, comprised primarily p-cymene, and methyl acetate, as well as TPH, were detected in tide gate structures including the reference sample location. These parameters are not associated with the gas condensate release and are from unrelated sources, which indicates that sources other than the condensate release have impacted the structures.

PCBs were not detected on the sanitary sewer manhole covers tested. Low concentrations (0.45 to 1.2 mg/kg) of PCB Aroclor 1248 were detected in the two wipe samples collected on two metal storm water catch basins located at the intersection of Paerdegat Avenue North and

Seaview Avenue, both below the EPA decontamination standard of 10 ug/100 cm^2formetal (non-porous) surfaces. No further actions are recommended regarding the nonporous structures.

Based on the data from analysis of samples collected over time from structures at Paerdegat Basin, it appears that PCBs from sources other than the gas condensate release have affected the structures, and that Aroclor 1242 concentrations potentially associated with the condensate release are declining over time. A significant portion of PCBs appear to be related to other sources than the condensate release given that Aroclors 1242, 1248, and 1260 were detected. Only 1242 is associated with the condensate release. Aroclor 1242 was also detected in a reference sample collected above the high tide line suggesting that CSO effluent or other sources beyond the condensate release have also contributed to the detections of Aroclor 1242. Overall PCB concentrations on structures are highest near the head of the basin. It is anticipated that the concentration of gas condensate PCBs on basin structures will continue to decline, to levels below the cleanup standard of 1 mg/kg within a reasonable time frame.

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Tables

Table 1. Concrete Bulkhead and Tide Gate Wood PCB Analysis Results
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Brooklyn, NY

Sample Name	NG-PB-CN-100	NG-PB-CN-101	NG-PB-CN-104	NG-PB-CN-105	Duplicate of NG-PB-CN-105	NG-PB-CN-106	NG-PB-CN-107	NG-PB-PS-CSO-01	NG-PB-PS-CSO-01H	NG-PB-PS-CSO-01L	NG-PB-PS-CSO-02
Sample Type	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead
Sample Date	9/23/2015	9/24/2015	9/24/2015	9/22/2015	9/22/2015	9/22/2015	9/22/2015	4/16/2013	9/24/2015	9/24/2015	4/16/2013
PCB Aroclors (mg/kg)											
Aroclor 1221	0.25 UJ	0.2 UJ	0.24 UJ	0.22 UJ	0.19 UJ	0.19 UJ	0.21 UJ	0.6 UJ	0.21 UJ	0.2 UJ	21 U
Aroclor 1232	0.25 UJ	0.2 UJ	0.24 UJ	0.22 UJ	0.19 UJ	0.19 UJ	0.21 UJ	0.6 UJ	0.21 UJ	0.2 UJ	21 U
Aroclor 1242	**2.6 J**	0.2 UJ	0.24 UJ	0.22 UJ	0.19 UJ	0.19 UJ	0.21 UJ	0.6 UJ	0.21 UJ	**2.4 J**	21 U
Aroclor 1016	0.25 UJ	0.2 UJ	0.24 UJ	0.22 UJ	0.19 UJ	0.19 UJ	0.21 UJ	0.6 UJ	0.21 UJ	0.2 UJ	21 U
Aroclor 1248	0.25 UJ	**2.2 J**	**0.55 J**	0.22 UJ	0.19 UJ	0.19 UJ	0.21 UJ	**7.2 J**	0.21 UJ	0.2 UJ	**140**
Aroclor 1254	0.25 UJ	0.2 UJ	0.24 UJ	0.22 UJ	0.19 UJ	0.19 UJ	0.21 UJ	0.6 UJ	0.21 UJ	0.2 UJ	21 U
Aroclor 1260	**0.13 J**	**0.36 J**	0.24 UJ	0.22 UJ	0.19 UJ	0.19 UJ	0.21 UJ	**0.58 J**	0.21 UJ	**0.18 J**	**6.6 J**
Aroclor 1262	0.25 UJ	0.2 UJ	0.24 UJ	0.22 UJ	0.19 UJ	0.19 UJ	0.21 UJ	0.6 UJ	0.21 UJ	0.2 UJ	21 U
Aroclor 1268	0.25 UJ	0.2 UJ	0.24 UJ	0.22 UJ	0.19 UJ	0.19 UJ	0.21 UJ	0.6 UJ	0.21 UJ	0.2 UJ	21 U
Total PCB Aroclors	**2.73**	**2.56**	**0.55**	ND	ND	ND	ND	**7.78**	ND	**2.58**	**146.6**

Table 1. Concrete Bulkhead and Tide Gate Wood PCB Analysis Results
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Paerdegat Basin
Brooklyn, NY

Sample Name	NG-PB-PS-CSO-02H	NG-PB-PS-CSO-02L	NG-PB-WD-108	NG-PB-WD-109	NG-PB-WD-110	Duplicate of NG-PB-WD-110	NG-PB-WD-112	NG-PB-WD-113	NG-PB-WD-114	NG-PB-WD-115
Sample Type	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead	Concrete Bulkhead	Wood Tide Gate	Wood Tide Gate	Wood Tide Gate	Wood Tide Gate	Wood Tide Gate
Sample Date	9/22/2015	9/24/2015	9/23/2015	9/24/2015	9/23/2015	9/23/2015	9/23/2015	9/24/2015	9/22/2015	9/22/2015
PCB Aroclors (mg/kg)										
Aroclor 1221	0.22 UJ	0.24 UJ	0.26 UJ	0.57 UJ	0.34 UJ	0.35 UJ	0.44 UJ	0.49 UJ	0.37 UJ	0.26 UJ
Aroclor 1232	0.22 UJ	0.24 UJ	0.26 UJ	0.57 UJ	0.34 UJ	0.35 UJ	0.44 UJ	0.49 UJ	0.37 UJ	0.26 UJ
Aroclor 1242	0.22 UJ	**2.5 J**	**0.089 J**	0.57 UJ	0.34 UJ	0.35 UJ	**4.9 J**	0.49 UJ	0.37 UJ	0.26 UJ
Aroclor 1016	0.22 UJ	0.24 UJ	0.26 UJ	0.57 UJ	0.34 UJ	0.35 UJ	0.44 UJ	0.49 UJ	0.37 UJ	0.26 UJ
Aroclor 1248	0.22 UJ	0.24 UJ	0.26 UJ	**5.9 J**	**0.11 J**	**0.19 J**	0.44 UJ	0.49 UJ	**0.26 J**	**0.7 J**
Aroclor 1254	0.22 UJ	0.24 UJ	0.26 UJ	0.57 UJ	0.34 UJ	0.35 UJ	0.44 UJ	0.49 UJ	0.37 UJ	0.26 UJ
Aroclor 1260	0.22 UJ	**0.14 J**	0.26 UJ	**0.68 J**	0.34 UJ	0.35 UJ	**0.6 J**	0.49 UJ	0.37 UJ	**0.13 J**
Aroclor 1262	0.22 UJ	0.24 UJ	0.26 UJ	0.57 UJ	0.34 UJ	0.35 UJ	0.44 UJ	0.49 UJ	0.37 UJ	0.26 UJ
Aroclor 1268	0.22 UJ	0.24 UJ	0.26 UJ	0.57 UJ	0.34 UJ	0.35 UJ	0.44 UJ	0.49 UJ	0.37 UJ	0.26 UJ
Total PCB Aroclors	ND	**2.64**	**0.089**	**6.58**	**0.11**	**0.19**	**5.5**	ND	**0.26**	**0.83**

Table 2. Tide Gate Wood Analysis Results
Addendum 1 Data Report
Paerdegat Basin
Brooklyn, NY

Sample Name Sample Date	NG-PB-WD-108 (Reference Location) 9/23/2015	NG-PB-WD-110 9/23/2015	Duplicate of NG-PB-WD-110 9/23/2015	NG-PB-WD-112 9/23/2015
BTEX (ug/kg)				
Benzene	120 U	170 U	170 U	210 U
Toluene	120 U	170 U	**60 J**	210 U
Ethylbenzene	120 U	170 U	170 U	210 U
o-Xylene	120 U	170 U	**31 J**	210 U
m/p-Xylene	240 U	340 U	330 U	430 U
Total Xylene	240 U	340 U	330 U	430 U
Total BTEX	ND	ND	**91**	ND
Other VOCs (ug/kg)				
Acetone	610 U	850 U	830 U	1100 U
Bromobenzene	120 U	170 U	170 U	210 U
Bromochloromethane	120 U	170 U	170 U	210 U
Bromodichloromethane	120 U	170 U	170 U	210 U
Bromoform	120 UJ	170 UJ	170 UJ	210 UJ
Bromomethane	120 U	170 U	170 U	210 U
n-Butylbenzene	120 U	170 U	170 U	210 U
sec-Butylbenzene	120 U	170 U	170 U	210 U
tert-Butylbenzene	120 U	170 U	170 U	210 U
Carbon disulfide	120 UJ	170 UJ	170 UJ	210 UJ
Carbon tetrachloride	120 UJ	170 UJ	170 UJ	210 UJ
Chlorobenzene	120 U	170 U	170 U	210 U
Chloroethane	120 UJ	170 UJ	170 UJ	210 UJ
2-Chloroethyl vinyl ether	610 U	850 U	830 U	1100 U
Chloroform	120 U	170 U	170 U	210 U
Chloromethane	120 UJ	**54 J**	**84 J**	210 UJ
2-Chlorotoluene (o-Chlorotoluene)	120 U	170 U	170 U	210 U
4-Chlorotoluene (p-Chlorotoluene)	120 U	170 U	170 U	210 U
Cyclohexane	120 UJ	170 UJ	170 UJ	210 UJ
p-Cymene (4-Isopropyltoluene)	**7900**	**5000**	**4000**	**430 J**
1,2-Dibromo-3-chloropropane	120 U	170 U	170 U	210 U
Dibromochloromethane	120 UJ	170 UJ	170 UJ	210 UJ
1,2-Dibromoethane (EDB)	120 U	170 U	170 U	210 U
Dibromomethane	120 U	170 U	170 U	210 U
1,2-Dichlorobenzene	120 U	170 U	170 U	210 U
1,3-Dichlorobenzene	120 U	170 U	170 U	210 U
1,4-Dichlorobenzene	120 U	170 U	170 U	210 U
Dichlorodifluoromethane (Freon 12)	120 UJ	170 UJ	170 UJ	210 UJ
2,4-Dichlorofluoromethane	120 U	170 U	170 U	210 U
1,1-Dichloroethane	120 U	170 U	170 U	210 U
1,2-Dichloroethane	120 U	170 U	170 U	210 U
1,1-Dichloroethene	120 UJ	170 UJ	170 UJ	210 UJ
Total 1,2-Dichloroethene	240 U	340 U	330 U	430 U
cis-1,2-Dichloroethene	120 U	170 U	170 U	210 U
trans-1,2-Dichloroethene	120 UJ	170 UJ	170 UJ	210 UJ
1,2-Dichloropropane	120 U	170 U	170 U	210 U
1,3-Dichloropropane	120 U	170 U	170 U	210 U
2,2-Dichloropropane	120 U	170 U	170 U	210 U
1,1-Dichloropropene	120 U	170 U	170 U	210 U
cis-1,3-Dichloropropene	120 U	170 U	170 U	210 U
trans-1,3-Dichloropropene	120 U	170 U	170 U	210 U
1,4-Dioxane	2300 R	3200 R	3200 R	4100 R
Hexachlorobutadiene (C-46)	120 U	170 U	170 U	210 U
2-Hexanone	610 U	850 U	830 U	1100 U
Iodomethane	120 UJ	170 UJ	170 UJ	210 UJ
Isobutyl alcohol	3100 U	4200 U	4100 U	5400 U
Isopropylbenzene	120 U	170 U	170 U	210 U
Methyl acetate	**2100**	**3000**	**2800**	**3400 J**
Methyl ethyl ketone (2-Butanone)	610 U	850 U	830 U	1100 U
Methyl tert-butyl ether (MTBE)	120 U	170 U	170 U	210 U
4-Methyl-2-pentanone (MIBK)	610 U	850 U	830 U	1100 U
Methylcyclohexane	120 UJ	170 UJ	170 UJ	210 UJ
Methylene chloride	120 U	170 U	170 U	210 U
Naphthalene	120 U	170 U	170 U	210 U
n-Propylbenzene	120 U	170 U	170 U	210 U
Styrene	120 U	170 U	170 U	210 U
1,1,1,2-Tetrachloroethane	120 U	170 U	170 U	210 U
1,1,2,2-Tetrachloroethane	120 U	170 U	170 U	210 U
Tetrachloroethene (PCE)	120 U	170 U	170 U	210 U
Tetrahydrofuran	240 U	340 U	330 U	430 U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	120 U	170 U	170 U	210 U
1,2,4-Trichlorobenzene	120 U	170 U	170 U	210 U
1,1,1-Trichloroethane (TCA)	120 U	170 U	170 U	210 U
1,1,2-Trichloroethane	120 U	170 U	170 U	210 U

Table 2. Tide Gate Wood Analysis Results
Addendum 1 Data Report
Paerdegat Basin
Brooklyn, NY

Sample Name Sample Date	NG-PB-WD-108 (Reference Location) 9/23/2015	NG-PB-WD-110 9/23/2015	Duplicate of NG-PB-WD-110 9/23/2015	NG-PB-WD-112 9/23/2015
Trichloroethene (TCE)	120 U	170 U	170 U	210 U
Trichlorofluoromethane (Freon 11)	120 U	170 U	170 U	210 U
1,2,3-Trichloropropane	120 U	170 U	170 U	210 U
1,2,4-Trimethylbenzene	120 U	170 U	170 U	210 U
1,3,5-Trimethylbenzene	120 U	170 U	170 U	210 U
Vinyl acetate	610 U	850 U	830 U	1100 U
Vinyl chloride	120 U	170 U	170 U	210 U
Total VOCs	**10000**	**8054**	**6975**	**3830**
PAHs (ug/kg)				
Acenaphthene	19000 U	24000 U	24000 U	21000 U
Acenaphthylene	19000 U	24000 U	24000 U	21000 U
Anthracene	19000 U	24000 U	24000 U	21000 U
Benzo(a)anthracene	19000 U	24000 U	24000 U	21000 U
Benzo(b)fluoranthene	19000 U	24000 U	24000 U	21000 U
Benzo(k)fluoranthene	19000 U	24000 U	24000 U	21000 U
Benzo(g,h,i)perylene	19000 U	24000 U	24000 U	21000 U
Benzo(a)pyrene	19000 U	24000 U	24000 U	21000 U
Chrysene	19000 U	24000 U	24000 U	21000 U
Dibenz(a,h)anthracene	19000 U	24000 U	24000 U	21000 U
Fluoranthene	19000 U	24000 U	24000 U	21000 U
Fluorene	19000 U	24000 U	24000 U	21000 U
Indeno(1,2,3-cd)pyrene	19000 U	24000 U	24000 U	21000 U
2-Methylnaphthalene	19000 U	24000 U	24000 U	21000 U
Naphthalene	19000 U	24000 U	24000 U	21000 U
Phenanthrene	19000 U	24000 U	24000 U	21000 U
Pyrene	19000 U	24000 U	24000 U	21000 U
Total PAHs	ND	ND	ND	ND
Other SVOCs (ug/kg)				
Acetophenone	19000 U	24000 U	24000 U	21000 U
Atrazine	19000 U	24000 U	24000 U	21000 U
Benzaldehyde	19000 U	24000 U	24000 U	21000 U
Biphenyl (1,1-Biphenyl)	19000 U	24000 U	24000 U	21000 U
Bis(2-chloroethoxy)methane	19000 U	24000 U	24000 U	21000 U
Bis(2-chloroethyl)ether	19000 U	24000 U	24000 U	21000 U
2,2-oxybis(1-Chloropropane)	19000 U	24000 U	24000 U	21000 U
Bis(2-ethylhexyl)phthalate	19000 U	24000 U	24000 U	21000 U
4-Bromophenyl phenyl ether	19000 U	24000 U	24000 U	21000 U
Butyl benzyl phthalate	19000 U	24000 U	24000 U	21000 U
Caprolactam	19000 U	24000 U	24000 U	21000 U
Carbazole	19000 U	24000 U	24000 U	21000 U
4-Chloro-3-methylphenol	19000 U	24000 U	24000 U	21000 U
4-Chloroaniline	19000 U	24000 U	24000 U	21000 U
2-Chloronaphthalene	19000 U	24000 U	24000 U	21000 U
2-Chlorophenol	19000 U	24000 U	24000 U	21000 U
4-Chlorophenyl phenyl ether	19000 U	24000 U	24000 U	21000 U
Dibenzofuran	19000 U	24000 U	24000 U	21000 U
3,3-Dichlorobenzidine	37000 U	47000 U	47000 U	42000 U
2,4-Dichlorophenol	19000 U	24000 U	24000 U	21000 U
Diethyl phthalate	19000 U	24000 U	24000 U	21000 U
Dimethyl phthalate	19000 U	24000 U	24000 U	21000 U
2,4-Dimethylphenol	19000 U	24000 U	24000 U	21000 U
Di-n-butyl phthalate	19000 U	24000 U	24000 U	21000 U
4,6-Dinitro-2-methylphenol	37000 U	47000 U	47000 U	42000 U
2,4-Dinitrophenol	190000 U	240000 U	240000 U	210000 U
2,4-Dinitrotoluene	19000 U	24000 U	24000 U	21000 U
2,6-Dinitrotoluene	19000 U	24000 U	24000 U	21000 U
Di-n-octyl phthalate	19000 U	24000 U	24000 U	21000 U
Hexachlorobenzene	19000 U	24000 U	24000 U	21000 U
Hexachlorobutadiene (C-46)	19000 U	24000 U	24000 U	21000 U
Hexachlorocyclopentadiene	19000 U	24000 U	24000 U	21000 U
Hexachloroethane	19000 U	24000 U	24000 U	21000 U
Isophorone	19000 U	24000 U	24000 U	21000 U
2-Methylphenol (o-Cresol)	19000 U	24000 U	24000 U	21000 U
3-Methylphenol (m-Cresol)	37000 U	47000 U	47000 U	42000 U
3,4-Methylphenol (m,p-Cresol)	37000 U	47000 U	47000 U	42000 U
2-Nitroaniline	37000 U	47000 U	47000 U	42000 U
3-Nitroaniline	37000 U	47000 U	47000 U	42000 U
4-Nitroaniline	37000 U	47000 U	47000 U	42000 U
Nitrobenzene	19000 U	24000 U	24000 U	21000 U
2-Nitrophenol	19000 U	24000 U	24000 U	21000 U
4-Nitrophenol	37000 U	47000 U	47000 U	42000 U
N-Nitrosodiphenylamine (NDFA)	19000 U	24000 U	24000 U	21000 U
N-Nitrosodi-n-propylamine (NDPA)	19000 U	24000 U	24000 U	21000 U

Table 2. Tide Gate Wood Analysis Results
Addendum 1 Data Report
Paerdegat Basin
Brooklyn, NY

Sample Name Sample Date	NG-PB-WD-108 (Reference Location) 9/23/2015	NG-PB-WD-110 9/23/2015	Duplicate of NG-PB-WD-110 9/23/2015	NG-PB-WD-112 9/23/2015
Pentachlorophenol	37000 U	47000 U	47000 U	42000 U
Phenol	19000 U	24000 U	24000 U	21000 U
1,2,4,5-Tetrachlorobenzene	19000 U	24000 U	24000 U	21000 U
2,3,4,6-Tetrachlorophenol	19000 U	24000 U	24000 U	21000 U
2,4,5-Trichlorophenol	19000 U	24000 U	24000 U	21000 U
2,4,6-Trichlorophenol	19000 U	24000 U	24000 U	21000 U
Total SVOCs	ND	ND	ND	ND
PCB Aroclors (mg/kg)				
Aroclor 1221	0.26 UJ	0.34 UJ	0.35 UJ	0.44 UJ
Aroclor 1232	0.26 UJ	0.34 UJ	0.35 UJ	0.44 UJ
Aroclor 1242	**0.089 J**	0.34 UJ	0.35 UJ	**4.9 J**
Aroclor 1016	0.26 UJ	0.34 UJ	0.35 UJ	0.44 UJ
Aroclor 1248	0.26 UJ	**0.11 J**	**0.19 J**	0.44 UJ
Aroclor 1254	0.26 UJ	0.34 UJ	0.35 UJ	0.44 UJ
Aroclor 1260	0.26 UJ	0.34 UJ	0.35 UJ	**0.6 J**
Aroclor 1262	0.26 UJ	0.34 UJ	0.35 UJ	0.44 UJ
Aroclor 1268	0.26 UJ	0.34 UJ	0.35 UJ	0.44 UJ
Total PCB Aroclors	**0.089**	**0.11**	**0.19**	**5.5**
Other (mg/kg)				
F1 (C6-C10)	7.1 U	8.8 U	8.9 U	7.9 U
TPH-DRO (C10-C28)	**16 J**	**460**	**520**	63 R

Table 3. PCB Wipe Sample Analysis Results
Addendum 1 Data Report
Paerdegat Basin
Brooklyn, NY

Sample Name	CB-1	CB-2	SMH-1	SMH-2	NG-PB-WP-102
Sample Type	Catch Basin Grate	Catch Basin Grate	Sewer Manhole Cover	Sewer Manhole Cover	Steel Bulkhead
Sample Date	9/25/2015	9/25/2015	9/25/2015	9/25/2015	9/24/2015
PCB Aroclors (ug/100cm2)					
Aroclor 1221	1 U	1 U	1 U	1 U	1 U
Aroclor 1232	1 U	1 U	1 U	1 U	1 U
Aroclor 1242	1 U	1 U	1 U	1 U	1 U
Aroclor 1016	1 U	1 U	1 U	1 U	1 U
Aroclor 1248	**1.2**	**0.45 J**	1 U	1 U	1 U
Aroclor 1254	1 U	1 U	1 U	1 U	1 U
Aroclor 1260	1 U	1 U	1 U	1 U	**0.31 J**
Aroclor 1262	1 U	1 U	1 U	1 U	1 U
Aroclor 1268	1 U	1 U	1 U	1 U	1 U
Total PCB Aroclors	**1.2**	**0.45**	ND	ND	**0.31**

Tables 1 - 3. NOTES
Addendum 1 Data Report
Paerdegat Basin
Brooklyn, NY

Notes:

Analytes in blue are not detected in any sample
Bolding indicates a detected result concentration
mg/kg = milligrams/kilogram or parts per million (ppm)
ug/100cm^2 = micrograms per 100 centimeters squared
ug/kg = micrograms per kilogram
BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
PAH = Polycyclic Aromatic Hydrocarbon
PCB = Polychlorinated Biphenyl
SVOC = Semi-Volatile Organic Compound
VOC = Volatile Organic Compound
Total BTEX, Total VOCs, Total PAHs, Total SVOCs and Total PCBs are calculated using detects only.
Validation Qualifiers:
J = The result is an estimated value.
R = The result is rejected.
U = The result was not detected above the reporting limit.
UJ = The results was not detected at or above the reporting limit shown and the reporting limit is estimated.

Figures

SOURCE:
WORLD IMAGERY (ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY) ACCESSED VIA ARCGIS ONLINE ON 5/22/14.

0 300' 600' 1200'
SCALE: 1" = 600'

Addendum I Data Report
Paerdegat Basin
Brooklyn, New York

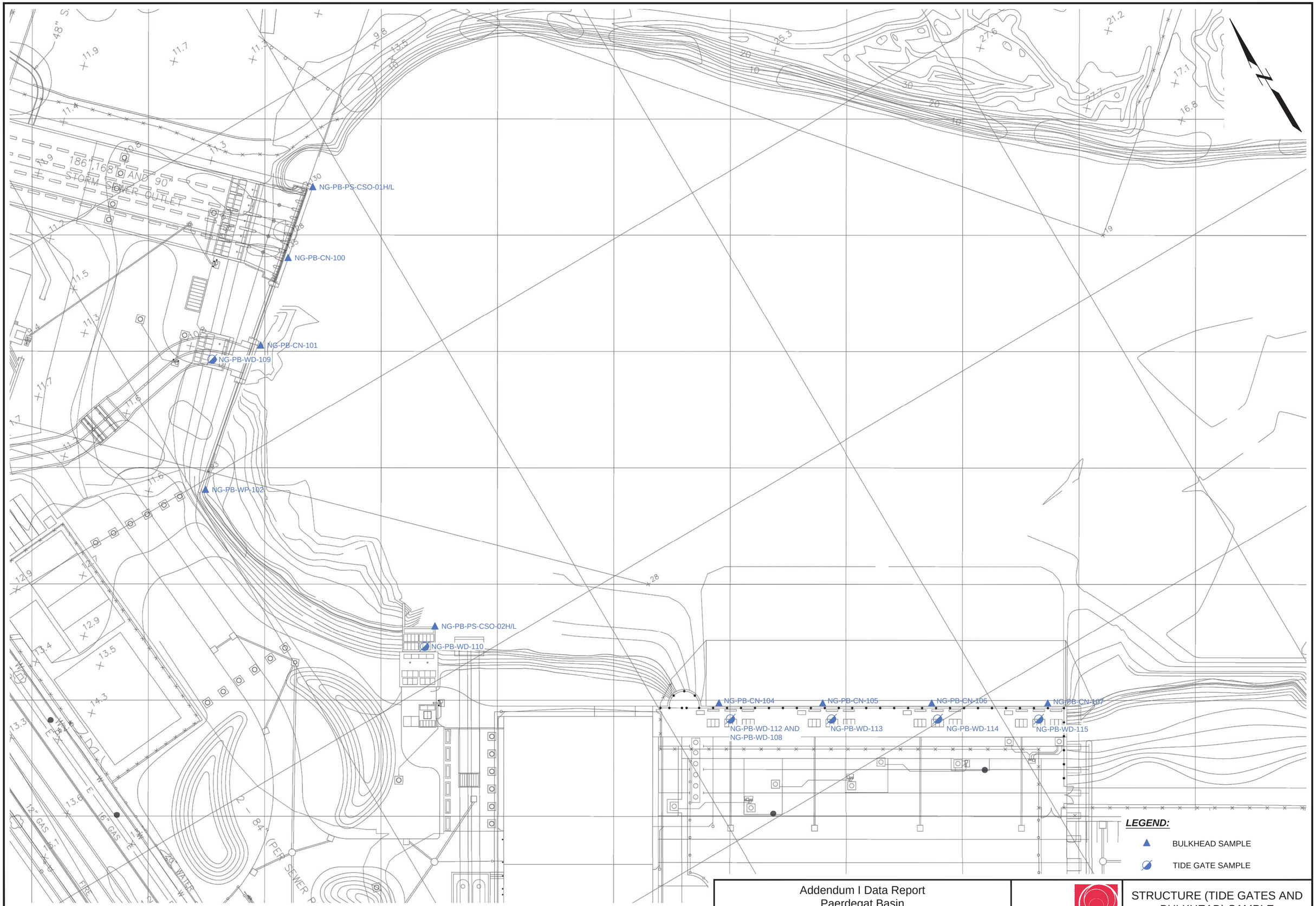
nationalgrid

GEI Consultants

SITE LOCATION

Project 129600 | January 2016 | Figure 1

---- \\gtb1v-fs01\CAD\Project\National Grid\Paerdegat Basin\CAD\Figures\Addendum I Data Report\Paerdegate-DR-A1.dwg - 12/3/2015



Addendum I Data Report
Paerdegat Basin
Brooklyn, New York

nationalgrid

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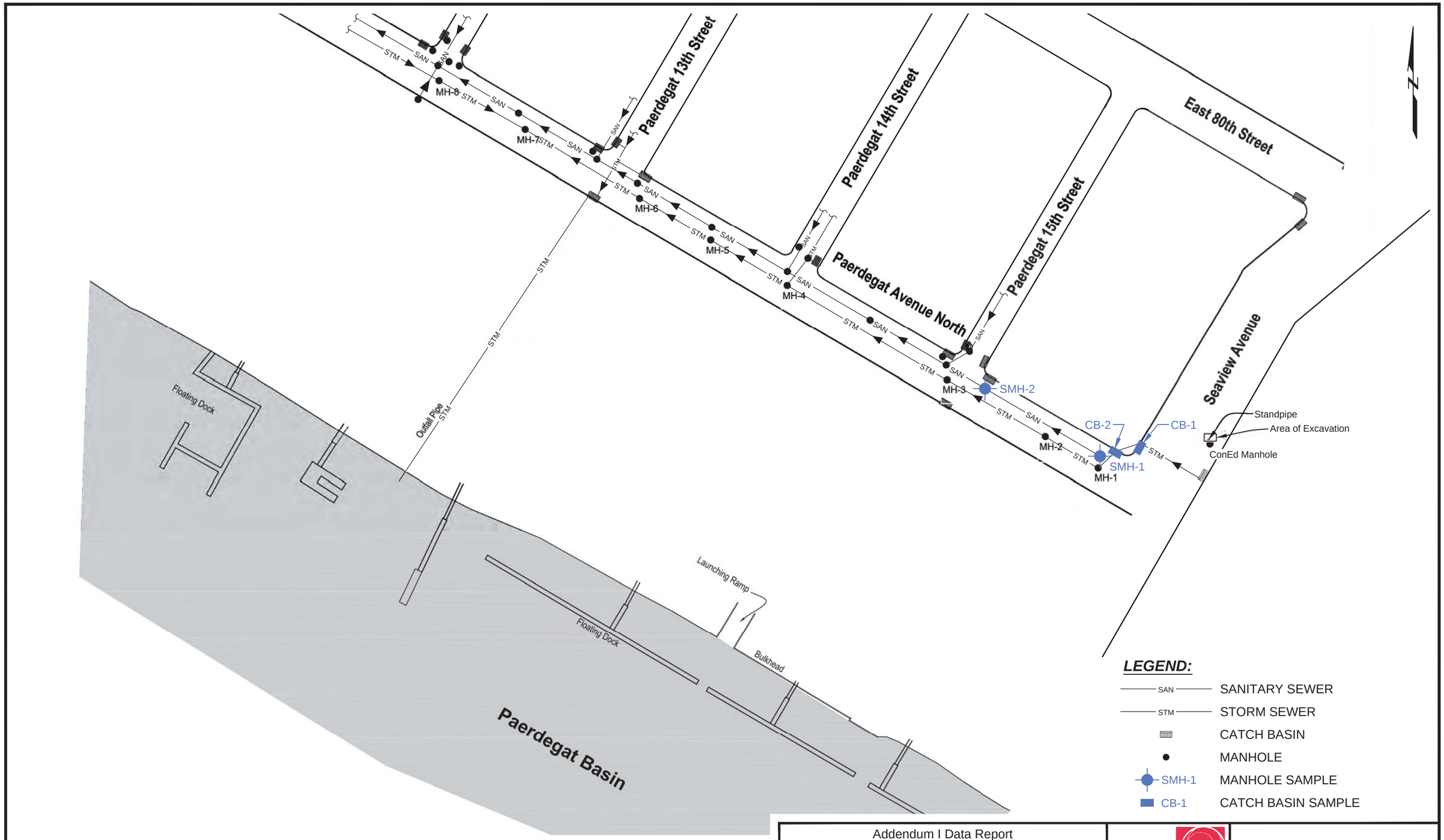
STRUCTURE (TIDE GATES AND BULKHEAD) SAMPLE LOCATIONS

Project 129600 | January 2016 | Figure 2

---- \\gtb1v-fs01\CAD\Project\National Grid\Paerdegat Basin\CAD\Figures\Addendum I Data Report\Paerdegate-DR-A1.dwg - 12/3/2015



SOURCE:

GAS CONDENSATE RELEASE, 80TH AVENUE & SEAVIEW AVENUE, PREPARED FOR NATIONAL GRID, PREPARED BY H2M ARCHITECTS + ENGINEERS, SCALE: 1" = 200', DATE: 10/01/12.

0 120' 240'

SCALE: 1" = 120'

Addendum I Data Report
Paerdegat Basin
Brooklyn, New York

nationalgrid

GEI Consultants

SANITARY SEWER SAMPLE LOCATIONS

Project 129600 | January 2016 | Figure 3

---- \\gtb1v-fs01\CAD\Project\National Grid\Paerdegat Basin\CAD\Figures\Addendum I Data Report\Paerdegate-DR-A1.dwg - 12/3/2015

Sample Name	NG-PB-PS-CSO-01	NG-PB-PS-CSO-01H	NG-PB-PS-CSO-01L
Sample Date	4/16/2013	9/24/2015	9/24/2015
PCB Aroclors (mg/kg)			
Aroclor 1242	0.6 UJ	0.21 UJ	**2.4 J**
Aroclor 1248	**7.2 J**	0.21 UJ	0.2 UJ
Aroclor 1260	**0.58 J**	0.21 UJ	**0.18 J**
Total PCB Aroclors	**7.78**	ND	**2.58**

NG-PB-PS-CSO-01H/L

Sample Name	NG-PB-CN-100
Sample Date	9/23/2015
PCB Aroclors (mg/kg)	
Aroclor 1242	**2.6 J**
Aroclor 1260	**0.13 J**
Total PCB Aroclors	**2.73**

NG-PB-CN-100

Sample Name	NG-PB-CN-101
Sample Date	9/24/2015
PCB Aroclors (mg/kg)	
Aroclor 1248	**2.2 J**
Aroclor 1260	**0.36 J**
Total PCB Aroclors	**2.56**

NG-PB-CN-101

NG-PB-WD-109

Sample Name	NG-PB-WD-109
Sample Date	9/24/2015
PCB Aroclors (mg/kg)	
Aroclor 1248	**5.9 J**
Aroclor 1260	**0.68 J**
Total PCB Aroclors	**6.58**

NG-PB-WP-102

Sample Name	NG-PB-WP-102
Sample Date	9/24/2015
PCB Aroclors (ug/100cm2)	
Aroclor 1260	**0.31 J**
Total PCB Aroclors	**0.31**

Sample Name	NG-PB-PS-CSO-02	NG-PB-PS-CSO-02H	NG-PB-PS-CSO-02L
Sample Date	4/16/2013	9/22/2015	9/24/2015
PCB Aroclors (mg/kg)			
Aroclor 1242	21 U	0.22 UJ	**2.5 J**
Aroclor 1248	**140**	0.22 UJ	0.24 UJ
Aroclor 1260	**6.6 J**	0.22 UJ	**0.14 J**
Total PCB Aroclors	**146.6**	ND	**2.64**

NG-PB-PS-CSO-02H/L

NG-PB-WD-110

Sample Name	NG-PB-WD-110	"Duplicate of NG-PB-WD-110"
Sample Date	9/23/2015	9/23/2015
BTEX (ug/kg)		
Toluene	170 U	**60 J**
o-Xylene	170 U	**31 J**
Total BTEX	ND	**91**
Other VOCs (ug/kg)		
Chloromethane	**54 J**	**84 J**
p-Cymene (4-Isopropyltoluene)	**5000**	**4000**
Methyl acetate	**3000**	**2800**
Total VOCs	**8054**	**6975**
PAHs (ug/kg)		
Total PAHs	ND	ND
Other SVOCs (ug/kg)		
Total SVOCs	ND	ND
PCB Aroclors (mg/kg)		
Aroclor 1248	**0.11 J**	**0.19 J**
Total PCB Aroclors	**0.11**	**0.19**
Other (mg/kg)		
TPH-DRO (C10-C28)	**460**	**520**

Sample Name	NG-PB-WD-108
Sample Date	9/23/2015
BTEX (ug/kg)	
Total BTEX	ND
Other VOCs (ug/kg)	
p-Cymene (4-Isopropyltoluene)	**7900**
Methyl acetate	**2100**
Total VOCs	**10000**
PAHs (ug/kg)	
Total PAHs	ND
Other SVOCs (ug/kg)	
Total SVOCs	ND
PCB Aroclors (mg/kg)	
Aroclor 1242	**0.089 J**
Total PCB Aroclors	**0.089**
Other (mg/kg)	
TPH-DRO (C10-C28)	**16 J**

Sample Name	NG-PB-WD-112
Sample Date	9/23/2015
BTEX (ug/kg)	
Total BTEX	ND
Other VOCs (ug/kg)	
p-Cymene (4-Isopropyltoluene)	**430 J**
Methyl acetate	**3400 J**
Total VOCs	**3830.0000**
PAHs (ug/kg)	
Total PAHs	ND
Other SVOCs (ug/kg)	
Total SVOCs	ND
PCB Aroclors (mg/kg)	
Aroclor 1242	**4.9 J**
Aroclor 1260	**0.6 J**
Total PCB Aroclors	**5.5**

Sample Name	NG-PB-CN-105	"Duplicate of NG-PB-CN-105"
Sample Date	9/22/2015	9/22/2015
PCB Aroclors (mg/kg)		
Total PCB Aroclors	ND	ND

Sample Name	NG-PB-CN-104
Sample Date	9/24/2015
PCB Aroclors (mg/kg)	
Aroclor 1248	**0.55 J**
Total PCB Aroclors	**0.55**

NG-PB-CN-104

NG-PB-CN-105

NG-PB-CN-106

NG-PB-CN-107

NG-PB-WD-112 AND NG-PB-WD-108

NG-PB-WD-113

NG-PB-WD-114

NG-PB-WD-115

Sample Name	NG-PB-CN-106
Sample Date	9/22/2015
PCB Aroclors (mg/kg)	
Total PCB Aroclors	ND

Sample Name	NG-PB-CN-107
Sample Date	9/22/2015
PCB Aroclors (mg/kg)	
Total PCB Aroclors	ND

Sample Name	NG-PB-WD-115
Sample Date	9/22/2015
PCB Aroclors (mg/kg)	
Aroclor 1248	**0.7 J**
Aroclor 1260	**0.13 J**
Total PCB Aroclors	**0.83**

Sample Name	NG-PB-WD-113
Sample Date	9/24/2015
PCB Aroclors (mg/kg)	
Total PCB Aroclors	ND

Sample Name	NG-PB-WD-114
Sample Date	9/22/2015
PCB Aroclors (mg/kg)	
Aroclor 1248	**0.26 J**
Total PCB Aroclors	**0.26**

0 50' 100'

SCALE: 1" = 50'

LEGEND:

BULKHEAD SAMPLE

TIDE GATE SAMPLE

Addendum I Data Report
Paerdegat Basin
Brooklyn, New York

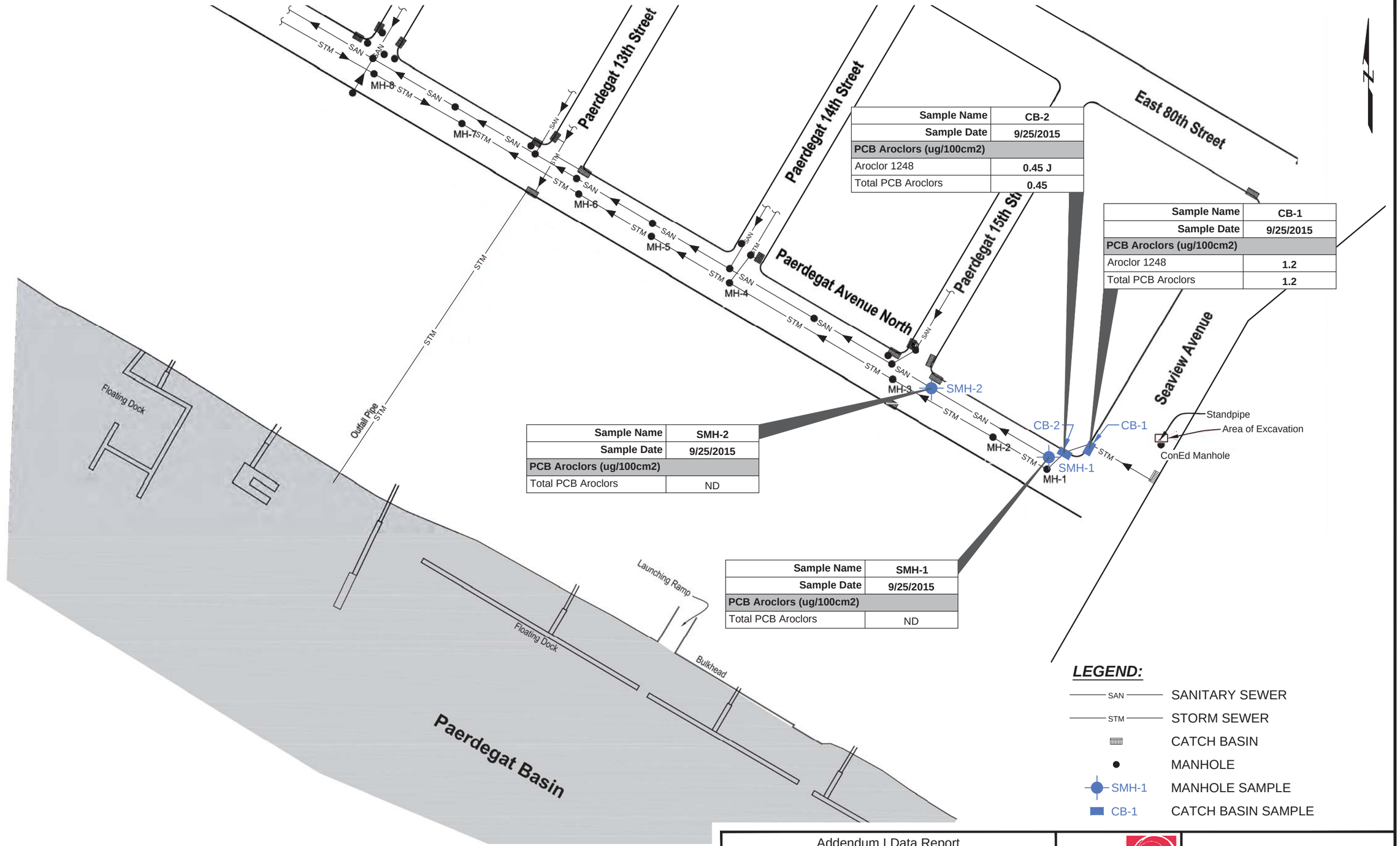
nationalgrid

GEI Consultants

STRUCTURE (TIDE GATES AND BULKHEAD) SAMPLE ANALYTICAL SUMMARY

Project 129600 | January 2016 | Figure 4

---- \\gtb1v-fs01\CAD\Project\National Grid\Paerdegat Basin\CAD\Figures\Addendum I Data Report\Paerdegate-DR-A1.dwg - 12/3/2015



Sample Name	CB-2
Sample Date	9/25/2015
PCB Aroclors (ug/100cm2)	
Aroclor 1248	0.45 J
Total PCB Aroclors	0.45

Sample Name	CB-1
Sample Date	9/25/2015
PCB Aroclors (ug/100cm2)	
Aroclor 1248	1.2
Total PCB Aroclors	1.2

Sample Name	SMH-2
Sample Date	9/25/2015
PCB Aroclors (ug/100cm2)	
Total PCB Aroclors	ND

Sample Name	SMH-1
Sample Date	9/25/2015
PCB Aroclors (ug/100cm2)	
Total PCB Aroclors	ND

LEGEND:

- SAN — SANITARY SEWER
- STM — STORM SEWER
- CATCH BASIN
- MANHOLE
- SMH-1 — MANHOLE SAMPLE
- CB-1 — CATCH BASIN SAMPLE

SOURCE:

GAS CONDENSATE RELEASE, 80TH AVENUE & SEAVIEW AVENUE, PREPARED FOR NATIONAL GRID, PREPARED BY H2M ARCHITECTS + ENGINEERS, SCALE: 1" = 200', DATE: 10/01/12.

0 120' 240'

SCALE: 1" = 120'

Addendum I Data Report
Paerdegat Basin
Brooklyn, New York

nationalgrid

GEI Consultants

SANITARY SEWER
ANALYTICAL SUMMARY

Project 129600 | January 2016 | Figure 5

---- \\gtb1v-fs01\CAD\Project\National Grid\Paerdegat Basin\CAD\Figures\Addendum I Data Report\Paerdegate-DR-A1.dwg - 12/3/2015

Appendix A

NYSDEC Work Plan Approval Letter

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2
47-40 21st Street, Long Island City, NY 11101
P: (718) 482-4995
www.dec.ny.gov

June 19, 2015

William J. Ryan
Project Manager - Site Investigation and Remediation Department
National Grid
175 E. Old Country Road
Hicksville, NY 11801

Re: Paerdegat Basin
NYSDEC Site No. 224167
Sampling Work Plan Addendum 1

Dear Mr. Ryan:

The New York State Department of Environmental Conservation, in consultation with the New York State Department of Health, has completed its review of the referenced sampling plan addendum dated March 2015 which was prepared by GEI Consultants, Inc. on behalf of National Grid. This addendum to the approved Sampling Work Plan dated April 2, 2013 addresses sampling and analysis of structures operated by the New York City Department of Environmental Protection which were impacted by the release of PCB-contaminated gas condensate in September 2012. The proposed sampling plan addendum is in conformance with DER-10 and the approved Sampling Work Plan, and it is hereby approved with all the conditions stated in the approval letter of April 2, 2013 (copy attached).

If you have any questions concerning the technical aspects of this matter, please contact me at 718-482-4096.

Sincerely,

Nicholas S. Bollers

Shaun Bollers
Project Manager

Attachment

ec w/att: R. Cozzy, J. O'Connell, K. Mintzer – NYSDEC
A. Mukasa, B. Boyd – NYSDOH
J. Roberts, S. McAtamney - NYCDEP

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

R. Teetz, T. Leissing, C. Corrado, D. Riccobono – National Grid
B. Giroux - GEI
P. Lageraaen – H2M

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 2
47-40 21ST Street, Long Island City, NY 11101-5407
Phone: (718) 482-4995 • **Fax:** (718) 482-6358
Website: www.dec.ny.gov

Joe Martens
Commissioner

October 4, 2013

William J. Ryan
Project Manager - Site Investigation and Remediation Department
National Grid
175 E. Old Country Road
Hicksville, NY 11801

Re: Paerdegat Basin
NYSDEC Site No. 224167

Dear Mr. Ryan:

The purpose of this letter is to document result of the August 12, 2013 meeting among the New York State Department of Environmental Conservation ("NYSDEC"), the New York State Department of Health ("NYSDOH") and National Grid, and to provide additional information to address outstanding issues. Following the meeting, the outstanding issues were:

1. Cleanup Standards – NYSDEC has determined that the appropriate cleanup objective for the wooden/steel/Styrofoam elements of the marinas, floating docks and piers is 1 ppm of total PCBs. Therefore, any impacted structure that has been sampled and found to have a PCB concentration of 1 ppm or greater must be remediated. Furthermore, in accordance with 6NYCRR Part 371.4(e), if the concentration of PCBs is 50 ppm or greater the material must be considered a listed hazardous waste and be disposed of as such.

2. Additional Fish Sampling - The NYSDEC and NYSDOH recommend that resident populations of killifish, American eel and blue crab should be analyzed. In addition, transient sportfish such as bluefish, striped bass and weakfish should also be collected and analyzed to further refine the current fish advisory. As noted during the meeting, this sampling may be delayed until after the completion of NYCDEP's planned dredging activities.

3. Feedback from Other Regulatory Agencies - The USEPA has informed the NYSDEC that they will not be providing further feedback unless a formal notification/application to EPA for approval of the PCB cleanup has been submitted. NYCDEP would like to meet with National Grid and NYSDEC concerning the impact to its structures, in particular tide gates and CSO structures, as a result of the spill. NYCDEP would also like to address additional sampling and proposed mitigation of the impact to its infrastructure.

Within 30 days of this letter, please submit to NYSDEC the following:

- A Sampling Work Plan Addendum providing details on the next round of sampling; and
- A separate Interim Remedial Measure Work Plan detailing the cleanup of the impacted marinas and floating docks.

If there are any questions regarding this letter, please call me at (718) 482-4096.

Sincerely,

Nicholas S. Bollers
Environmental Engineer

ec: J. O'Connell, L. Oliva, W. Richter, S. Zahn, S. Maresca – NYSDEC
A. Forti – NYSDOH
J. Roberts, S. McAtamney – NYCDEP
T. Leissing, C. Corrado, D. Riccobono – National Grid
B. Giroux – GEI

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 2
47-40 21ST Street, Long Island City, NY 11101-5407
Phone: (718) 482-4995 • **Fax:** (718) 482-6358
Website: www.dec.ny.gov

Joe Martens
Commissioner

April 2, 2013

William J. Ryan
Project Manager - Site Investigation and Remediation Department
National Grid
175 E. Old Country Road
Hicksville, NY 11801

Re: Paerdegat Basin
NYSDEC Site No. 224167
Sampling Work Plan

Dear Mr. Ryan:

The New York State Department of Environmental Conservation ("NYSDEC"), in consultation with the New York State Department of Health ("NYSDOH"), the United States Environmental Protection Agency ("USEPA") and the New York City Department of Environmental Protection ("NYCDEP"), has completed its review of the above referenced document (the "Plan") prepared by GEI Consultants, Inc. on behalf of National Grid (the Remedial Party). The document was dated March 13, 2013 and represented the second revision of the Plan. The Plan is now in compliance with DER-10 and is hereby approved.

The Remedial Party and its contractors are solely responsible for the safe execution of all invasive and other field work performed under the Plan. The Remedial Party and its contractors must obtain all local, state, and/or federal permits or approvals that may be required to perform work under the Plan. Further, The Remedial Party and its contractors are solely responsible for the identification of utilities that might be affected by work under the Plan and, the implementation of all required, appropriate, or necessary health and safety measures during performance of work under the Plan.

Please provide the NYSDEC with an updated schedule for the proposed investigative work at your earliest convenience. Please also provide at least 5 days notice prior to initiating field work related to the approved Plan.

If there are any questions regarding this letter, please call me at (718) 482-4096.

Sincerely,

Nicholas S. Bollers
Environmental Engineer

ec: R. Cozzy, P. John, J. O'Connell, L. Oliva, W. Richter, S. Zahn, S. Maresca – NYSDEC
A. Forti – NYSDOH
J. Haklar – USEPA
J. Roberts, S. McAtamney – NYCDEP
R. Teetz, T. Leissing, C. Corrado, D. Riccobono – National Grid
B. Giroux - GEI

Appendix B

Field Activities Photo Log

FIELD ACTIVITIES PHOTO LOG

Date: 09/23/2015

Direction: North

Description: General site conditions and chip sampling from location NG-PB-CN-100

Date: 09/24/2015

Direction: Southeast

Description: Landside setup for tide gate sampling location NG-PB-WD-109

Date: 09/22/2015

Direction: Southwest

Description: View from sampling boat following collection of NG-PB-WD-114

Date: 09/22/2015

Direction: Southeast

Description: Landside view of sampling at NG-PB-WD-115

Date: 09/23/2015

Direction: Southeast

Description: Landside setup above locations NG-PB-WD-108 and NG-PB-WD-112

Appendix C

Data Usability Reports and Laboratory Form 1s

Site: Paerdegat Basin Study Phase II, Brooklyn, NY
Laboratory: Test America, South Burlington, VT
Report Nos.: 480-87753, 480-87984
Reviewer: Lorie MacKinnon/GEI Consultants
Date: October 29, 2015

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
480-87753		
NG-PB-CN-107	480-87753-01	PCBs
NG-PB-WD-115	480-87753-02	PCBs
NG-PB-WD-114	480-87753-03	PCBs
NG-PB-CN-106	480-87753-04	PCBs
NG-PB-CN-XX	480-87753-05	PCBs
NG-PB-CSO-02H	480-87753-06	PCBs
NG-PB-CN-FB092215	480-87753-07	PCBs
NG-PB-CN-105	480-87753-08	PCBs
480-87984		
CB-1	480-87984-01	PCBs
CB-2	480-87984-02	PCBs
SMH-2	480-87984-03	PCBs
SMH-1	480-87984-04	PCBs

Associated QC Samples(s):	Field Blank:	NG-PB-CN-FB092215
	Field Duplicate pair:	NG-PB-CN-XX/NG-PB-CN-105

The above-listed wood, concrete, and wipe samples and field blank sample were collected on September 21, 22, and 25, 2015 were analyzed for polychlorinated biphenyls (PCBs) by SW-846 method 8082A. The data validation was performed based on the following USEPA Region 2 Standard Operating Procedure (SOP) HW-37 (Revision 3) *Polychlorinated Biphenyl (PCB) Aroclor Data Validation* (May 2013), modified for the SW-846 methodology utilized.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results

- Laboratory Control Sample (LCS) Results
- Field Duplicate Results
- Moisture Content
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

In general, the data appear usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data packages were found to be complete as received by the laboratory.

Holding Times and Sample Preservation

All criteria were met.

Initial and Continuing Calibrations

Compounds that did not meet criteria in the PCB calibrations are summarized in the following table.

Instrument/Calibration Standard	Compound	Calibration Exceedance (%D)	Validation Qualifier
CCAL 09/24/15 19:09 Column ZB-35	Aroclor 1016	25.3	Estimate (J/UJ) the positive and nondetect results for all Aroclors in sample NG-PB-CN-FB092215.
	Aroclor 1260	34.8	
Associated Samples: NG-PB-CN-FB092215			
CCAL 09/24/15 20:44 Column ZB-35	Aroclor 1016	23.0	Estimate (J/UJ) the positive and nondetect results for all Aroclors in the associated samples.
	Aroclor 1260	27.3	
Associated Samples: NG-PB-CN-FB092215, NG-PB-CN-107, NG-PB-WD-115, NG-PB-WD-114, NG-PB-CN-106, NG-PB-CN-XX, NG-PB-PS-CSO-02H			
CCAL 09/24/15 23:55 Column ZB-35	Aroclor 1016	21.7	Estimate (J/UJ) the positive and nondetect results for all Aroclors in the associated samples.
	Aroclor 1260	24.7	
Associated Samples: NG-PB-CN-107, NG-PB-WD-115, NG-PB-WD-114, NG-PB-CN-106, NG-PB-CN-XX, NG-PB-PS-CSO-02H, NG-PB-CN-105			
CCAL 09/25/15 01:15 Column ZB-35	Aroclor 1016	23.2	Estimate (J/UJ) the positive and nondetect results for all Aroclors in sample NG-PB-CN-105.
	Aroclor 1260	25.7	
Associated Samples: NG-PB-CN-105			

X = Initial calibration (IC) relative standard deviation (%RSD) > 20 for; estimate (J) positive and blank-qualified (UJ) results only.
XX = Continuing calibration (CC) percent difference (%D) > 20 for PCBs; estimate (J/UJ) positive and nondetect results.

The direction of the bias cannot be determined for the calibration nonconformances. The results can be used for project objectives as estimated (J/UJ) values which may have a minor impact on the data usability.

Blanks

Contamination was not detected in the associated laboratory method blanks and field blank sample.

Surrogate Recoveries

All criteria were met.

MS/MSD Results

MS/MSD analyses were performed on sample NG-PB-CN-106. All criteria were met.

LCS Results

All criteria were met.

Field Duplicate Results

Samples NG-PB-CN-XX and NG-PB-CN-105 were submitted as the field duplicate pair with this sample set. Results were nondetect in these samples.

Moisture Content

All criteria were met.

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

The following table lists the sample dilutions which were performed and the results to be reported.

Sample	PCB Analysis Reported
NG-PB-WD-114	Due to matrix, the sample extract final volume was elevated (15 ml versus 10 ml). QLs are elevated accordingly.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

All dual column criteria were met.

Select Aroclors have overlapping quantitation peaks and thus the potential for double counting of these peaks exists when multiple Aroclors are present in the sample. The positive results for Aroclor 1248 and Aroclor 1260 in sample NG-PB-WD-115 were qualified as estimated (J) as a result of this potential high bias due to possible double counting of the peaks.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

Client Sample ID: CB-1

Date Collected: 09/25/15 07:05
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87984-1
Matrix: Wipe

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:07	1
PCB-1221	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:07	1
PCB-1232	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:07	1
PCB-1242	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:07	1
PCB-1248	**1.2**		1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:07	1
PCB-1254	1.0	U	1.0	0.25	ug/Wipe		09/28/15 08:07	09/30/15 06:07	1
PCB-1260	1.0	U	1.0	0.25	ug/Wipe		09/28/15 08:07	09/30/15 06:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*57 - 173*	*09/28/15 08:07*	*09/30/15 06:07*	*1*
DCB Decachlorobiphenyl	*88*		*59 - 171*	*09/28/15 08:07*	*09/30/15 06:07*	*1*

Client Sample ID: CB-2

Date Collected: 09/25/15 07:10
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87984-2
Matrix: Wipe

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:23	1
PCB-1221	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:23	1
PCB-1232	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:23	1
PCB-1242	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:23	1
PCB-1248	**0.45**	J	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:23	1
PCB-1254	1.0	U	1.0	0.25	ug/Wipe		09/28/15 08:07	09/30/15 06:23	1
PCB-1260	1.0	U	1.0	0.25	ug/Wipe		09/28/15 08:07	09/30/15 06:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*57 - 173*	*09/28/15 08:07*	*09/30/15 06:23*	*1*
DCB Decachlorobiphenyl	*80*		*59 - 171*	*09/28/15 08:07*	*09/30/15 06:23*	*1*

Client Sample ID: SMH-2

Date Collected: 09/25/15 07:15
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87984-3
Matrix: Wipe

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:40	1
PCB-1221	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:40	1
PCB-1232	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:40	1
PCB-1242	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:40	1
PCB-1248	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:40	1
PCB-1254	1.0	U	1.0	0.25	ug/Wipe		09/28/15 08:07	09/30/15 06:40	1
PCB-1260	1.0	U	1.0	0.25	ug/Wipe		09/28/15 08:07	09/30/15 06:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*57 - 173*	*09/28/15 08:07*	*09/30/15 06:40*	*1*
DCB Decachlorobiphenyl	*74*		*59 - 171*	*09/28/15 08:07*	*09/30/15 06:40*	*1*

dam 10/18/15

Client Sample ID: SMH-1

Date Collected: 09/25/15 07:20
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87984-4

Matrix: Wipe

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:57	1
PCB-1221	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:57	1
PCB-1232	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:57	1
PCB-1242	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:57	1
PCB-1248	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 06:57	1
PCB-1254	1.0	U	1.0	0.25	ug/Wipe		09/28/15 08:07	09/30/15 06:57	1
PCB-1260	1.0	U	1.0	0.25	ug/Wipe		09/28/15 08:07	09/30/15 06:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*95*		*57 - 173*	*09/28/15 08:07*	*09/30/15 06:57*	*1*
DCB Decachlorobiphenyl	*92*		*59 - 171*	*09/28/15 08:07*	*09/30/15 06:57*	*1*

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Barry Giroux	Site Contact: Amy Mastrangelo	Date: 9/25/15	COC No:
Barry Giroux	Tel/Fax:	Lab Contact: Kathryn Kelly	Carrier:	1 of 1 COCs
GEI Consultants	Analysis Turnaround Time			Sampler:
455 Winding Brook Dr. Glastonbury, CT	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
(860) 368-5300 Phone	TAT if different from Below _____			Walk-in Client:
(860) 368-5307 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Fire Dept Basin	☐ 1 week			
Site: Brooklyn NY	☐ 2 days			Job / SDG No.:
PO# 1291600	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	RCRA 8082A	Sample Specific Notes:
CB-1	9/25/15	0705	G	wipe	1	N	N	X	
CB-2	↓	0710	G	wipe	1	N	N	X	
SMH-2		0715	G	wipe	1	N	N	X	
SMH-1	↓	0720	G	wipe	1	N	N	X	

480-87984 Chain of Custody

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Please send EDD to Datagroup@geiconsultants.com

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 4.1 Corr'd: _____ | Therm ID No.: #1

	Company	Date/Time	Received by	Company	Date/Time
Relinquished by:	GEI	1445		TAL	9/25/15 1452
Relinquished by:	TAL	9/25/15 1725			9/26/15 0900
Relinquished by:			Received in Laboratory by:		

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Paerdegat Basin Study Phase II

TestAmerica Job ID: 480-87753-1
SDG: 480-87753

Client Sample ID: NG-PB-CN-107

Date Collected: 09/22/15 09:15
Date Received: 09/23/15 11:30

Lab Sample ID: 480-87753-1
Matrix: Solid
Percent Solids: 97.7

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.21	U J	0.21	0.041	mg/Kg	☼	09/24/15 07:52	09/24/15 22:20	1
PCB-1221	0.21	U	0.21	0.041	mg/Kg	☼	09/24/15 07:52	09/24/15 22:20	1
PCB-1232	0.21	U	0.21	0.041	mg/Kg	☼	09/24/15 07:52	09/24/15 22:20	1
PCB-1242	0.21	U	0.21	0.041	mg/Kg	☼	09/24/15 07:52	09/24/15 22:20	1
PCB-1248	0.21	U	0.21	0.041	mg/Kg	☼	09/24/15 07:52	09/24/15 22:20	1
PCB-1254	0.21	U	0.21	0.097	mg/Kg	☼	09/24/15 07:52	09/24/15 22:20	1
PCB-1260	0.21	U J	0.21	0.097	mg/Kg	☼	09/24/15 07:52	09/24/15 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*60 - 154*	*09/24/15 07:52*	*09/24/15 22:20*	*1*
DCB Decachlorobiphenyl	*103*		*65 - 174*	*09/24/15 07:52*	*09/24/15 22:20*	*1*

Client Sample ID: NG-PB-WD-115

Date Collected: 09/22/15 08:55
Date Received: 09/23/15 11:30

Lab Sample ID: 480-87753-2
Matrix: Solid
Percent Solids: 83.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.26	U J	0.26	0.052	mg/Kg	☼	09/24/15 07:52	09/24/15 22:36	1
PCB-1221	0.26	U	0.26	0.052	mg/Kg	☼	09/24/15 07:52	09/24/15 22:36	1
PCB-1232	0.26	U	0.26	0.052	mg/Kg	☼	09/24/15 07:52	09/24/15 22:36	1
PCB-1242	0.26	U J	0.26	0.052	mg/Kg	☼	09/24/15 07:52	09/24/15 22:36	1
PCB-1248	**0.70**	J	0.26	0.052	mg/Kg	☼	09/24/15 07:52	09/24/15 22:36	1
PCB-1254	0.26	U J	0.26	0.12	mg/Kg	☼	09/24/15 07:52	09/24/15 22:36	1
PCB-1260	**0.13**	J	0.26	0.12	mg/Kg	☼	09/24/15 07:52	09/24/15 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*100*		*60 - 154*	*09/24/15 07:52*	*09/24/15 22:36*	*1*
DCB Decachlorobiphenyl	*99*		*65 - 174*	*09/24/15 07:52*	*09/24/15 22:36*	*1*

Client Sample ID: NG-PB-WD-114

Date Collected: 09/22/15 10:05
Date Received: 09/23/15 11:30

Lab Sample ID: 480-87753-3
Matrix: Solid
Percent Solids: 83.7

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.37	U J	0.37	0.073	mg/Kg	☼	09/24/15 07:52	09/24/15 22:52	1
PCB-1221	0.37	U	0.37	0.073	mg/Kg	☼	09/24/15 07:52	09/24/15 22:52	1
PCB-1232	0.37	U	0.37	0.073	mg/Kg	☼	09/24/15 07:52	09/24/15 22:52	1
PCB-1242	0.37	U J	0.37	0.073	mg/Kg	☼	09/24/15 07:52	09/24/15 22:52	1
PCB-1248	**0.26**	J	0.37	0.073	mg/Kg	☼	09/24/15 07:52	09/24/15 22:52	1
PCB-1254	0.37	U J	0.37	0.17	mg/Kg	☼	09/24/15 07:52	09/24/15 22:52	1
PCB-1260	0.37	U J	0.37	0.17	mg/Kg	☼	09/24/15 07:52	09/24/15 22:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*60 - 154*	*09/24/15 07:52*	*09/24/15 22:52*	*1*
DCB Decachlorobiphenyl	*81*		*65 - 174*	*09/24/15 07:52*	*09/24/15 22:52*	*1*

10/18/15

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Paerdegat Basin Study Phase II

TestAmerica Job ID: 480-87753-1
SDG: 480-87753

Client Sample ID: NG-PB-CN-106

Date Collected: 09/22/15 10:45
Date Received: 09/23/15 11:30

Lab Sample ID: 480-87753-4
Matrix: Solid
Percent Solids: 96.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.19	U J	0.19	0.037	mg/Kg	☼	09/24/15 07:52	09/24/15 23:08	1
PCB-1221	0.19	U	0.19	0.037	mg/Kg	☼	09/24/15 07:52	09/24/15 23:08	1
PCB-1232	0.19	U	0.19	0.037	mg/Kg	☼	09/24/15 07:52	09/24/15 23:08	1
PCB-1242	0.19	U	0.19	0.037	mg/Kg	☼	09/24/15 07:52	09/24/15 23:08	1
PCB-1248	0.19	U	0.19	0.037	mg/Kg	☼	09/24/15 07:52	09/24/15 23:08	1
PCB-1254	0.19	U	0.19	0.087	mg/Kg	☼	09/24/15 07:52	09/24/15 23:08	1
PCB-1260	0.19	U J	0.19	0.087	mg/Kg	☼	09/24/15 07:52	09/24/15 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*99*		*60 - 154*	*09/24/15 07:52*	*09/24/15 23:08*	*1*
DCB Decachlorobiphenyl	*100*		*65 - 174*	*09/24/15 07:52*	*09/24/15 23:08*	*1*

Client Sample ID: NG-PB-CN-XX

Date Collected: 09/22/15 12:00
Date Received: 09/23/15 11:30

Lab Sample ID: 480-87753-5
Matrix: Solid
Percent Solids: 96.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.19	U J	0.19	0.038	mg/Kg	☼	09/24/15 07:52	09/24/15 23:23	1
PCB-1221	0.19	U	0.19	0.038	mg/Kg	☼	09/24/15 07:52	09/24/15 23:23	1
PCB-1232	0.19	U	0.19	0.038	mg/Kg	☼	09/24/15 07:52	09/24/15 23:23	1
PCB-1242	0.19	U	0.19	0.038	mg/Kg	☼	09/24/15 07:52	09/24/15 23:23	1
PCB-1248	0.19	U	0.19	0.038	mg/Kg	☼	09/24/15 07:52	09/24/15 23:23	1
PCB-1254	0.19	U	0.19	0.090	mg/Kg	☼	09/24/15 07:52	09/24/15 23:23	1
PCB-1260	0.19	U J	0.19	0.090	mg/Kg	☼	09/24/15 07:52	09/24/15 23:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*99*		*60 - 154*	*09/24/15 07:52*	*09/24/15 23:23*	*1*
DCB Decachlorobiphenyl	*101*		*65 - 174*	*09/24/15 07:52*	*09/24/15 23:23*	*1*

Client Sample ID: NG-PB-PS-CSO-02H

Date Collected: 09/22/15 13:00
Date Received: 09/23/15 11:30

Lab Sample ID: 480-87753-6
Matrix: Solid
Percent Solids: 97.7

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.22	U J	0.22	0.043	mg/Kg	☼	09/24/15 07:52	09/24/15 23:39	1
PCB-1221	0.22	U	0.22	0.043	mg/Kg	☼	09/24/15 07:52	09/24/15 23:39	1
PCB-1232	0.22	U	0.22	0.043	mg/Kg	☼	09/24/15 07:52	09/24/15 23:39	1
PCB-1242	0.22	U	0.22	0.043	mg/Kg	☼	09/24/15 07:52	09/24/15 23:39	1
PCB-1248	0.22	U	0.22	0.043	mg/Kg	☼	09/24/15 07:52	09/24/15 23:39	1
PCB-1254	0.22	U	0.22	0.10	mg/Kg	☼	09/24/15 07:52	09/24/15 23:39	1
PCB-1260	0.22	U J	0.22	0.10	mg/Kg	☼	09/24/15 07:52	09/24/15 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*100*		*60 - 154*	*09/24/15 07:52*	*09/24/15 23:39*	*1*
DCB Decachlorobiphenyl	*101*		*65 - 174*	*09/24/15 07:52*	*09/24/15 23:39*	*1*

Client Sample ID: NG-PB-CN-FB092215

Date Collected: 09/22/15 13:40
Date Received: 09/23/15 11:30

Lab Sample ID: 480-87753-7
Matrix: Water

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.50	U J	0.50	0.18	ug/L		09/24/15 07:50	09/24/15 20:29	1
PCB-1221	0.50	U	0.50	0.18	ug/L		09/24/15 07:50	09/24/15 20:29	1
PCB-1232	0.50	U	0.50	0.18	ug/L		09/24/15 07:50	09/24/15 20:29	1
PCB-1242	0.50	U	0.50	0.18	ug/L		09/24/15 07:50	09/24/15 20:29	1
PCB-1248	0.50	U	0.50	0.18	ug/L		09/24/15 07:50	09/24/15 20:29	1
PCB-1254	0.50	U	0.50	0.25	ug/L		09/24/15 07:50	09/24/15 20:29	1
PCB-1260	0.50	U J	0.50	0.25	ug/L		09/24/15 07:50	09/24/15 20:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*24 - 137*	*09/24/15 07:50*	*09/24/15 20:29*	*1*
DCB Decachlorobiphenyl	*44*		*19 - 125*	*09/24/15 07:50*	*09/24/15 20:29*	*1*

Client Sample ID: NG-PB-CN-105

Date Collected: 09/22/15 11:10
Date Received: 09/23/15 11:30

Lab Sample ID: 480-87753-8
Matrix: Solid
Percent Solids: 96.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.22	U J	0.22	0.043	mg/Kg	☼	09/24/15 07:52	09/25/15 00:27	1
PCB-1221	0.22	U	0.22	0.043	mg/Kg	☼	09/24/15 07:52	09/25/15 00:27	1
PCB-1232	0.22	U	0.22	0.043	mg/Kg	☼	09/24/15 07:52	09/25/15 00:27	1
PCB-1242	0.22	U	0.22	0.043	mg/Kg	☼	09/24/15 07:52	09/25/15 00:27	1
PCB-1248	0.22	U	0.22	0.043	mg/Kg	☼	09/24/15 07:52	09/25/15 00:27	1
PCB-1254	0.22	U	0.22	0.10	mg/Kg	☼	09/24/15 07:52	09/25/15 00:27	1
PCB-1260	0.22	U J	0.22	0.10	mg/Kg	☼	09/24/15 07:52	09/25/15 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*100*		*60 - 154*	*09/24/15 07:52*	*09/25/15 00:27*	*1*
DCB Decachlorobiphenyl	*104*		*65 - 174*	*09/24/15 07:52*	*09/25/15 00:27*	*1*

TestAmerica Burlington
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South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Barry Giroux	Site Contact: Katheryn Kelly	Date: 9/22/15	COC No:
GEI Consultants	Tel/Fax:	Lab Contact: Amy Mastrangelo	Carrier:	1 of 1 COCs
455 Winding Brook Dr.	Analysis Turnaround Time			Sampler:
Glastenbury CT 06033	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
(860) 368-5300 Phone	TAT if different from Below			Walk-in Client:
( ) FAX	☐ 2 weeks standard			Lab Sampling:
Project Name: Paerdegat Basin	☐ 1 week			Job / SDG No.:
Site: Brooklyn NY	☐ 2 days			
PO# 129600	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	PCBs 8082	Sample Specific Notes:
NG-PB-CN107	9/22/15	0915	C	concrete	1	N	N	X	
NG-PB-WD-115	↓	0855	C wood	wood	1	N	N	X	
NG-PB-WD-114		1005	C	wood	1	N	N	X	
NG-PB-CN-106	↓	1045 1025	C	concrete	3	N	Y	X	w/ MS/MSD
NG-PB-CN-XX	9/22/15	1200	C	concrete	1	N	N	X	
NG-PB-PS-CS0-02H	9/21/15	1300	G	concrete	1	N	N	X	
NG-PB-FB CN-FB092215	9/22/15	1340	G	water	2	N	N	X	
NG-PB-CN-105	9/22/15	1110	C	concrete		N	N	X	

480-87753 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: 4.6 Corr'd:	Therm ID No.: #1
Relinquished by:	Company: GEI	Date/Time: 1700 9/22/15	Received by:	Company: T. B	Date/Time: 9/24/15 1710
Relinquished by:	Company: T. B	Date/Time: 9/24/15 1810	Received by:	Company:	Date/Time: 9/23/15 1130
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.3, dated 12/05/2013

Site: Paerdegat Basin Study Phase II, Brooklyn, NY
Laboratory: Test America, South Burlington, VT
Report Nos.: 480-87989
Reviewer: Lorie MacKinnon/GEI Consultants
Date: November 18, 2015

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
NG-PB-WD-108	480-87989-01	VOC, SVOC, TPH, PCB
NG-PB-WD-112	480-87989-02	VOC, SVOC, TPH, PCB
NG-PB-WD-110	480-87989-03	VOC, SVOC, TPH, PCB
NG-PB-WD-XX	480-87989-04	VOC, SVOC, TPH, PCB
NG-PB-WP-102	480-87989-05	PCB
NG-PB-PS-CSO-01H	480-87989-06	PCB
NG-PB-PS-CSO-01L	480-87989-07	PCB
NG-PB-CN-101	480-87989-08	PCB
NG-PB-WD-TB092415	480-87989-09	VOC
NG-PB-WD-FB092415	480-87989-10	VOC, SVOC, TPH, PCB
NG-PB-WD-109	480-87989-11	PCB
NG-PB-CN-104	480-87989-12	PCB
NG-PB-WD-113	480-87989-13	PCB
NG-PB-CN-100	480-87989-14	PCB
NG-PB-PS-CSO-02L	480-87989-15	PCB

Associated QC Samples(s):	Field/Trip Blanks:	NG-PB-WD-FB092415, NG-PB-WD-TB092415
	Field Duplicate pair:	NG-PB-WD-110/NG-PB-WD-XX

The above-listed wood, granite, concrete, and wipe samples, field blank sample, and trip blank sample were collected on September 23 and 24, 2015 and were analyzed for volatile organic compounds (VOCs) by SW-846 method 8260C, semivolatile organic compounds (SVOCs) by SW-846 method 8270D, polychlorinated biphenyls (PCBs) by SW-846 method 8082A, and total petroleum hydrocarbons as diesel and gasoline range organics by SW-846 method 8015B.

The data validation was performed based on the following USEPA Region 2 Documents: Standard Operating Procedure (SOP) HW-37 (Revision 3) *Polychlorinated Biphenyl (PCB) Aroclor Data Validation* (May 2013), SOP HW-35 (Revision 2) *Semivolatile Data Validation* (March 2013), and SOP HW-33 (Revision 3) *Low/Medium Volatile Data Validation* (March 2013), modified for the SW-846 methodologies utilized.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Moisture Content
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

In general, the data appear usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers. However, the following issues were noted which may have a significant impact on the data usability:

- The calibration response factor for VOC compounds 1,4-dioxane and isobutyl alcohol were low in select calibration standards and associated nondetect results were rejected. The nondetect results for isobutyl alcohol and 1,4-dioxane in samples NG-PB-WD-TB092415 and NG-PB-WD-FB092415 and 1,4-dioxane in samples NG-PB-WD-108, NG-PB-WD-112, NG-PB-WD-110, and NG-PB-WD-XX should not be used for decision-making purposes.

- The nondetect result for DRO in sample NG-PB-WD-112 was rejected due to surrogate recovery less than 10. The nondetect result for DRO in sample NG-PB-WD-112 should not be used for decision-making purposes.

The validation findings were based on the following information.

Data Completeness

The data package was found to be complete as received by the laboratory.

Holding Times and Sample Preservation

All criteria were met.

Gas Chromatography/Mass Spectrometry (GC/MS) Tunes

All criteria were met.

Initial and Continuing Calibrations

SVOC, DRO, and GRO

All initial and continuing calibration criteria were met.

VOC

Compounds that did not meet criteria in the VOC calibrations are summarized in the following table.

Instrument/Calibration Standard	Compound	Calibration Exceedance (%D or RF)	Validation Qualifier
HP5973C: ICAL 09/17/15	Isobutyl alcohol	RF 0.0309	Reject (R) the nondetect results for isobutyl alcohol and 1,4-dioxane in the associated samples.
	1,4-Dioxane	RF 0.0087	
Associated Samples: NG-PB-WD-TB092415, NG-PB-WD-FB092415			
HP5973C: CCAL 10/06/15 09:38	Isobutyl alcohol	RF 0.0241, 22.1 %D	Reject (R) the nondetect results for isobutyl alcohol and 1,4-dioxane in the associated samples.
	1,4-Dioxane	RF 0.0098	
	Chloromethane	30.8	Estimate (J/UJ) the positive and nondetect results for the affected compounds in the associated samples.
	Vinyl chloride	22.3	
	Acetone	30.4	
	Methyl acetate	23.0	
	2-Butanone	27.1	
	Tetrahydrofuran	21.9	
	4-Methyl-2-pentanone	21.6	
	2-Hexanone	22.1	
Associated Samples: NG-PB-WD-TB092415, NG-PB-WD-FB092415			
HP5973G: ICAL 09/13/15	1,4-Dioxane	RF 0.0096	Reject (R) the nondetect results for 1,4-dioxane in the associated samples.
Associated samples: NG-PB-WD-108, NG-PB-WD-112, NG-PB-WD-110, NG-PB-WD-XX			
HP5973G: CCAL 09/28 22:17	Dichlorodifluoromethane	22.4	Estimate (J/UJ) the positive and nondetect results for the affected compounds in the associated samples.
	Chloromethane	22.2	
	Chloroethane	26.3	
	1,1-Dichloroethene	22.0	
	Carbon disulfide	42.4	
	trans 1,2-dichloroethene	23.4	

	Cyclohexane	24.7	
	Carbon tetrachloride	21.2	
	Methyl cyclohexane	24.4	
	Dibromochloromethane	20.3	
	Bromoform	27.9	
	Methyl iodide	37.1	
Associated Samples: NG-PB-WD-108, NG-PB-WD-112, NG-PB-WD-110, NG-PB-WD-XX			

X = Initial calibration (IC) relative standard deviation (%RSD) > 20 for; estimate (J) positive and blank-qualified (UJ) results only.

XX = Continuing calibration (CC) percent difference (%D) > 20 for VOC and SVOC and >25% for alkylated PAH; estimate (J/UJ) positive and nondetect results.

RF = Response factor (RRF) < 0.05; Estimate (J) positive results and reject (R) nondetect results.

The nondetect results for isobutyl alcohol and 1,4-dioxane in samples NG-PB-WD-TB092415 and NG-PB-WD-FB092415 and 1,4-dioxane in samples NG-PB-WD-108, NG-PB-WD-112, NG-PB-WD-110, and NG-PB-WD-XX were rejected (R) and are not usable for project objectives.

The direction of the bias cannot be determined for the remaining calibration nonconformances. The results can be used for project objectives as estimated (J/UJ) values which may have a minor impact on the data usability.

PCBs

Compounds that did not meet criteria in the PCB calibrations are summarized in the following table.

Instrument/Calibration Standard	**Compound**	**Calibration Exceedance (%D)**	**Validation Qualifier**
HP 6890-07 CCAL 09/28 15:14 Column ZB-35	Aroclor 1016	29.1	Estimate (J/UJ) the positive and nondetect results for all Aroclors in the associated samples.
	Aroclor 1260	23.6	
Associated Samples: NG-PB-WD-108, NG-PB-WD-112, NG-PB-WD-110, NG-PB-WD-XX, NG-PB-PS-CSO-01H, NG-PB-PS-CSO-01L			
HP 6890-07 CCAL 09/28 21:21 Column ZB-35	Aroclor 1016	21.2	Estimate (J/UJ) the positive and nondetect results for all Aroclors in the associated samples.
	Aroclor 1260	20.1	
Associated Samples: NG-PB-CN-101, NG-PB-WD-109, NG-PB-CN-104, NG-PB-WD-113, NG-PB-CN-100, NG-PB-PS-CSO-02L			
HP 6890-07 CCAL 10/08 17:21 Column ZB-35	Aroclor 1016	31.9	Estimate (J/UJ) the positive and nondetect results for all Aroclors in sample NG-PB-WD-FB092415.
	Aroclor 1260	33.9	

Associated Sample: NG-PB-WD-FB092415			
HP 6890-07 CCAL 10/08 19:12 Column ZB-35	Aroclor 1016	29.4	Estimate (J/UJ) the positive and nondetect results for all Aroclors in sample NG-PB-WD-FB092415.
	Aroclor 1260	33.3	
Associated Samples: NG-PB-WD-FB092415			

X = Initial calibration (IC) relative standard deviation (%RSD) > 20 for; estimate (J) positive and blank-qualified (UJ) results only.

XX = Continuing calibration (CC) percent difference (%D) > 20 for PCBs; estimate (J/UJ) positive and nondetect results.

The direction of the bias cannot be determined for the calibration nonconformances. The results can be used for project objectives as estimated (J/UJ) values which may have a minor impact on the data usability.

Blanks

Analytes were detected below the reporting limits (RLs) in the associated laboratory method, field and trip blank samples. Analytes which were detected in the project samples at levels less than five times (or ten times for common contaminants) those in the blanks were qualified as nondetect (U). Actions levels were adjusted for sample specific weights, dilution factors, and moisture content.

Analyte	Blank ID/Associated Samples	Maximum Concentration	Action Level	Validation Actions
Hexachlorobutadiene	Method 480-267118: NG-PB-WD-TB092415, NG-PB-WD-FB092415	0.287 ug/L	4.35 ug/L	No actions required.
Phenol	Method MB-265758: NG-PB-WD-108, NG-PB-WD-112, NG-PB-WD-110, NG-PB-WD-XX	52.9 ug/kg	265 ug/kg	No actions required.
Bis(2-ethylhexyl)phthalate	Method MB-480-265862: NG-PB-WD-FB092415	2.57 ug/L	25.7 ug/L	Qualify result as nondetect (U) at the RL in sample NG-PB-WD-FB092415
Methylene chloride	NG-PB-WD-TB092414: All soil samples	1.3 ug/L	13 ug/L	No actions required.
Acetone	NG-PB-WD-FB092414: All soil samples	3.4 ug/L	34 ug/L	No actions required.
Cyclohexane		0.45 ug/L	2.25 ug/L	
Methylene chloride		3.4 ug/L	34 ug/L	
Acetophenone		13 ug/L	65 ug/L	
Bis(2-ethylhexyl)phthalate		2.6 ug/L	26 ug/L	
Diethyl phthalate		0.76 ug/L	7.6 ug/L	

Analyte	Blank ID/Associated Samples	Maximum Concentration	Action Level	Validation Actions
di-n-butyl phthalate		1.4 ug/L	1.4 ug/L	
GRO		48 ug/L	240 ug/L	

Blank Actions

If the sample result is < QL and < action level; report the result as nondetect (U) at the RL.
If the sample result is ≥ QL and < action level; report the sample result as nondetect (U) at the reported value.
If the sample result is > QL and > action level; validation action is not required.

Surrogate Recoveries

VOC, SVOC, PCBs, and GRO

All criteria were met for samples analyzed at dilutions less than five.

DRO

The following table lists the surrogate recoveries outside of the control limits and the resulting validation actions.

Sample	Surrogate	Recovery (%)	Control Limits	Validation Actions
NG-PB-WD-108	o-Terphenyl	3	48-125	Estimate (J) the positive result for DRO in this sample; Low bias.
NG-PB-WD-112	o-Terphenyl	2	48-125	Reject (R) the nondetect result for DRO in this sample.

MS/MSD Results

MS/MSD analyses were performed on sample NG-PB-WD-112 for VOCs, SVOCs, GRO, DRO, and PCBs and sample NG-PB-WD-FB092415 for GRO. Due to the high dilution performed on this sample for the SVOC analyses, MS/MSD recoveries could not be evaluated. All criteria were met in the GRO analyses. The following tables list the analytes recovered outside of control limits MS and/or MSD analyses and the resulting actions.

NG-PB-WD-112					
Analyte	**MS (%)**	**MSD (%)**	**RPD (%)**	**Control Limits**	**Validation Action/Bias**
Aroclor 1016	341	212	-	50-177	Validation actions were not required as the result for Aroclor 1016 was nondetect in this samples and therefore not affected by the potential high bias.
Diesel range organics	35	-	106	43-153/35	Validation action was not required as the result was rejected due to extremely poor surrogate recovery.
- Criteria met					

NG-PB-WD-112					
Analyte	**MS (%)**	**MSD (%)**	**RPD (%)**	**Control Limits**	**Validation Action/Bias**
Methyl acetate	161	131	-	71-123	Estimate (J) the positive results for methyl acetate and 4-isopropyltoluene in sample NG-PB-WD-112; High bias.
4-Isopropyltoluene	198	183	-	82-119	
The majority of VOC compounds exhibited high MS/MSD recoveries. Validation actions were not required on this basis as the sample results were nondetect and therefore not affected by the potential high bias.					
- Criteria met					

NG-PB-WD-FB092415					
Analyte	**MS (%)**	**MSD (%)**	**RPD (%)**	**Control Limits**	**Validation Action/Bias**
GRO	50	42	-	78-127	Estimate (J) the positive result for GRO in sample NG-PB-WD-FB092415; Low bias.
- Criteria met					

LCS Results

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

Samples NG-PB-WD-110 and NG-PB-WD-XX were submitted as the field duplicate pair with this sample group. The following table summarizes the RPDs of the detected analytes in the field duplicate pair which were within the acceptance criteria.

Analyte	NG-PB-WD-110 (ug/Kg)	NG-PB-WD-XX (ug/Kg)	RPD (%)
Chloromethane	54 J	84 J	43.5
4-Isopropyltoluene	5000	4000	22.2
Toluene	170 U	60 J	NC, Within 2xRL
Methyl acetate	3000	2800	NC, Within 2xRL
o-Xylene	170 U	31 J	6.9
Diesel range organics	460 mg/kg	520 mg/kg	12.2
PCB-1248	0.11 J mg/kg	0.19 J mg/kg	53.3, Within 2xRL
Criteria: When both results are ≥5x the RL, RPDs must be <50%. When results are < 5x the RL, the absolute difference between the original and field duplicate results must be < 2xRL			

Moisture Content

All criteria were met.

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

The following table lists the sample dilutions which were performed and the results to be reported.

Sample	VOC Analysis Reported	SVOC Analysis Reported	PCB Analysis Reported
NG-PB-WD-108	A medium level analysis (100-fold) dilution was performed.	Due to sample extract appearance and viscosity, 100-fold dilutions were performed for these samples.	NR
NG-PB-WD-112			Due to matrix, the sample extract final volume was elevated (15 ml versus 10 ml). QLs are elevated accordingly.
NG-PB-WD-110			NR
NG-PB-WD-XX			NR
NG-PB-WD-109	NR	NR	Due to matrix, the sample extract final volume was elevated (15 ml versus 10 ml). QLs are elevated accordingly.
NG-PB-WD-113	NR	NR	

NR – Dilution/Analysis was not required.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

Select Aroclors have overlapping quantitation peaks and thus the potential for double counting of these peaks exists when multiple Aroclors are present in the sample. The positive results for Aroclor 1248 and Aroclor 1260 in samples NG-PB-CN-101 and NG-PB-WD-109 were qualified as estimated (J) as a result of this potential high bias due to possible double counting of the peaks.

The following table lists the GC dual column RPDs which were outside of control limits and the resulting actions. The direction of the bias cannot be determined from this nonconformance. All results are usable as estimated values.

Sample	Compound	RPD	Validation Actions
NG-PB-WD-112	Aroclor 1260	28.6	Estimate (J) the results for Aroclor 1260 in these samples.
NG-PB-CN-101	Aroclor 1260	25.4	
NG-PB-CN-100	Aroclor 1260	27.3	

For %RPD between 25 and 70%; estimate (J) the positive result.
For %RPD between 70and 100%; qualify the result as presumptively present (JN).
For %RPD >50% and the result < QL; raise the value to the QL and qualify as nondetect (U).
For %RPD > 100% and interference is present; qualify the result as presumptively present (JN).
For %RPD > 100% and interference is not present; reject (R) result**.**

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Paerdegat Basin Study Phase II

TestAmerica Job ID: 480-87989-1
SDG: 480-87989

Client Sample ID: NG-PB-WD-108
Date Collected: 09/23/15 12:30
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-1
Matrix: Solid
Percent Solids: 87.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	120	U	120	35	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,1,1-Trichloroethane	120	U	120	34	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,1,2,2-Tetrachloroethane	120	U	120	20	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,1,2-Trichloroethane	120	U	120	26	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Freon TF	120	U	120	61	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,1-Dichloroethane	120	U	120	38	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,1-Dichloroethene	120	U J	120	42	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,1-Dichloropropene	120	U	120	30	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,2,3-Trichloropropane	120	U	120	27	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,2,4-Trichlorobenzene	120	U	120	46	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,2-Dibromo-3-Chloropropane	120	U	120	61	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,2-Dichlorobenzene	120	U	120	31	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,2-Dichloroethane	120	U	120	50	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,2,4-Trimethylbenzene	120	U	120	34	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,2-Dichloropropane	120	U	120	20	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,3-Dichloropropane	120	U	120	22	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,4-Dichlorobenzene	120	U	120	17	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
2,2-Dichloropropane	120	U	120	28	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
2-Butanone (MEK)	610	U	610	360	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
2-Hexanone	610	U	610	250	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
4-Methyl-2-pentanone (MIBK)	610	U	610	39	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Acetone	610	U	610	500	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,3,5-Trimethylbenzene	120	U	120	37	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Benzene	120	U	120	23	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Bromochloromethane	120	U	120	44	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,4-Dioxane	~~2300~~ ~~U~~	R	2300	620	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Bromodichloromethane	120	U	120	24	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Bromoform	120	U J	120	61	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Bromomethane	120	U	120	27	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Carbon disulfide	120	U J	120	56	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Carbon tetrachloride	120	U J	120	31	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Chlorobenzene	120	U	120	16	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
2-Chloroethyl vinyl ether	610	U	610	39	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Dibromochloromethane	120	U J	120	59	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
2-Chlorotoluene	120	U	120	47	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Chloroethane	120	U J	120	25	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Chloroform	120	U	120	84	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Chloromethane	120	U J	120	29	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
cis-1,2-Dichloroethene	120	U	120	34	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
cis-1,3-Dichloropropene	120	U	120	29	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
4-Chlorotoluene	120	U	120	25	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
4-Isopropyltoluene	**7900**		120	41	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Dibromomethane	120	U	120	40	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Dichlorodifluoromethane	120	U J	120	53	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Ethylbenzene	120	U	120	36	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,2-Dibromoethane	120	U	120	21	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Hexachlorobutadiene	120	U	120	48	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Methyl iodide	120	U J	120	38	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Isobutyl alcohol	3100	U	3100	650	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1

11/9/15

Client Sample ID: NG-PB-WD-108
Date Collected: 09/23/15 12:30
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-1
Matrix: Solid
Percent Solids: 87.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	120	U	120	24	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Bromobenzene	120	U	120	27	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Naphthalene	120	U	120	41	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Styrene	120	U	120	29	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Tetrachloroethene	120	U	120	16	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Toluene	120	U	120	33	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
trans-1,2-Dichloroethene	120	U J	120	29	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
trans-1,3-Dichloropropene	120	U	120	12	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Trichloroethene	120	U	120	34	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Trichlorofluoromethane	120	U	120	57	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Vinyl acetate	610	U	610	220	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Vinyl chloride	120	U	120	41	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Xylenes, Total	240	U	240	68	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
o-Xylene	120	U	120	16	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Cyclohexane	120	U J	120	27	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
m,p-Xylene	240	U	240	68	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,2-Dichloroethene, Total	240	U	240	64	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
1,3-Dichlorobenzene	120	U	120	33	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Dichlorofluoromethane	120	U	120	24	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Isopropylbenzene	120	U	120	18	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Methyl acetate	**2100**		120	58	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Methyl tert-butyl ether	120	U	120	46	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Methylcyclohexane	120	U J	120	57	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
n-Butylbenzene	120	U	120	36	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
N-Propylbenzene	120	U	120	32	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
sec-Butylbenzene	120	U	120	45	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
Tetrahydrofuran	240	U	240	61	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1
tert-Butylbenzene	120	U	120	34	ug/Kg	☼	09/26/15 11:00	09/29/15 05:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*53 - 146*	*09/26/15 11:00*	*09/29/15 05:28*	*1*
4-Bromofluorobenzene (Surr)	*103*		*49 - 148*	*09/26/15 11:00*	*09/29/15 05:28*	*1*
Toluene-d8 (Surr)	*122*		*50 - 149*	*09/26/15 11:00*	*09/29/15 05:28*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*09/26/15 11:00*	*09/29/15 05:28*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	19000	U	19000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
1,2,4,5-Tetrachlorobenzene	19000	U	19000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2,3,4,6-Tetrachlorophenol	19000	U	19000	3900	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2,4,5-Trichlorophenol	19000	U	19000	5200	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2,4,6-Trichlorophenol	19000	U	19000	3800	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2,4-Dichlorophenol	19000	U	19000	2000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2,4-Dimethylphenol	19000	U	19000	4600	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2,4-Dinitrophenol	190000	U	190000	88000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2,4-Dinitrotoluene	19000	U	19000	3900	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2,6-Dinitrotoluene	19000	U	19000	2200	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2-Chloronaphthalene	19000	U	19000	3100	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2-Chlorophenol	19000	U	19000	3500	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2-Methylnaphthalene	19000	U	19000	3800	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100

Client Sample ID: NG-PB-WD-108
Date Collected: 09/23/15 12:30
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-1
Matrix: Solid
Percent Solids: 87.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	19000	U	19000	2200	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2-Nitroaniline	37000	U	37000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2-Nitrophenol	19000	U	19000	5400	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
3 & 4 Methylphenol	37000	U	37000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
3-Methylphenol	37000	U	37000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
3,3'-Dichlorobenzidine	37000	U	37000	22000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
3-Nitroaniline	37000	U	37000	5300	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
4,6-Dinitro-2-methylphenol	37000	U	37000	19000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
4-Bromophenyl phenyl ether	19000	U	19000	2700	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
4-Chloro-3-methylphenol	19000	U	19000	4700	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
4-Chloroaniline	19000	U	19000	4700	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
4-Chlorophenyl phenyl ether	19000	U	19000	2400	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
4-Nitroaniline	37000	U	37000	10000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
4-Nitrophenol	37000	U	37000	13000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Acenaphthene	19000	U	19000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Acenaphthylene	19000	U	19000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Acetophenone	19000	U	19000	2600	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Anthracene	19000	U	19000	4700	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Benzo[a]anthracene	19000	U	19000	1900	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Benzo[a]pyrene	19000	U	19000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Benzo[b]fluoranthene	19000	U	19000	3000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Benzo[g,h,i]perylene	19000	U	19000	2000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Benzo[k]fluoranthene	19000	U	19000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Bis(2-chloroethoxy)methane	19000	U	19000	4000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Bis(2-chloroethyl)ether	19000	U	19000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Bis(2-ethylhexyl) phthalate	19000	U	19000	6500	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
2,2'-oxybis[1-chloropropane]	19000	U	19000	3800	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Butyl benzyl phthalate	19000	U	19000	3100	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Chrysene	19000	U	19000	4300	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Dibenz(a,h)anthracene	19000	U	19000	3400	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Dibenzofuran	19000	U	19000	2200	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Diethyl phthalate	19000	U	19000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Atrazine	19000	U	19000	6600	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Dimethyl phthalate	19000	U	19000	2200	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Benzaldehyde	19000	U	19000	15000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Di-n-butyl phthalate	19000	U	19000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Di-n-octyl phthalate	19000	U	19000	2200	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Fluoranthene	19000	U	19000	2000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Fluorene	19000	U	19000	2200	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Hexachlorobenzene	19000	U	19000	2600	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Hexachlorobutadiene	19000	U	19000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Hexachlorocyclopentadiene	19000	U	19000	2600	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Hexachloroethane	19000	U	19000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Caprolactam	19000	U	19000	5700	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Carbazole	19000	U	19000	2200	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Indeno[1,2,3-cd]pyrene	19000	U	19000	2400	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Isophorone	19000	U	19000	4000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Naphthalene	19000	U	19000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Nitrobenzene	19000	U	19000	2100	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100

Client Sample ID: NG-PB-WD-108

Date Collected: 09/23/15 12:30
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-1
Matrix: Solid
Percent Solids: 87.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	19000	U	19000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
N-Nitrosodiphenylamine	19000	U	19000	16000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Pentachlorophenol	37000	U	37000	19000	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Phenanthrene	19000	U	19000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Phenol	19000	U	19000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100
Pyrene	19000	U	19000	2200	ug/Kg	☼	09/28/15 07:55	09/30/15 16:43	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*09/28/15 07:55*	*09/30/15 16:43*	*100*
2-Fluorophenol (Surr)	*0*	*X*	*18 - 120*	*09/28/15 07:55*	*09/30/15 16:43*	*100*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*39 - 146*	*09/28/15 07:55*	*09/30/15 16:43*	*100*
Nitrobenzene-d5 (Surr)	*0*	*X*	*34 - 132*	*09/28/15 07:55*	*09/30/15 16:43*	*100*
Phenol-d5 (Surr)	*0*	*X*	*11 - 120*	*09/28/15 07:55*	*09/30/15 16:43*	*100*
p-Terphenyl-d14 (Surr)	*0*	*X*	*65 - 153*	*09/28/15 07:55*	*09/30/15 16:43*	*100*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	7.1	U	7.1	1.9	mg/Kg	☼	09/28/15 10:56	09/28/15 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*85*		*46 - 156*	*09/28/15 10:56*	*09/28/15 20:04*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	16	J	54	16	mg/Kg	☼	09/30/15 07:57	10/01/15 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*3*	*X*	*48 - 125*	*09/30/15 07:57*	*10/01/15 12:23*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.26	U J	0.26	0.051	mg/Kg	☼	09/28/15 11:43	09/28/15 16:50	1
PCB-1221	0.26	U J	0.26	0.051	mg/Kg	☼	09/28/15 11:43	09/28/15 16:50	1
PCB-1232	0.26	U J	0.26	0.051	mg/Kg	☼	09/28/15 11:43	09/28/15 16:50	1
PCB-1242	**0.089**	**J**	0.26	0.051	mg/Kg	☼	09/28/15 11:43	09/28/15 16:50	1
PCB-1248	0.26	U J	0.26	0.051	mg/Kg	☼	09/28/15 11:43	09/28/15 16:50	1
PCB-1254	0.26	U J	0.26	0.12	mg/Kg	☼	09/28/15 11:43	09/28/15 16:50	1
PCB-1260	0.26	U J	0.26	0.12	mg/Kg	☼	09/28/15 11:43	09/28/15 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*93*		*60 - 154*	*09/28/15 11:43*	*09/28/15 16:50*	*1*
DCB Decachlorobiphenyl	*83*		*65 - 174*	*09/28/15 11:43*	*09/28/15 16:50*	*1*

Client Sample ID: NG-PB-WD-112

Date Collected: 09/23/15 11:30
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-2
Matrix: Solid
Percent Solids: 78.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	210	U F1	210	61	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,1,1-Trichloroethane	210	U F1	210	59	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Paerdegat Basin Study Phase II

TestAmerica Job ID: 480-87989-1
SDG: 480-87989

Client Sample ID: NG-PB-WD-112
Date Collected: 09/23/15 11:30
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-2
Matrix: Solid
Percent Solids: 78.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	210	U F1	210	35	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,1,2-Trichloroethane	210	U F1	210	45	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Freon TF	210	U F1	210	110	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,1-Dichloroethane	210	U F1	210	66	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,1-Dichloroethene	210	U F1 UJ.	210	74	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,1-Dichloropropene	210	U F1	210	53	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,2,3-Trichloropropane	210	U F1	210	48	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,2,4-Trichlorobenzene	210	U F1	210	81	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,2-Dibromo-3-Chloropropane	210	U F1	210	110	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,2-Dichlorobenzene	210	U F1	210	55	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,2-Dichloroethane	210	U F1	210	88	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,2,4-Trimethylbenzene	210	U F1	210	60	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,2-Dichloropropane	210	U F1	210	35	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,3-Dichloropropane	210	U F1	210	39	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,4-Dichlorobenzene	210	U F1	210	30	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
2,2-Dichloropropane	210	U F1	210	49	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
2-Butanone (MEK)	1100	U F1	1100	640	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
2-Hexanone	1100	U F1	1100	440	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
4-Methyl-2-pentanone (MIBK)	1100	U F1	1100	69	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Acetone	1100	U F2 F1	1100	880	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,3,5-Trimethylbenzene	210	U F1	210	65	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Benzene	210	U F1	210	41	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Bromochloromethane	210	U F1	210	77	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,4-Dioxane	~~4100~~	~~U F1~~ R.	4100	1100	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Bromodichloromethane	210	U F1	210	43	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Bromoform	210	U F1 UJ.	210	110	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Bromomethane	210	U F1	210	47	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Carbon disulfide	210	U F1 UJ.	210	97	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Carbon tetrachloride	210	U F1 UJ.	210	55	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Chlorobenzene	210	U F1	210	28	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
2-Chloroethyl vinyl ether	1100	U F1	1100	69	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Dibromochloromethane	210	U F1 UJ.	210	100	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
2-Chlorotoluene	210	U F1	210	82	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Chloroethane	210	U F1 UJ.	210	45	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Chloroform	210	U F1	210	150	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Chloromethane	210	U F1 UJ.	210	51	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
cis-1,2-Dichloroethene	210	U F1	210	59	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
cis-1,3-Dichloropropene	210	U F1	210	51	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
4-Chlorotoluene	210	U F1	210	43	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
4-Isopropyltoluene	**430**	~~F1~~ J.	210	72	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Dibromomethane	210	U F1	210	70	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Dichlorodifluoromethane	210	U F1 UJ.	210	93	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Ethylbenzene	210	U F1	210	62	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,2-Dibromoethane	210	U F1	210	37	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Hexachlorobutadiene	210	U F1	210	85	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Methyl iodide	210	U F1 UJ.	210	66	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Isobutyl alcohol	5400	U F1	5400	1100	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Methylene Chloride	210	U F1	210	42	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Bromobenzene	210	U F1	210	47	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Paerdegat Basin Study Phase II

TestAmerica Job ID: 480-87989-1
SDG: 480-87989

Client Sample ID: NG-PB-WD-112
Date Collected: 09/23/15 11:30
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-2
Matrix: Solid
Percent Solids: 78.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	210	U F1	210	72	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Styrene	210	U F1	210	52	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Tetrachloroethene	210	U F1	210	29	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Toluene	210	U F1	210	57	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
trans-1,2-Dichloroethene	210	U F1 UJ.	210	51	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
trans-1,3-Dichloropropene	210	U F1	210	21	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Trichloroethene	210	U F1	210	60	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Trichlorofluoromethane	210	U F1	210	100	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Vinyl acetate	1100	U F1	1100	380	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Vinyl chloride	210	U F1	210	72	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Xylenes, Total	430	U F1	430	120	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
o-Xylene	210	U F1	210	28	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Cyclohexane	210	U F1 UJ.	210	48	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
m,p-Xylene	430	U F1	430	120	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,2-Dichloroethene, Total	430	U F1	430	110	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
1,3-Dichlorobenzene	210	U F1	210	57	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Dichlorofluoromethane	210	U F1	210	43	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Isopropylbenzene	210	U F1	210	32	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Methyl acetate	3400	~~F1~~ J.	210	100	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Methyl tert-butyl ether	210	U F1	210	81	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Methylcyclohexane	210	U F1 UJ.	210	100	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
n-Butylbenzene	210	U F1	210	63	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
N-Propylbenzene	210	U F1	210	56	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
sec-Butylbenzene	210	U F1	210	79	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
Tetrahydrofuran	430	U F2 F1	430	110	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1
tert-Butylbenzene	210	U F1	210	60	ug/Kg	☼	09/26/15 11:00	09/29/15 05:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*53 - 146*	*09/26/15 11:00*	*09/29/15 05:51*	*1*
4-Bromofluorobenzene (Surr)	*101*		*49 - 148*	*09/26/15 11:00*	*09/29/15 05:51*	*1*
Toluene-d8 (Surr)	*121*		*50 - 149*	*09/26/15 11:00*	*09/29/15 05:51*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*09/26/15 11:00*	*09/29/15 05:51*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	21000	U	21000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
1,2,4,5-Tetrachlorobenzene	21000	U	21000	3700	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2,3,4,6-Tetrachlorophenol	21000	U	21000	4400	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2,4,5-Trichlorophenol	21000	U	21000	5800	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2,4,6-Trichlorophenol	21000	U	21000	4300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2,4-Dichlorophenol	21000	U	21000	2300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2,4-Dimethylphenol	21000	U	21000	5200	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2,4-Dinitrophenol	210000	U	210000	99000	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2,4-Dinitrotoluene	21000	U	21000	4400	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2,6-Dinitrotoluene	21000	U	21000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2-Chloronaphthalene	21000	U	21000	3500	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2-Chlorophenol	21000	U	21000	3900	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2-Methylnaphthalene	21000	U	21000	4300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2-Methylphenol	21000	U	21000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2-Nitroaniline	42000	U	42000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100

Client Sample ID: NG-PB-WD-112

Date Collected: 09/23/15 11:30
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-2

Matrix: Solid
Percent Solids: 78.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	21000	U	21000	6100	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
3 & 4 Methylphenol	42000	U	42000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
3-Methylphenol	42000	U	42000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
3,3'-Dichlorobenzidine	42000	U	42000	25000	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
3-Nitroaniline	42000	U	42000	5900	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
4,6-Dinitro-2-methylphenol	42000	U	42000	21000	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
4-Bromophenyl phenyl ether	21000	U	21000	3000	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
4-Chloro-3-methylphenol	21000	U	21000	5300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
4-Chloroaniline	21000	U	21000	5300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
4-Chlorophenyl phenyl ether	21000	U	21000	2700	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
4-Nitroaniline	42000	U	42000	11000	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
4-Nitrophenol	42000	U	42000	15000	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Acenaphthene	21000	U	21000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Acenaphthylene	21000	U	21000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Acetophenone	21000	U	21000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Anthracene	21000	U	21000	5300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Benzo[a]anthracene	21000	U F1	21000	2100	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Benzo[a]pyrene	21000	U	21000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Benzo[b]fluoranthene	21000	U	21000	3400	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Benzo[g,h,i]perylene	21000	U	21000	2300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Benzo[k]fluoranthene	21000	U	21000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Bis(2-chloroethoxy)methane	21000	U	21000	4600	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Bis(2-chloroethyl)ether	21000	U	21000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Bis(2-ethylhexyl) phthalate	21000	U	21000	7300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
2,2'-oxybis[1-chloropropane]	21000	U	21000	4300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Butyl benzyl phthalate	21000	U	21000	3500	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Chrysene	21000	U	21000	4800	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Dibenz(a,h)anthracene	21000	U	21000	3800	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Dibenzofuran	21000	U	21000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Diethyl phthalate	21000	U	21000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Atrazine	21000	U	21000	7500	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Dimethyl phthalate	21000	U	21000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Benzaldehyde	21000	U	21000	17000	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Di-n-butyl phthalate	21000	U	21000	3700	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Di-n-octyl phthalate	21000	U	21000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Fluoranthene	21000	U	21000	2300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Fluorene	21000	U	21000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Hexachlorobenzene	21000	U	21000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Hexachlorobutadiene	21000	U	21000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Hexachlorocyclopentadiene	21000	U	21000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Hexachloroethane	21000	U	21000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Caprolactam	21000	U	21000	6400	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Carbazole	21000	U	21000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Indeno[1,2,3-cd]pyrene	21000	U	21000	2700	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Isophorone	21000	U	21000	4600	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Naphthalene	21000	U	21000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Nitrobenzene	21000	U	21000	2400	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
N-Nitrosodi-n-propylamine	21000	U	21000	3700	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
N-Nitrosodiphenylamine	21000	U	21000	17000	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100

Client Sample ID: NG-PB-WD-112

Date Collected: 09/23/15 11:30
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-2
Matrix: Solid
Percent Solids: 78.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	42000	U	42000	21000	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Phenanthrene	21000	U	21000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Phenol	21000	U	21000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100
Pyrene	21000	U	21000	2500	ug/Kg	☼	09/28/15 07:55	09/30/15 14:00	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*09/28/15 07:55*	*09/30/15 14:00*	*100*
2-Fluorophenol (Surr)	*0*	*X*	*18 - 120*	*09/28/15 07:55*	*09/30/15 14:00*	*100*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*39 - 146*	*09/28/15 07:55*	*09/30/15 14:00*	*100*
Nitrobenzene-d5 (Surr)	*0*	*X*	*34 - 132*	*09/28/15 07:55*	*09/30/15 14:00*	*100*
Phenol-d5 (Surr)	*0*	*X*	*11 - 120*	*09/28/15 07:55*	*09/30/15 14:00*	*100*
p-Terphenyl-d14 (Surr)	*0*	*X*	*65 - 153*	*09/28/15 07:55*	*09/30/15 14:00*	*100*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	7.9	U	7.9	2.1	mg/Kg	☼	09/28/15 10:56	09/28/15 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*46 - 156*	*09/28/15 10:56*	*09/28/15 17:09*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	~~63~~	~~U F1 F2~~ R	63	19	mg/Kg	☼	09/30/15 07:57	10/01/15 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*2*	*X*	*48 - 125*	*09/30/15 07:57*	*10/01/15 11:49*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.44	~~U F1~~ UJ	0.44	0.086	mg/Kg	☼	09/28/15 11:43	09/28/15 17:06	1
PCB-1221	0.44	UJ	0.44	0.086	mg/Kg	☼	09/28/15 11:43	09/28/15 17:06	1
PCB-1232	0.44	UJ	0.44	0.086	mg/Kg	☼	09/28/15 11:43	09/28/15 17:06	1
PCB-1242	**4.9**	J	0.44	0.086	mg/Kg	☼	09/28/15 11:43	09/28/15 17:06	1
PCB-1248	0.44	UJ	0.44	0.086	mg/Kg	☼	09/28/15 11:43	09/28/15 17:06	1
PCB-1254	0.44	UJ	0.44	0.21	mg/Kg	☼	09/28/15 11:43	09/28/15 17:06	1
PCB-1260	**0.60**	J	0.44	0.21	mg/Kg	☼	09/28/15 11:43	09/28/15 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*91*		*60 - 154*	*09/28/15 11:43*	*09/28/15 17:06*	*1*
DCB Decachlorobiphenyl	*84*		*65 - 174*	*09/28/15 11:43*	*09/28/15 17:06*	*1*

Client Sample ID: NG-PB-WD-110

Date Collected: 09/23/15 09:45
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-3
Matrix: Solid
Percent Solids: 69.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	170	U	170	48	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,1,1-Trichloroethane	170	U	170	47	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,1,2,2-Tetrachloroethane	170	U	170	28	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,1,2-Trichloroethane	170	U	170	36	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1

Client Sample ID: NG-PB-WD-110
Date Collected: 09/23/15 09:45
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-3
Matrix: Solid
Percent Solids: 69.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Freon TF	170	U	170	85	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,1-Dichloroethane	170	U	170	52	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,1-Dichloroethene	170	U J	170	59	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,1-Dichloropropene	170	U	170	42	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,2,3-Trichloropropane	170	U	170	38	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,2,4-Trichlorobenzene	170	U	170	64	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,2-Dibromo-3-Chloropropane	170	U	170	85	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,2-Dichlorobenzene	170	U	170	43	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,2-Dichloroethane	170	U	170	69	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,2,4-Trimethylbenzene	170	U	170	47	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,2-Dichloropropane	170	U	170	27	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,3-Dichloropropane	170	U	170	31	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,4-Dichlorobenzene	170	U	170	24	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
2,2-Dichloropropane	170	U	170	39	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
2-Butanone (MEK)	850	U	850	500	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
2-Hexanone	850	U	850	350	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
4-Methyl-2-pentanone (MIBK)	850	U	850	54	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Acetone	850	U	850	700	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,3,5-Trimethylbenzene	170	U	170	51	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Benzene	170	U	170	32	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Bromochloromethane	170	U	170	61	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,4-Dioxane	~~3200~~ ~~U~~	R	3200	870	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Bromodichloromethane	170	U	170	34	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Bromoform	170	U J	170	85	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Bromomethane	170	U	170	37	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Carbon disulfide	170	U J	170	77	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Carbon tetrachloride	170	U J	170	43	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Chlorobenzene	170	U	170	22	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
2-Chloroethyl vinyl ether	850	U	850	54	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Dibromochloromethane	170	U J	170	82	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
2-Chlorotoluene	170	U	170	65	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Chloroethane	170	U J	170	35	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Chloroform	170	U	170	120	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Chloromethane	**54**	J	170	40	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
cis-1,2-Dichloroethene	170	U	170	47	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
cis-1,3-Dichloropropene	170	U	170	41	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
4-Chlorotoluene	170	U	170	34	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
4-Isopropyltoluene	**5000**		170	57	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Dibromomethane	170	U	170	55	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Dichlorodifluoromethane	170	U J	170	74	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Ethylbenzene	170	U	170	49	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,2-Dibromoethane	170	U	170	30	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Hexachlorobutadiene	170	U	170	67	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Methyl iodide	170	U J	170	52	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Isobutyl alcohol	4200	U	4200	900	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Methylene Chloride	170	U	170	34	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Bromobenzene	170	U	170	37	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Naphthalene	170	U	170	57	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Styrene	170	U	170	41	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1

Client Sample ID: NG-PB-WD-110
Date Collected: 09/23/15 09:45
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-3
Matrix: Solid
Percent Solids: 69.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	170	U	170	23	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Toluene	170	U	170	45	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
trans-1,2-Dichloroethene	170	U J	170	40	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
trans-1,3-Dichloropropene	170	U	170	17	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Trichloroethene	170	U	170	47	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Trichlorofluoromethane	170	U	170	80	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Vinyl acetate	850	U	850	300	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Vinyl chloride	170	U	170	57	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Xylenes, Total	340	U	340	94	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
o-Xylene	170	U	170	22	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Cyclohexane	170	U J	170	38	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
m,p-Xylene	340	U	340	94	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,2-Dichloroethene, Total	340	U	340	89	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
1,3-Dichlorobenzene	170	U	170	45	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Dichlorofluoromethane	170	U	170	34	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Isopropylbenzene	170	U	170	25	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Methyl acetate	**3000**	*	170	81	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Methyl tert-butyl ether	170	U	170	64	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Methylcyclohexane	170	U J	170	79	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
n-Butylbenzene	170	U	170	50	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
N-Propylbenzene	170	U	170	44	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
sec-Butylbenzene	170	U	170	62	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
Tetrahydrofuran	340	U	340	85	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1
tert-Butylbenzene	170	U	170	47	ug/Kg	☼	09/26/15 11:00	09/29/15 06:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*53 - 146*	*09/26/15 11:00*	*09/29/15 06:58*	*1*
4-Bromofluorobenzene (Surr)	*105*		*49 - 148*	*09/26/15 11:00*	*09/29/15 06:58*	*1*
Toluene-d8 (Surr)	*125*		*50 - 149*	*09/26/15 11:00*	*09/29/15 06:58*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*	*09/26/15 11:00*	*09/29/15 06:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	24000	U	24000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
1,2,4,5-Tetrachlorobenzene	24000	U	24000	4200	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2,3,4,6-Tetrachlorophenol	24000	U	24000	5000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2,4,5-Trichlorophenol	24000	U	24000	6600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2,4,6-Trichlorophenol	24000	U	24000	4900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2,4-Dichlorophenol	24000	U	24000	2600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2,4-Dimethylphenol	24000	U	24000	5900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2,4-Dinitrophenol	240000	U	240000	110000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2,4-Dinitrotoluene	24000	U	24000	5000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2,6-Dinitrotoluene	24000	U	24000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2-Chloronaphthalene	24000	U	24000	4000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2-Chlorophenol	24000	U	24000	4500	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2-Methylnaphthalene	24000	U	24000	4900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2-Methylphenol	24000	U	24000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2-Nitroaniline	47000	U	47000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2-Nitrophenol	24000	U	24000	6900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
3 & 4 Methylphenol	47000	U	47000	3700	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100

Client Sample ID: NG-PB-WD-110
Date Collected: 09/23/15 09:45
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-3
Matrix: Solid
Percent Solids: 69.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Methylphenol	47000	U	47000	3700	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
3,3'-Dichlorobenzidine	47000	U	47000	29000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
3-Nitroaniline	47000	U	47000	6800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
4,6-Dinitro-2-methylphenol	47000	U	47000	24000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
4-Bromophenyl phenyl ether	24000	U	24000	3500	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
4-Chloro-3-methylphenol	24000	U	24000	6000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
4-Chloroaniline	24000	U	24000	6000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
4-Chlorophenyl phenyl ether	24000	U	24000	3000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
4-Nitroaniline	47000	U	47000	13000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
4-Nitrophenol	47000	U	47000	17000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Acenaphthene	24000	U	24000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Acenaphthylene	24000	U	24000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Acetophenone	24000	U	24000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Anthracene	24000	U	24000	6000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Benzo[a]anthracene	24000	U	24000	2400	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Benzo[a]pyrene	24000	U	24000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Benzo[b]fluoranthene	24000	U	24000	3900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Benzo[g,h,i]perylene	24000	U	24000	2600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Benzo[k]fluoranthene	24000	U	24000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Bis(2-chloroethoxy)methane	24000	U	24000	5200	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Bis(2-chloroethyl)ether	24000	U	24000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Bis(2-ethylhexyl) phthalate	24000	U	24000	8300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
2,2'-oxybis[1-chloropropane]	24000	U	24000	4900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Butyl benzyl phthalate	24000	U	24000	4000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Chrysene	24000	U	24000	5500	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Dibenz(a,h)anthracene	24000	U	24000	4300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Dibenzofuran	24000	U	24000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Diethyl phthalate	24000	U	24000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Atrazine	24000	U	24000	8500	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Dimethyl phthalate	24000	U	24000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Benzaldehyde	24000	U	24000	19000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Di-n-butyl phthalate	24000	U	24000	4200	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Di-n-octyl phthalate	24000	U	24000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Fluoranthene	24000	U	24000	2600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Fluorene	24000	U	24000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Hexachlorobenzene	24000	U	24000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Hexachlorobutadiene	24000	U	24000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Hexachlorocyclopentadiene	24000	U	24000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Hexachloroethane	24000	U	24000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Caprolactam	24000	U	24000	7300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Carbazole	24000	U	24000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Indeno[1,2,3-cd]pyrene	24000	U	24000	3000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Isophorone	24000	U	24000	5200	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Naphthalene	24000	U	24000	3200	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Nitrobenzene	24000	U	24000	2700	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
N-Nitrosodi-n-propylamine	24000	U	24000	4200	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
N-Nitrosodiphenylamine	24000	U	24000	20000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Pentachlorophenol	47000	U	47000	24000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Phenanthrene	24000	U	24000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100

Client Sample ID: NG-PB-WD-110

Date Collected: 09/23/15 09:45
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-3

Matrix: Solid
Percent Solids: 69.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	24000	U	24000	3700	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100
Pyrene	24000	U	24000	2900	ug/Kg	☼	09/28/15 07:55	09/30/15 17:20	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*09/28/15 07:55*	*09/30/15 17:20*	*100*
2-Fluorophenol (Surr)	*0*	*X*	*18 - 120*	*09/28/15 07:55*	*09/30/15 17:20*	*100*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*39 - 146*	*09/28/15 07:55*	*09/30/15 17:20*	*100*
Nitrobenzene-d5 (Surr)	*0*	*X*	*34 - 132*	*09/28/15 07:55*	*09/30/15 17:20*	*100*
Phenol-d5 (Surr)	*0*	*X*	*11 - 120*	*09/28/15 07:55*	*09/30/15 17:20*	*100*
p-Terphenyl-d14 (Surr)	*0*	*X*	*65 - 153*	*09/28/15 07:55*	*09/30/15 17:20*	*100*

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	8.8	U	8.8	2.3	mg/Kg	☼	09/28/15 10:56	09/28/15 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*89*		*46 - 156*	*09/28/15 10:56*	*09/28/15 17:45*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	460		71	21	mg/Kg	☼	09/30/15 07:57	10/01/15 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*57*		*48 - 125*	*09/30/15 07:57*	*10/01/15 12:57*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.34	U J	0.34	0.067	mg/Kg	☼	09/28/15 11:43	09/28/15 17:22	1
PCB-1221	0.34	U J	0.34	0.067	mg/Kg	☼	09/28/15 11:43	09/28/15 17:22	1
PCB-1232	0.34	U J	0.34	0.067	mg/Kg	☼	09/28/15 11:43	09/28/15 17:22	1
PCB-1242	0.34	U J	0.34	0.067	mg/Kg	☼	09/28/15 11:43	09/28/15 17:22	1
PCB-1248	**0.11**	**J**	0.34	0.067	mg/Kg	☼	09/28/15 11:43	09/28/15 17:22	1
PCB-1254	0.34	U J	0.34	0.16	mg/Kg	☼	09/28/15 11:43	09/28/15 17:22	1
PCB-1260	0.34	U J	0.34	0.16	mg/Kg	☼	09/28/15 11:43	09/28/15 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*95*		*60 - 154*	*09/28/15 11:43*	*09/28/15 17:22*	*1*
DCB Decachlorobiphenyl	*83*		*65 - 174*	*09/28/15 11:43*	*09/28/15 17:22*	*1*

Client Sample ID: NG-PB-WD-XX

Date Collected: 09/23/15 12:00
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-4

Matrix: Solid
Percent Solids: 70.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	170	U	170	47	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,1,1-Trichloroethane	170	U	170	46	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,1,2,2-Tetrachloroethane	170	U	170	27	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,1,2-Trichloroethane	170	U	170	35	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Freon TF	170	U	170	83	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,1-Dichloroethane	170	U	170	51	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Paerdegat Basin Study Phase II

TestAmerica Job ID: 480-87989-1
SDG: 480-87989

Client Sample ID: NG-PB-WD-XX
Date Collected: 09/23/15 12:00
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-4
Matrix: Solid
Percent Solids: 70.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	170	U J.	170	57	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,1-Dichloropropene	170	U	170	41	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,2,3-Trichloropropane	170	U	170	37	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,2,4-Trichlorobenzene	170	U	170	63	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,2-Dibromo-3-Chloropropane	170	U	170	83	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,2-Dichlorobenzene	170	U	170	42	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,2-Dichloroethane	170	U	170	68	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,2,4-Trimethylbenzene	170	U	170	46	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,2-Dichloropropane	170	U	170	27	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,3-Dichloropropane	170	U	170	30	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,4-Dichlorobenzene	170	U	170	23	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
2,2-Dichloropropane	170	U	170	38	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
2-Butanone (MEK)	830	U	830	490	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
2-Hexanone	830	U	830	340	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
4-Methyl-2-pentanone (MIBK)	830	U	830	53	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Acetone	830	U	830	680	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,3,5-Trimethylbenzene	170	U	170	50	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Benzene	170	U	170	32	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Bromochloromethane	170	U	170	60	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,4-Dioxane	~~3200~~	~~U~~ R.	3200	850	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Bromodichloromethane	170	U	170	33	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Bromoform	170	U J.	170	83	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Bromomethane	170	U	170	36	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Carbon disulfide	170	U J.	170	75	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Carbon tetrachloride	170	U J.	170	42	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Chlorobenzene	170	U	170	22	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
2-Chloroethyl vinyl ether	830	U	830	53	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Dibromochloromethane	170	U J.	170	80	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
2-Chlorotoluene	170	U	170	64	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Chloroethane	170	U J.	170	35	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Chloroform	170	U	170	110	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Chloromethane	**84**	J.	170	39	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
cis-1,2-Dichloroethene	170	U	170	46	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
cis-1,3-Dichloropropene	170	U	170	40	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
4-Chlorotoluene	170	U	170	34	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
4-Isopropyltoluene	**4000**		170	56	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Dibromomethane	170	U	170	54	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Dichlorodifluoromethane	170	U J.	170	72	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Ethylbenzene	170	U	170	48	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,2-Dibromoethane	170	U	170	29	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Hexachlorobutadiene	170	U	170	66	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Methyl iodide	170	U J.	170	51	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Isobutyl alcohol	4100	U	4100	880	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Methylene Chloride	170	U	170	33	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Bromobenzene	170	U	170	36	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Naphthalene	170	U	170	56	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Styrene	170	U	170	40	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Tetrachloroethene	170	U	170	22	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Toluene	**60**	J.	170	44	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1

Client Sample ID: NG-PB-WD-XX
Date Collected: 09/23/15 12:00
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-4
Matrix: Solid
Percent Solids: 70.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	170	U J.	170	39	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
trans-1,3-Dichloropropene	170	U	170	16	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Trichloroethene	170	U	170	46	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Trichlorofluoromethane	170	U	170	78	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Vinyl acetate	830	U	830	300	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Vinyl chloride	170	U	170	56	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Xylenes, Total	330	U	330	92	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
o-Xylene	**31**	J	170	22	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Cyclohexane	170	U J-	170	37	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
m,p-Xylene	330	U	330	92	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,2-Dichloroethene, Total	330	U	330	87	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
1,3-Dichlorobenzene	170	U	170	44	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Dichlorofluoromethane	170	U	170	33	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Isopropylbenzene	170	U	170	25	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Methyl acetate	**2800**		170	79	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Methyl tert-butyl ether	170	U	170	63	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Methylcyclohexane	170	U J.	170	78	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
n-Butylbenzene	170	U	170	48	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
N-Propylbenzene	170	U	170	43	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
sec-Butylbenzene	170	U	170	61	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
Tetrahydrofuran	330	U	330	83	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1
tert-Butylbenzene	170	U	170	46	ug/Kg	☼	09/26/15 11:00	09/29/15 07:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*53 - 146*	*09/26/15 11:00*	*09/29/15 07:21*	*1*
4-Bromofluorobenzene (Surr)	*103*		*49 - 148*	*09/26/15 11:00*	*09/29/15 07:21*	*1*
Toluene-d8 (Surr)	*122*		*50 - 149*	*09/26/15 11:00*	*09/29/15 07:21*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*	*09/26/15 11:00*	*09/29/15 07:21*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	24000	U	24000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
1,2,4,5-Tetrachlorobenzene	24000	U	24000	4100	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2,3,4,6-Tetrachlorophenol	24000	U	24000	5000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2,4,5-Trichlorophenol	24000	U	24000	6500	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2,4,6-Trichlorophenol	24000	U	24000	4800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2,4-Dichlorophenol	24000	U	24000	2600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2,4-Dimethylphenol	24000	U	24000	5800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2,4-Dinitrophenol	240000	U	240000	110000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2,4-Dinitrotoluene	24000	U	24000	5000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2,6-Dinitrotoluene	24000	U	24000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2-Chloronaphthalene	24000	U	24000	4000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2-Chlorophenol	24000	U	24000	4400	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2-Methylnaphthalene	24000	U	24000	4800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2-Methylphenol	24000	U	24000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2-Nitroaniline	47000	U	47000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2-Nitrophenol	24000	U	24000	6800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
3 & 4 Methylphenol	47000	U	47000	3700	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
3-Methylphenol	47000	U	47000	3700	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
3,3'-Dichlorobenzidine	47000	U	47000	28000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100

Client Sample ID: NG-PB-WD-XX
Date Collected: 09/23/15 12:00
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-4
Matrix: Solid
Percent Solids: 70.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	47000	U	47000	6700	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
4,6-Dinitro-2-methylphenol	47000	U	47000	24000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
4-Bromophenyl phenyl ether	24000	U	24000	3400	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
4-Chloro-3-methylphenol	24000	U	24000	6000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
4-Chloroaniline	24000	U	24000	6000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
4-Chlorophenyl phenyl ether	24000	U	24000	3000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
4-Nitroaniline	47000	U	47000	13000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
4-Nitrophenol	47000	U	47000	17000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Acenaphthene	24000	U	24000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Acenaphthylene	24000	U	24000	3100	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Acetophenone	24000	U	24000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Anthracene	24000	U	24000	6000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Benzo[a]anthracene	24000	U	24000	2400	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Benzo[a]pyrene	24000	U	24000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Benzo[b]fluoranthene	24000	U	24000	3800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Benzo[g,h,i]perylene	24000	U	24000	2600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Benzo[k]fluoranthene	24000	U	24000	3100	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Bis(2-chloroethoxy)methane	24000	U	24000	5100	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Bis(2-chloroethyl)ether	24000	U	24000	3100	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Bis(2-ethylhexyl) phthalate	24000	U	24000	8300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
2,2'-oxybis[1-chloropropane]	24000	U	24000	4800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Butyl benzyl phthalate	24000	U	24000	4000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Chrysene	24000	U	24000	5400	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Dibenz(a,h)anthracene	24000	U	24000	4300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Dibenzofuran	24000	U	24000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Diethyl phthalate	24000	U	24000	3100	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Atrazine	24000	U	24000	8400	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Dimethyl phthalate	24000	U	24000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Benzaldehyde	24000	U	24000	19000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Di-n-butyl phthalate	24000	U	24000	4100	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Di-n-octyl phthalate	24000	U	24000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Fluoranthene	24000	U	24000	2600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Fluorene	24000	U	24000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Hexachlorobenzene	24000	U	24000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Hexachlorobutadiene	24000	U	24000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Hexachlorocyclopentadiene	24000	U	24000	3300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Hexachloroethane	24000	U	24000	3100	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Caprolactam	24000	U	24000	7300	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Carbazole	24000	U	24000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Indeno[1,2,3-cd]pyrene	24000	U	24000	3000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Isophorone	24000	U	24000	5100	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Naphthalene	24000	U	24000	3100	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Nitrobenzene	24000	U	24000	2700	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
N-Nitrosodi-n-propylamine	24000	U	24000	4100	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
N-Nitrosodiphenylamine	24000	U	24000	20000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Pentachlorophenol	47000	U	47000	24000	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Phenanthrene	24000	U	24000	3600	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Phenol	24000	U	24000	3700	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100
Pyrene	24000	U	24000	2800	ug/Kg	☼	09/28/15 07:55	09/30/15 17:52	100

Client Sample ID: NG-PB-WD-XX

Date Collected: 09/23/15 12:00
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-4
Matrix: Solid
Percent Solids: 70.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	0	X	37 - 120	09/28/15 07:55	09/30/15 17:52	100
2-Fluorophenol (Surr)	0	X	18 - 120	09/28/15 07:55	09/30/15 17:52	100
2,4,6-Tribromophenol (Surr)	0	X	39 - 146	09/28/15 07:55	09/30/15 17:52	100
Nitrobenzene-d5 (Surr)	0	X	34 - 132	09/28/15 07:55	09/30/15 17:52	100
Phenol-d5 (Surr)	0	X	11 - 120	09/28/15 07:55	09/30/15 17:52	100
p-Terphenyl-d14 (Surr)	0	X	65 - 153	09/28/15 07:55	09/30/15 17:52	100

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	8.9	U	8.9	2.4	mg/Kg	☼	09/28/15 10:56	09/28/15 18:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	75		46 - 156	09/28/15 10:56	09/28/15 18:20	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	520		67	20	mg/Kg	☼	09/30/15 07:57	10/01/15 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	75		48 - 125	09/30/15 07:57	10/01/15 13:31	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.35	U J	0.35	0.068	mg/Kg	☼	09/28/15 11:43	09/28/15 17:38	1
PCB-1221	0.35	U J	0.35	0.068	mg/Kg	☼	09/28/15 11:43	09/28/15 17:38	1
PCB-1232	0.35	U J	0.35	0.068	mg/Kg	☼	09/28/15 11:43	09/28/15 17:38	1
PCB-1242	0.35	U J	0.35	0.068	mg/Kg	☼	09/28/15 11:43	09/28/15 17:38	1
PCB-1248	**0.19**	**J**	0.35	0.068	mg/Kg	☼	09/28/15 11:43	09/28/15 17:38	1
PCB-1254	0.35	U J	0.35	0.16	mg/Kg	☼	09/28/15 11:43	09/28/15 17:38	1
PCB-1260	0.35	U J	0.35	0.16	mg/Kg	☼	09/28/15 11:43	09/28/15 17:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	96		60 - 154	09/28/15 11:43	09/28/15 17:38	1
DCB Decachlorobiphenyl	84		65 - 174	09/28/15 11:43	09/28/15 17:38	1

Client Sample ID: NG-PB-WP-102

Date Collected: 09/24/15 08:20
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-5
Matrix: Wipe

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 07:14	1
PCB-1221	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 07:14	1
PCB-1232	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 07:14	1
PCB-1242	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 07:14	1
PCB-1248	1.0	U	1.0	0.18	ug/Wipe		09/28/15 08:07	09/30/15 07:14	1
PCB-1254	1.0	U	1.0	0.25	ug/Wipe		09/28/15 08:07	09/30/15 07:14	1
PCB-1260	**0.31**	**J**	1.0	0.25	ug/Wipe		09/28/15 08:07	09/30/15 07:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	95		57 - 173	09/28/15 08:07	09/30/15 07:14	1
DCB Decachlorobiphenyl	98		59 - 171	09/28/15 08:07	09/30/15 07:14	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Paerdegat Basin Study Phase II

TestAmerica Job ID: 480-87989-1
SDG: 480-87989

Client Sample ID: NG-PB-PS-CSO-01H

Date Collected: 09/24/15 08:25
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-6
Matrix: Solid
Percent Solids: 96.7

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.21	U	0.21	0.041	mg/Kg	☼	09/28/15 11:43	09/28/15 17:54	1
PCB-1221	0.21	U	0.21	0.041	mg/Kg	☼	09/28/15 11:43	09/28/15 17:54	1
PCB-1232	0.21	U	0.21	0.041	mg/Kg	☼	09/28/15 11:43	09/28/15 17:54	1
PCB-1242	0.21	U	0.21	0.041	mg/Kg	☼	09/28/15 11:43	09/28/15 17:54	1
PCB-1248	0.21	U	0.21	0.041	mg/Kg	☼	09/28/15 11:43	09/28/15 17:54	1
PCB-1254	0.21	U	0.21	0.098	mg/Kg	☼	09/28/15 11:43	09/28/15 17:54	1
PCB-1260	0.21	U	0.21	0.098	mg/Kg	☼	09/28/15 11:43	09/28/15 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*99*		*60 - 154*	*09/28/15 11:43*	*09/28/15 17:54*	*1*
DCB Decachlorobiphenyl	*95*		*65 - 174*	*09/28/15 11:43*	*09/28/15 17:54*	*1*

Client Sample ID: NG-PB-PS-CSO-01L

Date Collected: 09/24/15 08:45
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-7
Matrix: Solid
Percent Solids: 93.4

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.20	U	0.20	0.039	mg/Kg	☼	09/28/15 11:43	09/28/15 18:10	1
PCB-1221	0.20	U	0.20	0.039	mg/Kg	☼	09/28/15 11:43	09/28/15 18:10	1
PCB-1232	0.20	U	0.20	0.039	mg/Kg	☼	09/28/15 11:43	09/28/15 18:10	1
PCB-1242	**2.4**		0.20	0.039	mg/Kg	☼	09/28/15 11:43	09/28/15 18:10	1
PCB-1248	0.20	U	0.20	0.039	mg/Kg	☼	09/28/15 11:43	09/28/15 18:10	1
PCB-1254	0.20	U	0.20	0.094	mg/Kg	☼	09/28/15 11:43	09/28/15 18:10	1
PCB-1260	**0.18**	J	0.20	0.094	mg/Kg	☼	09/28/15 11:43	09/28/15 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*60 - 154*	*09/28/15 11:43*	*09/28/15 18:10*	*1*
DCB Decachlorobiphenyl	*88*		*65 - 174*	*09/28/15 11:43*	*09/28/15 18:10*	*1*

Client Sample ID: NG-PB-CN-101

Date Collected: 09/24/15 09:20
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-8
Matrix: Solid
Percent Solids: 95.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.20	U	0.20	0.039	mg/Kg	☼	09/28/15 11:43	09/28/15 18:57	1
PCB-1221	0.20	U	0.20	0.039	mg/Kg	☼	09/28/15 11:43	09/28/15 18:57	1
PCB-1232	0.20	U	0.20	0.039	mg/Kg	☼	09/28/15 11:43	09/28/15 18:57	1
PCB-1242	0.20	U	0.20	0.039	mg/Kg	☼	09/28/15 11:43	09/28/15 18:57	1
PCB-1248	**2.2**		0.20	0.039	mg/Kg	☼	09/28/15 11:43	09/28/15 18:57	1
PCB-1254	0.20	U	0.20	0.093	mg/Kg	☼	09/28/15 11:43	09/28/15 18:57	1
PCB-1260	**0.36**		0.20	0.093	mg/Kg	☼	09/28/15 11:43	09/28/15 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*101*		*60 - 154*	*09/28/15 11:43*	*09/28/15 18:57*	*1*
DCB Decachlorobiphenyl	*98*		*65 - 174*	*09/28/15 11:43*	*09/28/15 18:57*	*1*

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Paerdegat Basin Study Phase II

TestAmerica Job ID: 480-87989-1
SDG: 480-87989

Client Sample ID: NG-PB-WD-TB092415
Date Collected: 09/24/15 15:00
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/06/15 12:06	1
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			10/06/15 12:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			10/06/15 12:06	1
Freon TF	1.0	U	1.0	0.31	ug/L			10/06/15 12:06	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			10/06/15 12:06	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/06/15 12:06	1
1,1-Dichloropropene	1.0	U	1.0	0.72	ug/L			10/06/15 12:06	1
1,2,3-Trichloropropane	1.0	U	1.0	0.89	ug/L			10/06/15 12:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			10/06/15 12:06	1
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			10/06/15 12:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			10/06/15 12:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			10/06/15 12:06	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/06/15 12:06	1
1,2-Dichloroethene, Total	2.0	U	2.0	0.81	ug/L			10/06/15 12:06	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			10/06/15 12:06	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			10/06/15 12:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			10/06/15 12:06	1
1,3-Dichloropropane	1.0	U	1.0	0.75	ug/L			10/06/15 12:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			10/06/15 12:06	1
1,4-Dioxane	~~40~~	~~U~~ R.	40	9.3	ug/L			10/06/15 12:06	1
2,2-Dichloropropane	1.0	U	1.0	0.40	ug/L			10/06/15 12:06	1
2-Butanone (MEK)	10	U J.	10	1.3	ug/L			10/06/15 12:06	1
2-Chloroethyl vinyl ether	5.0	U	5.0	0.96	ug/L			10/06/15 12:06	1
2-Chlorotoluene	1.0	U	1.0	0.86	ug/L			10/06/15 12:06	1
2-Hexanone	5.0	U J.	5.0	1.2	ug/L			10/06/15 12:06	1
4-Chlorotoluene	1.0	U	1.0	0.84	ug/L			10/06/15 12:06	1
4-Isopropyltoluene	1.0	U	1.0	0.31	ug/L			10/06/15 12:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U J.	5.0	2.1	ug/L			10/06/15 12:06	1
Acetone	10	U J.	10	3.0	ug/L			10/06/15 12:06	1
Benzene	1.0	U	1.0	0.41	ug/L			10/06/15 12:06	1
Bromobenzene	1.0	U	1.0	0.80	ug/L			10/06/15 12:06	1
Bromoform	1.0	U	1.0	0.26	ug/L			10/06/15 12:06	1
Bromomethane	1.0	U	1.0	0.69	ug/L			10/06/15 12:06	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			10/06/15 12:06	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			10/06/15 12:06	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			10/06/15 12:06	1
Bromochloromethane	1.0	U	1.0	0.87	ug/L			10/06/15 12:06	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			10/06/15 12:06	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/06/15 12:06	1
Chloroform	1.0	U	1.0	0.34	ug/L			10/06/15 12:06	1
Chloromethane	1.0	U J.	1.0	0.35	ug/L			10/06/15 12:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			10/06/15 12:06	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			10/06/15 12:06	1
Dibromomethane	1.0	U	1.0	0.41	ug/L			10/06/15 12:06	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			10/06/15 12:06	1
Dichlorofluoromethane	1.0	U	1.0	0.34	ug/L			10/06/15 12:06	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			10/06/15 12:06	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			10/06/15 12:06	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L			10/06/15 12:06	1

Client Sample ID: NG-PB-WD-TB092415

Date Collected: 09/24/15 15:00
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-9
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl iodide	1.0	U	1.0	0.30	ug/L			10/06/15 12:06	1
Isobutyl alcohol	~~25~~	~~U~~ R.	25	4.8	ug/L			10/06/15 12:06	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			10/06/15 12:06	1
Methyl acetate	2.5	U J.	2.5	1.3	ug/L			10/06/15 12:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			10/06/15 12:06	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			10/06/15 12:06	1
Methylene Chloride	**1.3**		1.0	0.44	ug/L			10/06/15 12:06	1
m,p-Xylene	2.0	U	2.0	0.66	ug/L			10/06/15 12:06	1
Naphthalene	1.0	U	1.0	0.43	ug/L			10/06/15 12:06	1
n-Butylbenzene	1.0	U	1.0	0.64	ug/L			10/06/15 12:06	1
N-Propylbenzene	1.0	U	1.0	0.69	ug/L			10/06/15 12:06	1
o-Xylene	1.0	U	1.0	0.76	ug/L			10/06/15 12:06	1
sec-Butylbenzene	1.0	U	1.0	0.75	ug/L			10/06/15 12:06	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			10/06/15 12:06	1
Tetrahydrofuran	5.0	U J.	5.0	1.3	ug/L			10/06/15 12:06	1
Toluene	1.0	U	1.0	0.51	ug/L			10/06/15 12:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			10/06/15 12:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			10/06/15 12:06	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			10/06/15 12:06	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			10/06/15 12:06	1
Vinyl acetate	5.0	U	5.0	0.85	ug/L			10/06/15 12:06	1
Vinyl chloride	1.0	U J.	1.0	0.90	ug/L			10/06/15 12:06	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			10/06/15 12:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			10/06/15 12:06	1
Styrene	1.0	U	1.0	0.73	ug/L			10/06/15 12:06	1
tert-Butylbenzene	1.0	U	1.0	0.81	ug/L			10/06/15 12:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			10/06/15 12:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			10/06/15 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 137*		*10/06/15 12:06*	*1*
4-Bromofluorobenzene (Surr)	*112*		*73 - 120*		*10/06/15 12:06*	*1*
Toluene-d8 (Surr)	*95*		*71 - 126*		*10/06/15 12:06*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*		*10/06/15 12:06*	*1*

Client Sample ID: NG-PB-WD-FB092415

Date Collected: 09/24/15 15:15
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.35	ug/L			10/06/15 12:33	1
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			10/06/15 12:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			10/06/15 12:33	1
Freon TF	1.0	U	1.0	0.31	ug/L			10/06/15 12:33	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			10/06/15 12:33	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			10/06/15 12:33	1
1,1-Dichloropropene	1.0	U	1.0	0.72	ug/L			10/06/15 12:33	1
1,2,3-Trichloropropane	1.0	U	1.0	0.89	ug/L			10/06/15 12:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			10/06/15 12:33	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Paerdegat Basin Study Phase II

TestAmerica Job ID: 480-87989-1
SDG: 480-87989

Client Sample ID: NG-PB-WD-FB092415
Date Collected: 09/24/15 15:15
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	1.0	U	1.0	0.75	ug/L			10/06/15 12:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			10/06/15 12:33	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			10/06/15 12:33	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			10/06/15 12:33	1
1,2-Dichloroethene, Total	2.0	U	2.0	0.81	ug/L			10/06/15 12:33	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			10/06/15 12:33	1
1,3,5-Trimethylbenzene	1.0	U	1.0	0.77	ug/L			10/06/15 12:33	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			10/06/15 12:33	1
1,3-Dichloropropane	1.0	U	1.0	0.75	ug/L			10/06/15 12:33	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			10/06/15 12:33	1
1,4-Dioxane	~~40~~	~~U~~ R.	40	9.3	ug/L			10/06/15 12:33	1
2,2-Dichloropropane	1.0	U	1.0	0.40	ug/L			10/06/15 12:33	1
2-Butanone (MEK)	10	U J.	10	1.3	ug/L			10/06/15 12:33	1
2-Chloroethyl vinyl ether	5.0	U	5.0	0.96	ug/L			10/06/15 12:33	1
2-Chlorotoluene	1.0	U	1.0	0.86	ug/L			10/06/15 12:33	1
2-Hexanone	5.0	U J.	5.0	1.2	ug/L			10/06/15 12:33	1
4-Chlorotoluene	1.0	U	1.0	0.84	ug/L			10/06/15 12:33	1
4-Isopropyltoluene	1.0	U	1.0	0.31	ug/L			10/06/15 12:33	1
4-Methyl-2-pentanone (MIBK)	5.0	U J.	5.0	2.1	ug/L			10/06/15 12:33	1
Acetone	**3.4**	J.	10	3.0	ug/L			10/06/15 12:33	1
Benzene	1.0	U	1.0	0.41	ug/L			10/06/15 12:33	1
Bromobenzene	1.0	U	1.0	0.80	ug/L			10/06/15 12:33	1
Bromoform	1.0	U	1.0	0.26	ug/L			10/06/15 12:33	1
Bromomethane	1.0	U	1.0	0.69	ug/L			10/06/15 12:33	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			10/06/15 12:33	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			10/06/15 12:33	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			10/06/15 12:33	1
Bromochloromethane	1.0	U	1.0	0.87	ug/L			10/06/15 12:33	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			10/06/15 12:33	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/06/15 12:33	1
Chloroform	1.0	U	1.0	0.34	ug/L			10/06/15 12:33	1
Chloromethane	1.0	U J.	1.0	0.35	ug/L			10/06/15 12:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			10/06/15 12:33	1
Cyclohexane	**0.45**	~~J~~ .	1.0	0.18	ug/L			10/06/15 12:33	1
Dibromomethane	1.0	U	1.0	0.41	ug/L			10/06/15 12:33	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			10/06/15 12:33	1
Dichlorofluoromethane	1.0	U	1.0	0.34	ug/L			10/06/15 12:33	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			10/06/15 12:33	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			10/06/15 12:33	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L			10/06/15 12:33	1
Methyl iodide	1.0	U	1.0	0.30	ug/L			10/06/15 12:33	1
Isobutyl alcohol	~~25~~	~~U~~ R.	25	4.8	ug/L			10/06/15 12:33	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			10/06/15 12:33	1
Methyl acetate	2.5	U J.	2.5	1.3	ug/L			10/06/15 12:33	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			10/06/15 12:33	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			10/06/15 12:33	1
Methylene Chloride	**3.4**		1.0	0.44	ug/L			10/06/15 12:33	1
m,p-Xylene	2.0	U	2.0	0.66	ug/L			10/06/15 12:33	1
Naphthalene	1.0	U	1.0	0.43	ug/L			10/06/15 12:33	1

Client Sample ID: NG-PB-WD-FB092415
Date Collected: 09/24/15 15:15
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	1.0	U	1.0	0.64	ug/L			10/06/15 12:33	1
N-Propylbenzene	1.0	U	1.0	0.69	ug/L			10/06/15 12:33	1
o-Xylene	1.0	U	1.0	0.76	ug/L			10/06/15 12:33	1
sec-Butylbenzene	1.0	U	1.0	0.75	ug/L			10/06/15 12:33	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			10/06/15 12:33	1
Tetrahydrofuran	5.0	U J	5.0	1.3	ug/L			10/06/15 12:33	1
Toluene	1.0	U	1.0	0.51	ug/L			10/06/15 12:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			10/06/15 12:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			10/06/15 12:33	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			10/06/15 12:33	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			10/06/15 12:33	1
Vinyl acetate	5.0	U	5.0	0.85	ug/L			10/06/15 12:33	1
Vinyl chloride	1.0	U J	1.0	0.90	ug/L			10/06/15 12:33	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			10/06/15 12:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			10/06/15 12:33	1
Styrene	1.0	U	1.0	0.73	ug/L			10/06/15 12:33	1
tert-Butylbenzene	1.0	U	1.0	0.81	ug/L			10/06/15 12:33	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			10/06/15 12:33	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			10/06/15 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*66 - 137*		*10/06/15 12:33*	*1*
4-Bromofluorobenzene (Surr)	*112*		*73 - 120*		*10/06/15 12:33*	*1*
Toluene-d8 (Surr)	*95*		*71 - 126*		*10/06/15 12:33*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*		*10/06/15 12:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.3	U	5.3	0.69	ug/L		09/28/15 14:34	09/29/15 10:25	1
1,2,4,5-Tetrachlorobenzene	5.3	U	5.3	0.62	ug/L		09/28/15 14:34	09/29/15 10:25	1
2,2'-oxybis[1-chloropropane]	5.3	U	5.3	0.55	ug/L		09/28/15 14:34	09/29/15 10:25	1
2,3,4,6-Tetrachlorophenol	5.3	U	5.3	0.34	ug/L		09/28/15 14:34	09/29/15 10:25	1
2,4,5-Trichlorophenol	5.3	U	5.3	0.51	ug/L		09/28/15 14:34	09/29/15 10:25	1
2,4,6-Trichlorophenol	5.3	U	5.3	0.65	ug/L		09/28/15 14:34	09/29/15 10:25	1
2,4-Dichlorophenol	5.3	U	5.3	0.54	ug/L		09/28/15 14:34	09/29/15 10:25	1
2,4-Dimethylphenol	5.3	U	5.3	0.53	ug/L		09/28/15 14:34	09/29/15 10:25	1
3 & 4 Methylphenol	11	U	11	0.38	ug/L		09/28/15 14:34	09/29/15 10:25	1
3,3'-Dichlorobenzidine	5.3	U	5.3	0.42	ug/L		09/28/15 14:34	09/29/15 10:25	1
3-Methylphenol	11	U	11	0.42	ug/L		09/28/15 14:34	09/29/15 10:25	1
3-Nitroaniline	11	U	11	0.51	ug/L		09/28/15 14:34	09/29/15 10:25	1
4,6-Dinitro-2-methylphenol	11	U	11	2.3	ug/L		09/28/15 14:34	09/29/15 10:25	1
4-Bromophenyl phenyl ether	5.3	U	5.3	0.48	ug/L		09/28/15 14:34	09/29/15 10:25	1
4-Chloro-3-methylphenol	5.3	U	5.3	0.48	ug/L		09/28/15 14:34	09/29/15 10:25	1
4-Chloroaniline	5.3	U	5.3	0.63	ug/L		09/28/15 14:34	09/29/15 10:25	1
4-Chlorophenyl phenyl ether	5.3	U	5.3	0.37	ug/L		09/28/15 14:34	09/29/15 10:25	1
4-Nitroaniline	11	U	11	0.27	ug/L		09/28/15 14:34	09/29/15 10:25	1
4-Nitrophenol	11	U	11	1.6	ug/L		09/28/15 14:34	09/29/15 10:25	1
Acenaphthene	5.3	U	5.3	0.43	ug/L		09/28/15 14:34	09/29/15 10:25	1
Acenaphthylene	5.3	U	5.3	0.40	ug/L		09/28/15 14:34	09/29/15 10:25	1
Acetophenone	**13**		5.3	0.57	ug/L		09/28/15 14:34	09/29/15 10:25	1

Client Sample ID: NG-PB-WD-FB092415
Date Collected: 09/24/15 15:15
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-10
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	5.3	U	5.3	0.30	ug/L		09/28/15 14:34	09/29/15 10:25	1
Atrazine	5.3	U	5.3	0.49	ug/L		09/28/15 14:34	09/29/15 10:25	1
Benzaldehyde	5.3	U	5.3	0.28	ug/L		09/28/15 14:34	09/29/15 10:25	1
Benzo[a]pyrene	5.3	U	5.3	0.50	ug/L		09/28/15 14:34	09/29/15 10:25	1
Benzo[b]fluoranthene	5.3	U	5.3	0.36	ug/L		09/28/15 14:34	09/29/15 10:25	1
Benzo[g,h,i]perylene	5.3	U	5.3	0.37	ug/L		09/28/15 14:34	09/29/15 10:25	1
Benzo[k]fluoranthene	5.3	U	5.3	0.77	ug/L		09/28/15 14:34	09/29/15 10:25	1
Bis(2-chloroethoxy)methane	5.3	U	5.3	0.37	ug/L		09/28/15 14:34	09/29/15 10:25	1
Bis(2-chloroethyl)ether	5.3	U	5.3	0.42	ug/L		09/28/15 14:34	09/29/15 10:25	1
Bis(2-ethylhexyl) phthalate	~~2.6~~ ~~J B~~ 5.3U		5.3	1.9	ug/L		09/28/15 14:34	09/29/15 10:25	1
Butyl benzyl phthalate	5.3	U	5.3	0.45	ug/L		09/28/15 14:34	09/29/15 10:25	1
Caprolactam	5.3	U	5.3	2.3	ug/L		09/28/15 14:34	09/29/15 10:25	1
Carbazole	5.3	U	5.3	0.32	ug/L		09/28/15 14:34	09/29/15 10:25	1
Chrysene	5.3	U	5.3	0.35	ug/L		09/28/15 14:34	09/29/15 10:25	1
Dibenz(a,h)anthracene	5.3	U	5.3	0.45	ug/L		09/28/15 14:34	09/29/15 10:25	1
Dibenzofuran	11	U	11	0.54	ug/L		09/28/15 14:34	09/29/15 10:25	1
Diethyl phthalate	0.76	J	5.3	0.23	ug/L		09/28/15 14:34	09/29/15 10:25	1
Dimethyl phthalate	5.3	U	5.3	0.38	ug/L		09/28/15 14:34	09/29/15 10:25	1
Di-n-butyl phthalate	1.4	J	5.3	0.33	ug/L		09/28/15 14:34	09/29/15 10:25	1
Di-n-octyl phthalate	5.3	U	5.3	0.50	ug/L		09/28/15 14:34	09/29/15 10:25	1
Fluoranthene	5.3	U	5.3	0.42	ug/L		09/28/15 14:34	09/29/15 10:25	1
Fluorene	5.3	U	5.3	0.38	ug/L		09/28/15 14:34	09/29/15 10:25	1
Hexachlorobenzene	5.3	U	5.3	0.54	ug/L		09/28/15 14:34	09/29/15 10:25	1
Hexachlorobutadiene	5.3	U	5.3	0.72	ug/L		09/28/15 14:34	09/29/15 10:25	1
Hexachlorocyclopentadiene	5.3	U	5.3	0.63	ug/L		09/28/15 14:34	09/29/15 10:25	1
Hexachloroethane	5.3	U	5.3	0.63	ug/L		09/28/15 14:34	09/29/15 10:25	1
Indeno[1,2,3-cd]pyrene	5.3	U	5.3	0.50	ug/L		09/28/15 14:34	09/29/15 10:25	1
Isophorone	5.3	U	5.3	0.46	ug/L		09/28/15 14:34	09/29/15 10:25	1
Naphthalene	5.3	U	5.3	0.81	ug/L		09/28/15 14:34	09/29/15 10:25	1
Nitrobenzene	5.3	U	5.3	0.31	ug/L		09/28/15 14:34	09/29/15 10:25	1
N-Nitrosodi-n-propylamine	5.3	U	5.3	0.57	ug/L		09/28/15 14:34	09/29/15 10:25	1
N-Nitrosodiphenylamine	5.3	U	5.3	0.54	ug/L		09/28/15 14:34	09/29/15 10:25	1
Pentachlorophenol	11	U	11	2.3	ug/L		09/28/15 14:34	09/29/15 10:25	1
Phenanthrene	5.3	U	5.3	0.47	ug/L		09/28/15 14:34	09/29/15 10:25	1
Phenol	5.3	U	5.3	0.41	ug/L		09/28/15 14:34	09/29/15 10:25	1
Pyrene	5.3	U	5.3	0.36	ug/L		09/28/15 14:34	09/29/15 10:25	1
2-Nitrophenol	5.3	U	5.3	0.51	ug/L		09/28/15 14:34	09/29/15 10:25	1
2,4-Dinitrophenol	11	U	11	2.4	ug/L		09/28/15 14:34	09/29/15 10:25	1
2-Methylnaphthalene	5.3	U	5.3	0.64	ug/L		09/28/15 14:34	09/29/15 10:25	1
2,4-Dinitrotoluene	5.3	U	5.3	0.47	ug/L		09/28/15 14:34	09/29/15 10:25	1
2-Nitroaniline	11	U	11	0.45	ug/L		09/28/15 14:34	09/29/15 10:25	1
2-Methylphenol	5.3	U	5.3	0.42	ug/L		09/28/15 14:34	09/29/15 10:25	1
2-Chlorophenol	5.3	U	5.3	0.56	ug/L		09/28/15 14:34	09/29/15 10:25	1
2,6-Dinitrotoluene	5.3	U	5.3	0.42	ug/L		09/28/15 14:34	09/29/15 10:25	1
2-Chloronaphthalene	5.3	U	5.3	0.49	ug/L		09/28/15 14:34	09/29/15 10:25	1
Benzo[a]anthracene	5.3	U	5.3	0.38	ug/L		09/28/15 14:34	09/29/15 10:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*80*		*46 - 120*	*09/28/15 14:34*	*09/29/15 10:25*	*1*
p-Terphenyl-d14 (Surr)	*101*		*67 - 150*	*09/28/15 14:34*	*09/29/15 10:25*	*1*

Client Sample ID: NG-PB-WD-FB092415

Lab Sample ID: 480-87989-10

Date Collected: 09/24/15 15:15
Date Received: 09/26/15 09:00

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5 (Surr)	38		16 - 120	09/28/15 14:34	09/29/15 10:25	1
2-Fluorophenol (Surr)	54		20 - 120	09/28/15 14:34	09/29/15 10:25	1
2,4,6-Tribromophenol (Surr)	94		52 - 132	09/28/15 14:34	09/29/15 10:25	1
2-Fluorobiphenyl	88		48 - 120	09/28/15 14:34	09/29/15 10:25	1

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	48	~~F1~~ J.	25	4.2	ug/L			09/28/15 11:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		62 - 133		09/28/15 11:07	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.48	U J	0.48	0.17	ug/L		10/08/15 08:08	10/08/15 18:40	1
PCB-1221	0.48	U	0.48	0.17	ug/L		10/08/15 08:08	10/08/15 18:40	1
PCB-1232	0.48	U	0.48	0.17	ug/L		10/08/15 08:08	10/08/15 18:40	1
PCB-1242	0.48	U	0.48	0.17	ug/L		10/08/15 08:08	10/08/15 18:40	1
PCB-1248	0.48	U	0.48	0.17	ug/L		10/08/15 08:08	10/08/15 18:40	1
PCB-1254	0.48	U	0.48	0.24	ug/L		10/08/15 08:08	10/08/15 18:40	1
PCB-1260	0.48	U J	0.48	0.24	ug/L		10/08/15 08:08	10/08/15 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		24 - 137	10/08/15 08:08	10/08/15 18:40	1
DCB Decachlorobiphenyl	63		19 - 125	10/08/15 08:08	10/08/15 18:40	1

Client Sample ID: NG-PB-WD-109

Lab Sample ID: 480-87989-11

Date Collected: 09/24/15 10:53
Date Received: 09/26/15 09:00

Matrix: Solid
Percent Solids: 64.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.57	U J	0.57	0.11	mg/Kg	☼	09/28/15 11:43	09/28/15 19:13	1
PCB-1221	0.57	U J	0.57	0.11	mg/Kg	☼	09/28/15 11:43	09/28/15 19:13	1
PCB-1232	0.57	U J	0.57	0.11	mg/Kg	☼	09/28/15 11:43	09/28/15 19:13	1
PCB-1242	0.57	U J	0.57	0.11	mg/Kg	☼	09/28/15 11:43	09/28/15 19:13	1
PCB-1248	**5.9**	J.	0.57	0.11	mg/Kg	☼	09/28/15 11:43	09/28/15 19:13	1
PCB-1254	0.57	U J	0.57	0.27	mg/Kg	☼	09/28/15 11:43	09/28/15 19:13	1
PCB-1260	**0.68**	J.	0.57	0.27	mg/Kg	☼	09/28/15 11:43	09/28/15 19:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	98		60 - 154	09/28/15 11:43	09/28/15 19:13	1
DCB Decachlorobiphenyl	87		65 - 174	09/28/15 11:43	09/28/15 19:13	1

Client Sample ID: NG-PB-CN-104

Lab Sample ID: 480-87989-12

Date Collected: 09/24/15 10:10
Date Received: 09/26/15 09:00

Matrix: Solid
Percent Solids: 94.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.24	U J	0.24	0.047	mg/Kg	☼	09/28/15 11:43	09/28/15 19:29	1

Client Sample ID: NG-PB-CN-104

Date Collected: 09/24/15 10:10
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-12
Matrix: Solid
Percent Solids: 94.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	0.24	U J	0.24	0.047	mg/Kg	☼	09/28/15 11:43	09/28/15 19:29	1
PCB-1232	0.24	U J	0.24	0.047	mg/Kg	☼	09/28/15 11:43	09/28/15 19:29	1
PCB-1242	0.24	U J	0.24	0.047	mg/Kg	☼	09/28/15 11:43	09/28/15 19:29	1
PCB-1248	**0.55**	J	0.24	0.047	mg/Kg	☼	09/28/15 11:43	09/28/15 19:29	1
PCB-1254	0.24	U J	0.24	0.11	mg/Kg	☼	09/28/15 11:43	09/28/15 19:29	1
PCB-1260	0.24	U J	0.24	0.11	mg/Kg	☼	09/28/15 11:43	09/28/15 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*60 - 154*	*09/28/15 11:43*	*09/28/15 19:29*	*1*
DCB Decachlorobiphenyl	*93*		*65 - 174*	*09/28/15 11:43*	*09/28/15 19:29*	*1*

Client Sample ID: NG-PB-WD-113

Date Collected: 09/24/15 11:11
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-13
Matrix: Solid
Percent Solids: 70.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.49	U J	0.49	0.096	mg/Kg	☼	09/28/15 11:43	09/28/15 19:45	1
PCB-1221	0.49	U	0.49	0.096	mg/Kg	☼	09/28/15 11:43	09/28/15 19:45	1
PCB-1232	0.49	U	0.49	0.096	mg/Kg	☼	09/28/15 11:43	09/28/15 19:45	1
PCB-1242	0.49	U	0.49	0.096	mg/Kg	☼	09/28/15 11:43	09/28/15 19:45	1
PCB-1248	0.49	U	0.49	0.096	mg/Kg	☼	09/28/15 11:43	09/28/15 19:45	1
PCB-1254	0.49	U	0.49	0.23	mg/Kg	☼	09/28/15 11:43	09/28/15 19:45	1
PCB-1260	0.49	U J	0.49	0.23	mg/Kg	☼	09/28/15 11:43	09/28/15 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*60 - 154*	*09/28/15 11:43*	*09/28/15 19:45*	*1*
DCB Decachlorobiphenyl	*91*		*65 - 174*	*09/28/15 11:43*	*09/28/15 19:45*	*1*

Client Sample ID: NG-PB-CN-100

Date Collected: 09/23/15 09:20
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-14
Matrix: Solid
Percent Solids: 90.1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.25	U J	0.25	0.049	mg/Kg	☼	09/28/15 11:43	09/28/15 20:01	1
PCB-1221	0.25	U J	0.25	0.049	mg/Kg	☼	09/28/15 11:43	09/28/15 20:01	1
PCB-1232	0.25	U J	0.25	0.049	mg/Kg	☼	09/28/15 11:43	09/28/15 20:01	1
PCB-1242	**2.6**	J	0.25	0.049	mg/Kg	☼	09/28/15 11:43	09/28/15 20:01	1
PCB-1248	0.25	U J	0.25	0.049	mg/Kg	☼	09/28/15 11:43	09/28/15 20:01	1
PCB-1254	0.25	U J	0.25	0.12	mg/Kg	☼	09/28/15 11:43	09/28/15 20:01	1
PCB-1260	**0.13**	J	0.25	0.12	mg/Kg	☼	09/28/15 11:43	09/28/15 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*100*		*60 - 154*	*09/28/15 11:43*	*09/28/15 20:01*	*1*
DCB Decachlorobiphenyl	*94*		*65 - 174*	*09/28/15 11:43*	*09/28/15 20:01*	*1*

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Paerdegat Basin Study Phase II

TestAmerica Job ID: 480-87989-1
SDG: 480-87989

Client Sample ID: NG-PB-PS-CSO-02L
Date Collected: 09/24/15 10:15
Date Received: 09/26/15 09:00

Lab Sample ID: 480-87989-15
Matrix: Solid
Percent Solids: 92.5

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.24	U J	0.24	0.046	mg/Kg	☼	09/28/15 11:43	09/28/15 20:17	1
PCB-1221	0.24	U J	0.24	0.046	mg/Kg	☼	09/28/15 11:43	09/28/15 20:17	1
PCB-1232	0.24	U J	0.24	0.046	mg/Kg	☼	09/28/15 11:43	09/28/15 20:17	1
PCB-1242	**2.5**	J	0.24	0.046	mg/Kg	☼	09/28/15 11:43	09/28/15 20:17	1
PCB-1248	0.24	U J	0.24	0.046	mg/Kg	☼	09/28/15 11:43	09/28/15 20:17	1
PCB-1254	0.24	U J	0.24	0.11	mg/Kg	☼	09/28/15 11:43	09/28/15 20:17	1
PCB-1260	**0.14**	J	0.24	0.11	mg/Kg	☼	09/28/15 11:43	09/28/15 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*98*		*60 - 154*	*09/28/15 11:43*	*09/28/15 20:17*	*1*
DCB Decachlorobiphenyl	*93*		*65 - 174*	*09/28/15 11:43*	*09/28/15 20:17*	*1*

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice)	Samplers Name (Printed)	Site/Project Identification
	Amy Maotranselo	Raritan Basin
Company: GEI Consultants	P. O. #: 129600	State (Location of site): NJ: ☐ NY: ☒ Other:
Address: 455 Winding Brook Dr	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City: Glastonbury State: CT	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: (860)368-5300 Fax: (860)368-5307		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST) — LAB USE ONLY

480-87989 Chain of Custody

Sample Identification	Date	Time	Matrix	No. of Cont.	PCBs 8082A	VOCs 8260	SVOCs 8270	TPH							Numbers
NG-PB-WD-108	9/23/15	1230	wood	B5	X	X	X	X							
NG-PB-WD-112	↓	1130	↓	9	X	X	X	X							w/ MS/MSD
NG-PB-WD-110		0945		B5	X	X	X	X							
NG-PB-WD-XX		1200		B5	X	X	X	X							
NG-PB-WP-102	9/24/15	0820	wipe	1	X										
NG-PB-PS-CSO-01H		0825	concrete	1	X										
NG-PB-PS-CSO-01L		0845		1	X										
NG-PB-CN-101		0920	↓	1	X										
NG-PB-WD-TB092415		1500	water	3		X									
NG-PB-WD-FB092415	↓	1515	↓	8	X	X	X	X							
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:															
6 = Other _____, 7 = Other _____ — Water:															

Special Instructions

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1)	GEI	9/24/15 1100	1)	T. A
Relinquished by 2)	Company T. A	9/25/15 18:00	Received by 2)	Company 9/26/15 0900
Relinquished by 3)	Company T.A.	09-25-15 Date / Time 09-24-15 17:00	Received by 3)	Company
Relinquished by 4)	Company	Date / Time	Received by 4)	Company

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0015 (0814)

Massachusetts (M-NJ312), North Carolina (No. 578)

2.0, 2.4 #1

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): Barry Girouy	Samplers Name (Printed): Amy Mastrangelo	Site/Project Identification: Paradesot Basin
Company: GEI Consultants	P. O. #: 129600	State (Location of site): NJ: ☐ NY: ☒ Other:
Address: 455 Winding Brook Dr	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City: Glastonbury State: CT	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: (860)368-5300 Fax: (860)368-5307		

Sample Identification	Date	Time	Matrix	No. of Cont.	PCBs 8082A										LAB USE ONLY Sample Numbers
NG-PB-WD-109	9/24/15	1053	wood	1	X										
NG-PB-CN-104	↓	1010	concrete	1	X										
NG-PB-WD-113	↓	1111	wood	1	X										
NG-PB-CN-100	9/23/15	0920	granite	1	X										
NG-PB-PS-CSO-02L	9/24/15	1015	concrete	1	X										

LAB USE ONLY: Project No: / Job No:

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH, 6 = Other _____, 7 = Other _____ Soil: / Water:

Special Instructions

Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) C. Mastrangelo	GEI	9/24/15 1700	1)	T. B
2)	T. B	9/24/15 8:00	2)	9/26/15 0900
3)	T.A. 09-25-15 ~~09-24-15~~	1700	3)	
4)			4)	

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0814)

Massachusetts (M-NJ312), North Carolina (No. 578)

2,0,2,4 #1