



PHASE II ENVIRONMENTAL SITE ASSESSMENT

WEST HYATTSVILLE METRO PROPERTY

**5620 Ager Road
Prince George's County, Maryland**

September 22, 2015

Prepared for:

WEST HYATTSVILLE PROPERTY COMPANY, LLC

7419 Baltimore – Annapolis Boulevard
Glen Burnie, Maryland 21061

Attn: Mr. Michael Sponseller

Prepared by:

GEO-TECHNOLOGY ASSOCIATES, INC.

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GTA Project No: 150938

GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS

A Practicing GBA Member Firm



September 22, 2015

West Hyattsville Property Company, LLC
7419 Baltimore - Annapolis Boulevard
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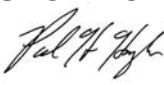
Re: Phase II Environmental Site Assessment
West Hyattsville Metro Property
5620 Ager Road
Prince George's County, Maryland

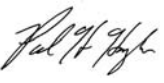
Dear Mr. Sponseller:

In accordance with our agreement dated July 23, 2015, Geo-Technology Associates, Inc. (GTA) has performed a Phase II Environmental Site Assessment (ESA) of the above referenced site ("subject property"). The subject property consists of approximately 18.45 acres located west of Ager Road and south of Kirkwood Place, in the Hyattsville area of Prince George's County, Maryland. The subject property contains a vacant warehouse, parking areas, open fields, and wooded areas. A Metro rail line crosses the subject property on an easement in the eastern portion of the property. GTA's Phase II ESA consisted of soil borings and soil and groundwater sampling and analysis to further evaluate petroleum impacts previously identified on the subject property.

This report transmits GTA's findings. Should you have any questions regarding this report, or should you require additional information, please contact our office at (410) 792-9446.

Sincerely,
GEO-TECHNOLOGY ASSOCIATES, INC.

 for
Amanda M. Frailer
Environmental Scientist


Paul H. Hayden, P.G., L.R.S.
Vice President

AMF/JWM/PHH
150938

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TABLE OF CONTENTS

1.0 INTRODUCTION.....	1
1.1 Purpose	1
1.2 Scope of Services.....	1
1.3 Limitations.....	2
2.0 BACKGROUND	2
2.1 Site Description	2
2.2 Proposed Development.....	3
2.3 Site History	3
3.0 GEOPHYSICAL SURVEY.....	8
4.0 SUBSURFACE EVALUATION.....	9
4.1 Sampling Rationale.....	9
4.2 Soil Evaluation	10
4.2.1 Soil Screening	12
4.2.2 Soil Sampling.....	12
4.2.3 Soil Analysis Results	13
4.3 Groundwater Evaluation.....	13
4.3.1 Groundwater Gauging.....	13
4.3.2 Groundwater Sampling.....	14
4.3.3 Groundwater Analysis Results.....	14
5.0 SUMMARY	15
6.0 CONCLUSIONS	16

GBA Publication – Important Information about Your Geoenvironmental Report (4 pages)

LIST OF FIGURES

- Figure 1 – Site Location Map (*color*)
- Figure 2 – 2014 Aerial Photograph (*color*)
- Figure 3 – Geophysical Anomaly Location Plan (*color*)
- Figure 4 – Sample Location Plan (*color*)

LIST OF TABLES

- Table 1 – Sample Matrix Table (*color*)
- Table 2 – Soil Analysis Summary (*color*)
- Table 3 – Groundwater Analysis Summary (*color*)

LIST OF APPENDICES

- Appendix A Site Photographs (*2 pages*)
- Appendix B Soil Boring Logs (*4 pages*)
- Appendix C Laboratory Analysis Reports (*46 pages*)

PHASE II ENVIRONMENTAL SITE ASSESSMENT

WEST HYATTSVILLE METRO PROPERTY PRINCE GEORGE'S COUNTY, MARYLAND SEPTEMBER 22, 2015

1.0 INTRODUCTION

1.1 Purpose

At the request of West Hyattsville Property Company, LLC (Client), Geo-Technology Associates, Inc. (GTA) has performed a Phase II Environmental Site Assessment (ESA) of the West Hyattsville Metro Property, in Hyattsville, Prince George's County, Maryland (the "subject property"). This Phase II ESA was performed for general site characterization, and as part of the Client's consideration of the acquisition of the property. These services were also performed, in part, to evaluate recognized environmental conditions (RECs) identified in several prior environmental evaluations of the subject property.

The field work, including soil borings, was performed in conjunction with a geotechnical evaluation of the property, also performed by GTA. The Preliminary Geotechnical Exploration Report will be submitted under separate cover. Nine soil borings were performed at the subject property, four of which were used to evaluate soil and groundwater conditions with respect to the existing and former presence of USTs and/or to evaluate soil and groundwater conditions in the area adjacent to a former gasoline station

1.2 Scope of Services

GTA's overall scope of services consisted of the advancement of nine soil borings and collection and laboratory analysis of soil and groundwater samples. GTA's scope of services was developed based on GTA's professional experience, and with consideration of various guidance documents, including those prepared by the United States Environmental Protection Agency (USEPA), the Maryland Department of the Environment (MDE), and ASTM International, including *ASTM E1903-11 Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process*.

1.3 Limitations

GTA's conclusions regarding this site have been based on observations of existing conditions and an interpretation of site history and site usage data, professional experience in the area with similar projects, and generally accepted professional environmental practice under similar circumstances. The conclusions reached regarding the conditions of this site do not represent a warranty that all areas within the site are of a similar quality as may be inferred from observable site conditions, available site history, samples, analysis results, etc. Site conditions were inferred from the observations, field screening, and laboratory analysis of samples obtained at specific locations and on specific dates. These conditions may not remain consistent through the passage of time. Please be advised that no environmental site assessment can wholly eliminate uncertainty regarding the potential for environmental liability in connection with the property. GTA's evaluation and analysis are intended to reduce, but not eliminate, the potential for conditions that result in liability for the Client.

This report was prepared by GTA for the sole and exclusive use of West Hyattsville Property Company, LLC. Use and reproduction of this report by any other person without the express written permission of GTA and West Hyattsville Property Company, LLC is unauthorized, and such use is at the sole risk of the user.

2.0 BACKGROUND

2.1 Site Description

The subject property consists of approximately 18.45 acres located west of Ager Road and south of Kirkwood Place, in the Hyattsville area of Prince Georges County, Maryland. The property contains a vacant warehouse, parking areas, open fields, and wooded areas. A Washington Metropolitan Area Transit Authority (WMATA) Metro rail line crosses the subject property on an easement in the eastern portion of the property. A *Site Location Map* for the subject property is presented as *Figure 1*, and a *2014 Aerial Photograph* is included as *Figure 2*.

2.2 Proposed Development

GTA was provided with a copy of a *Conceptual Site Layout, West Hyattsville Metro Property* (“Dewberry Plan”) of proposed development activities, prepared by Dewberry and dated September 11, 2014. The Dewberry Plan indicates that the subject property is proposed to be developed with 386 multi-family residential units within a single 5-story structure equipped with a centrally located parking structure, 60 stacked town units, and 64 townhomes. The proposed development will be service by municipal water and sanitary sewer utility services. The residential lots will be accessed by a paved access road which will extend west from Ager Road, and by additional interior roads that will extend from the main ingress-egress road. In addition, the Dewberry Plan indicates a modified flood plain area and existing flood plain fill areas to compensate for the 500 year floodplain area of the subject property.

2.3 Site History

The subject property contained open and wooded land, an apparent residence, and several outbuildings, from prior to 1938 until the current structure was constructed in 1957. The building was used as a warehouse, and a portion was used to manufacture and refinish furniture, until the late 1990s when it was vacated. The warehouse is still currently vacant. Three underground storage tanks (USTs) have been removed from the property, and one 10,000-gallon heating oil UST, determined to contain less than 1” of apparent heating oil, remains. Groundwater sampling conducted in 1997 in the vicinity of a former gasoline UST, the existing and former heating oil USTs, and a former gasoline station adjacently southeast of the subject property, detected elevated concentrations of the gasoline indicator compounds benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons (TPH) gasoline-range organics (GRO), and TPH diesel-range organics (DRO). Benzene was detected in one sample near the former gasoline UST location at a concentration of 6.7 µg/L, above the current Maryland Department of the Environment (MDE) Groundwater Cleanup Standard (GCS), as promulgated in *Cleanup Standards for Soil and Groundwater; June 2008; Interim Final Guidance (Update No. 2.1)* of 5 µg/L. Benzene was also detected on the subject property adjacent to the former gasoline station southeast of the subject property at concentrations ranging from 1.39 µg/L to

25.3 µg/L. Both TPH GRO and TPH DRO were detected at concentrations above their current GCSs.

A Metro station and associated parking areas border the property to the south, and the Metro tracks extend onto an easement located in the eastern portion of the subject property. The Metro station was constructed in the early 1990s, on the site of a former drive-in theater. Two former gasoline stations adjoin the subject property, one immediately southeast, and one to the east, across Ager Road. Groundwater sampling conducted in 1998 at the station adjacently southeast detected BTEX and the gasoline additive methyl tertiary butyl ether (MTBE). The site vicinity has contained various commercial businesses since the mid-20th Century.

GTA conducted a recent Phase I ESA of the subject property in July 2015. The information provided above is consistent with that provided in the 2015 ESA. The 2015 Phase I ESA indicated that several recognized environmental conditions (RECs) were found in connection with the subject property, as summarized below:

- “The existing 10,000-gallon heating oil UST that was installed in 1990. Although the UST tested tight in 1997 and is currently empty, it has not been properly maintained since the building was vacated in the late 1990s. It therefore presents a material threat of release, and is considered a REC.
- The property adjacently southeast of the subject property (5600 Ager Road) was formerly a gasoline station. Previous sampling activities on and adjacent to 5600 Ager Road identified groundwater petroleum contamination, including liquid-phase hydrocarbons. Based on the assumed groundwater flow direction, the 5600 Ager Road property appears to be upgradient from the subject property. Groundwater contamination beneath the subject property, whether originating on-site or off-site, is considered a REC.

Groundwater sampling conducted in 1997 in the vicinity of the current and former heating oil USTs identified petroleum contamination in the groundwater. An MDE OCP case (90-1822PG2), associated with removal of the 10,000-gallon UST and a 15,000-gallon heating oil UST south of the warehouse, was closed in 1990, and an OCP case apparently opened in response to submission of a report outlining the 1997 sampling results (97-1590PG2) was closed on March 13, 1997. A 10,000-gallon gasoline UST was removed from the area west of the warehouse in 1994. Groundwater sampling conducted in 1997 identified groundwater petroleum

contamination in this area. An MDE OCP case (94-3077PG2), associated with the removal of this UST, was closed in 1994. Because these cases were closed under then-current regulatory standards and guidelines, they are considered an HREC.

Although the OCP cases and removed USTs are not considered a REC, the cases were closed over 20 years ago, and case closure criteria have changed since then. GTA recommends evaluation of soil and groundwater conditions in the areas of the former and existing USTs to determine if residual impact exists which could affect development plans.

Although not considered a REC at this time, the historic residence and outbuildings previously located on the subject property could have potentially utilized USTs for the storage of heating oil, farm fuel, or other products. GTA recommends that if buried wastes, USTs, or contaminated media are encountered during future site activities, such materials should be removed and an environmental evaluation of the area performed.

GTA understands that the existing abandoned warehouse is planned to be demolished for the proposed development. Based on reports provided, GTA recommends that the demolition be performed in accordance with applicable environmental regulations, including those related to asbestos (a non-ASTM ESA scope item). An Asbestos Survey would be necessary to determine if asbestos abatement or related special handling and disposal are necessary to demolish the building.

GTA recommends that the existing 10,000-gallon heating oil UST be removed in accordance with applicable regulations (including COMAR 26.10).”

Several previous environmental evaluations of the subject property have been prepared and were summarized in GTA’s 2015 ESA, including the following.

- *Phase I ESA*, by Dames & Moore (D&M), dated May 21, 1996
- *Phase I Addenda*, by D&M, dated June 13 and 19, and December 9, 1996
- *Subsurface Investigation Report and Asbestos Sampling*, by D&M, dated February 10, 1997
- *Notice of Compliance*, by MDE, dated March 13, 1997
- *Groundwater Sampling Report, 5600 Ager Road, Partial*, by American Environmental Technology, Inc. (AETI), dated August 11, 1998

The 1996 Phase I ESA identified several RECs related to the subject property, primarily related to the above-referenced historic uses of the property. The ESA identified one UST on the site, and referenced the removal of three previous USTs from the site. The Phase I identified evidence of several potential RECs in connection with the property, as summarized below:

- WMATA used a staging area on the western portion of the property to store chemical substances including diesel fuel, used lead batteries, oils, solvents, and antifreeze. In 1992, “cleanup and restoration” of the area was performed, and 127.5 tons of impacted soil were excavated and disposed off-site. Six post-excavation confirmatory samples were collected, and “were below laboratory detection limits for diesel-range organics.”
- A 10,000-gallon heating oil UST was located on the site and three previous USTs had been removed from the site. During removal of the UST north of the warehouse building, approximately 10 to 15 cubic yards of contaminated soil was removed.
- Hazardous waste in the form of spent paint and paint thinners was generated at the site in connection with furniture refinishing activities.
- The environmental database report identified an adjacent WMATA facility as a RCRA generator.
- The environmental database report identified two UST (LUST) sites in the immediate site vicinity.
- Suspect ACMs were identified in the warehouse building.

The report made no recommendations regarding the identified RECs.

Three Addenda were prepared in reference to the 1996 Phase I ESA, which summarized additional information obtained after completion of the ESA, and indicated that:

- Soil sampling had been performed by D&M on the WMATA-leased staging area located on the subject property. The sampling indicated that “contaminated soils were removed to below state action levels.”
- Two PVC pipes located in the vicinity of the current 10,000-gallon heating oil UST, immediately north of the warehouse, were identified as tank pit observation wells.
- Review of information provided by MDE indicated that “all three of the tanks were approved by the MDE for closure and no further clean-up is required at this time.”
- Asbestos sampling was conducted on June 7, 1996. Samples were collected from suspect ceiling tiles, and laboratory analysis indicated “no asbestos was detected in any of the five samples collected.”
- The Addendum indicated “two nearby leaking USTs were identified in Subsection 4.1.6 as having the potential to impact the subject site. According to Ms. Naomi Kirtz of the MDE, the status of both these facilities is ‘case open.’ No additional information was provided.”

- Further inquiry into the reported use of the subject property for furniture manufacturing and refinishing found that the activities “were incidental services relative to the use of the remainder of the facility (office supply storage)” and “the former furniture manufacturing and refinishing operations were limited to approximately 3,000 square feet of warehouse space, approximately 1% of the total warehouse square footage.”

A subsurface investigation report was conducted in February 1997, which included soil and water sampling at the subject property. A mobile laboratory was used to analyze water samples for TPH GRO, TPH DRO, and BTEX. The laboratory results indicated impacted groundwater was identified in three locations:

- A 10,000 to 20,000–square-foot area west of the off-site Citgo gas station (5600 Ager Road). BTEX concentrations detected in this area ranged from below laboratory reporting limits to 296 micrograms per liter ($\mu\text{g/L}$, or parts per billion); TPH GRO concentrations ranged up to 2,460 $\mu\text{g/L}$; and TPH DRO concentrations ranged up to 1,590 $\mu\text{g/L}$.
- A 500 to 1,000-square-foot area near the current and former 10,000-gallon heating oil USTs, north of the warehouse. BTEX was detected at concentrations up to 2,976 $\mu\text{g/L}$, TPH GRO was detected at concentrations up to 55,800 $\mu\text{g/L}$, and TPH DRO was detected at concentration up to 167,000 $\mu\text{g/L}$.
- A 10,000 to 20,000-square-foot area near the former 10,000-gallon gasoline UST, west of the warehouse. BTEX concentrations ranged up to 8,714 $\mu\text{g/L}$, and benzene was detected in one groundwater sample at a concentration of 6.7 $\mu\text{g/L}$, above the current GCS of 5 $\mu\text{g/L}$. TPH GRO was detected at concentration up to 116,000 $\mu\text{g/L}$, and TPH DRO was detected at concentrations up to 6,070 $\mu\text{g/L}$.

Samples collected from the WMATA storage area and the area of a removed 15,000-gallon diesel UST reportedly did not exhibit detectable levels of contaminants.

In addition to the sampling activities summarized above, integrity testing was performed on January 28, 1997, on the existing UST by Tankology, Inc. The UST and piping “were found to be tight.”

In March 1997, the MDE issued a Notice of Compliance for OCP Case Number 97-1590PG2, located at 5620 Ager Road. The letter was issued by the MDE following review of their case file and D&M's February 10, 1997, Subsurface Investigation Report. The MDE letter stated that the "property is now in compliance with Code of Maryland Regulations 26.10. The Administration hereby closes its case in reference to this site."

In August 1998, groundwater sampling was conducted at 5600 Ager Road, adjacently southeast of the subject property. Five monitoring wells were present on the former gasoline station site, and groundwater samples were collected from three of the five monitoring wells. A sample location plan was not included in the information available for review. Liquid-phase hydrocarbons (LPH) were detected in one of the wells sampled; after removal of the LPH, the well was purged and sampled. Groundwater samples were analyzed for gasoline indicator compounds BTEX and MTBE. Benzene was detected in two wells at concentrations of 359 and 398 µg/L. The total BTEX concentrations detected ranged from 46 µg/L to 4,420 µg/L. The MTBE concentrations ranged from 46 µg/L to 770 µg/L.

3.0 GEOPHYSICAL SURVEY

On July 24, 2015, GTA performed a geophysical evaluation of portions of the subject property. The survey consisted of magnetometer (MAG), electromagnetic (EM), and ground penetrating radar (GPR) surveys. The evaluation was performed in the asphalt parking area to the southeast of the site building in the vicinity of a former 15,000-gallon heating oil UST; in the asphalt and grass-covered area to southwest of the site building, in the vicinity of a former 10,000-gallon gasoline UST; and in the grass-covered area to the northwest of the site building in the vicinity of a former 10,000-gallon heating oil UST and an existing 10,000-gallon heating oil UST. Unfortunately, interference caused by the building structure and existing utilities prevented use of the MAG and the EM instruments in certain locations. However, the GPR performed well and was an effective method for estimating the approximate dimensions and depth of a UST-like anomaly.

Prior to conducting the geophysical survey, a five foot grid was overlaid on the areas of concern to guide the instrument operator. Each instrument survey was performed as a series of traverses spaced two and a half feet apart, and oriented north-south and east-west. The areas of concern were surveyed using a GPR unit with a 250 MHz antenna was utilized to identify objects capable of reflecting the radar signal.

The GPR data was reviewed in the field, and a preliminary assessment was made regarding the presence or absence of anomalies indicative of USTs. The geophysical survey identified one anomaly adjacently southwest of the site building, near the approximate location of a former 10,000-gallon gasoline UST. A second anomaly was identified northwest of the site building, near the approximate location of an existing 10,000-gallon heating oil UST. Several anomalies were located southeast of the site building, which were apparently associated with utilities at the subject property or were inconclusive. No other anomalies that were considered consistent with USTs were detected. The locations of the geophysical survey area and identified anomalies are shown on *Figure 3, Geophysical Anomaly Location Plan*, and were marked with paint in the field and used to locate the soil borings.

4.0 SUBSURFACE EVALUATION

4.1 Sampling Rationale

GTA proposed to perform soil borings, collect and analyze soil samples, and collect and analyze groundwater samples to evaluate petroleum impacts previously identified on the subject property. Two borings were performed on the southern portion of the subject property, one adjacently southwest of the site building and one adjacently southeast of the site building; and one boring was performed on the northwestern portion of the subject property, and one boring adjacently north of the site building. These boring locations were performed to evaluate soil and groundwater conditions with respect to the existing and former presence of USTs. A fourth boring was performed near the northeastern property boundary to evaluate soil and groundwater conditions in the area adjacent to a former gasoline station. Five soil borings (GTA-2, GTA-3, GTA-5, GTA-6, and GTA-8) were performed on the northeastern, central, and southern portions of the subject property as part of the geotechnical evaluation. Test pits were proposed on the

southern and northwestern portions of the subject property, in the area of the geophysical anomalies.

GTA proposed to retain four soil samples and four groundwater samples from the borings, as summarized in *Table 1, Sample Matrix*.

4.2 Soil Evaluation

On July 24, and 27 through 29, 2015, GTA personnel utilized a CME-55 track-mounted auger drilling rig to advance four soil borings (GTA-1, GTA-4, GTA-7, and GTA-9) on the subject property, to depths of 20 to 25 feet below ground surface (bgs). One boring was performed on the southwestern portion of the subject property (GTA-1); one boring was performed on the southern portion of the subject property (GTA-4); one boring was performed along the northeastern property boundary (GTA-7); and one boring was performed on the northwestern portion of the subject property (GTA-9).

The boring locations are depicted on the attached *Sample Location Plan (Figure 4)*. The soil borings were field located using existing site features (e.g. tree lines, fence lines, and existing structures). Prior to the drilling activities, GTA contacted Miss Utility, reviewed the proposed boring locations with the current property owner, and contracted a private utility locating service in an attempt to avoid buried utilities. *Site Photographs* taken during the field activities are presented as *Appendix A*.

The soil borings were advanced using hollow-stem augers, and soil samples were collected through the augers using a two-foot split-spoon sampler. The samplers were opened immediately after collection, and the soil sample was split and a portion was sealed in zip-lock plastic bags for field screening.

The surface composition at the boring locations consisted of asphalt or topsoil. Visual observation of the borings indicated that the top six inches of soil on the majority of the subject property generally consists of existing fills, consisting of silty and clayey sands with varying amounts of gravel and debris (root fragments, concrete and asphalt rubble, etc.). The thickness

of the fills ranged from 1 to 15 feet, but was predominantly within the range of 3 to 8 feet. The surficial soil is generally underlain by native silty/clayey sands with interbedded layers of gravel to a depth of between two and 35 feet bgs. A potential clay layer was observed in one geotechnical boring location (GTA-3) at a depth of 18 feet bgs. *Soil Boring Logs* are included as *Appendix B*.

At the conclusion of the soil boring operations and groundwater sampling, the boreholes were backfilled with soil cuttings and granular bentonite, and the surface repaired with topsoil, asphalt, or concrete, as appropriate.

On July 27, 2015, GTA environmental personnel utilized a Case 580L backhoe to excavate two environmental test pits (Test Pit-1 and Test Pit-2) on the southwestern and northwestern portions of the subject property in the areas of detected geophysical anomalies, to depths of eight feet bgs. Excavation activities were limited due to the presence of utility cables and pipes. The test pit locations are depicted on *Figure 3*. Prior to the test pit activities, GTA contacted Miss Utility, reviewed the proposed test pit locations with the Client and owner representative, and hired a private utility location service in an attempt to avoid buried utilities. Photographs taken during the field activities are presented as *Appendix A*.

The surface composition at test pit locations consisted of asphalt pavement and/or topsoil. Sediments encountered consisted of silty and clayey sands with varying amounts of gravel. Excavation at test pit Test Pit-1, in the general area of the former location of a gasoline UST, found that the geophysical anomaly was apparently caused by several utility lines, located in positions that they resembled a UST during the survey. No UST or indications of a UST (odors, staining, etc) were observed.

Excavation at test pit Test Pit-2 exposed the northern end of the existing 10,000-gallon heating oil UST. The UST is fiberglass-reinforced plastic, buried approximately 18" to 24" bgs, and is labeled as a 10,000-gallon capacity tank. Backfill around the UST is pea gravel, and groundwater was encountered approximately 7 feet below grade, above the bottom of the UST, which prevented excavating to the bottom of the tank.

GTA personnel opened the UST fill port and measured the diameter of the UST and oil thickness in the UST. The UST contained less than 1” of oil, and the bottom of the UST was 10 feet bgs. No petroleum odors were observed on the soil excavated from the test pit.

At the conclusion of test pit activities, the excavations were backfilled with the excavated materials and the surface repaired with the excavated soil.

4.2.1 Soil Screening

As described in *Section 4.2*, 2-foot soil samples were collected from varying intervals during advancement of the soil borings, a portion of each sample was sealed in a plastic bag and was field screened using a photoionization detector (PID), which is capable of detecting volatile organic vapors, such as those typically associated with petroleum and some solvents. A portion of each soil sample was placed in a sealed plastic bag for field screening with the PID, and a portion placed in laboratory-provided sample containers and retained for possible laboratory analysis. A strong petroleum odor was observed in the sample collected between 8.5 to 10 feet bgs in boring GTA-9. PID readings ranged from 0 to 289 parts per million (ppm), and are shown on the Soil Boring Logs (*Appendix B*).

4.2.2 Soil Sampling

Soil samples exhibiting the highest PID readings were submitted for laboratory analysis. The soil samples were placed into clean, laboratory-provided containers, stored in an iced cooler, and transported to Phase Separation Science, Inc. (PSS) laboratory, under Chain of Custody documentation. A copy of the laboratory report, which includes the Chain of Custody document, is included in *Appendix C*.

The soil samples were submitted with the instructions to analyze for VOCs by USEPA Method 8260B and TPH DRO and TPH GRO by USEPA Method 8015C.

4.2.3 Soil Analysis Results

Table 2, Soil Analysis Summary, presents the soil analytical data, with a comparison to the MDE's Residential Cleanup Standard (RCS), as presented in MDE's *Cleanup Standards for Soil and Groundwater; June 2008; Interim Final Guidance (Update No. 2.1)*. The cleanup standards are risk-based guidance values representing concentrations at which no further remedial action would be needed at a site. An exceedance of the cleanup standards does not necessarily mean that remedial action is needed.

Several VOCs were detected above the laboratory reporting limits but below the MDE RCS in GTA-4, GTA-7, and GTA-9. TPH DRO was detected above the laboratory reporting limit but below the MDE RCS in GTA-9. TPH GRO was detected above the laboratory reporting limit but below the MDE RCS in GTA-1, GTA-7, and GTA-9. VOCs, TPH GRO, and TPH DRO were not detected above the laboratory reporting limits in the remaining samples.

4.3 Groundwater Evaluation

GTA installed temporary groundwater monitoring points in the borings so the groundwater levels could be gauged and groundwater samples could be collected. The monitoring points consisted of 5 to 15 feet of 1-inch diameter PVC well screen in the lower portion of the borings, followed by 5 to 20 feet of PVC riser to grade. The bottoms of the well screens were placed at the top of the clay confining unit.

4.3.1 Groundwater Gauging

GTA personnel utilized an electronic oil-water interface probe to measure the depth to groundwater and evaluate the possible presence of LPH. The depth to groundwater ranged from 6.2 feet below the top of casing (TOC) to 15.7 feet below TOC. The interface probe was decontaminated prior to gauging each location. No LPH was detected using the interface probe.

GROUNDWATER LEVELS	
Temporary Monitoring Point Identification	Depth to Water from TOC
GTA-1	8.8
GTA-4	6.2
GTA-7	15.7
GTA-9	9.7

Based on the depth to water in the four temporary monitoring points, the general groundwater flow direction is to the southwest.

4.3.2 Groundwater Sampling

After gauging the depth to water, the temporary monitoring points were purged of approximately three times the volume of water standing in the casing. GTA detected a slight petroleum odor in the temporary monitoring point at GTA-9; however, no LPH or sheen was observed during groundwater purging and sampling activities. GTA collected “grab” groundwater samples from the temporary groundwater monitoring points using a peristaltic pump and dedicated tubing, lowered into the temporary sampling point. The sample was immediately placed in laboratory-supplied containers, stored in a chilled cooler, and transported to PSS laboratory, under Chain of Custody documentation. A copy of the laboratory report, which includes the Chain of Custody document, is included in *Appendix C*.

The samples were submitted to PSS under Chain of Custody documentation, with instructions to analyze for VOCs using USEPA Method 8260B, and TPH DRO and TPH GRO using USEPA Method 8015.

4.3.3 Groundwater Analysis Results

Table 3, Groundwater Analysis Summary, presents the groundwater analytical data, with a comparison to the MDE’s GCS, as published in the June 2008 Interim Final Guidance cited above. GCS values generally apply to aquifers that are used or have the potential to be used for potable water supply and are comparable to the USEPA’s

Maximum Contaminant Levels (MCLs) for drinking water supplies. The MDE has not published groundwater comparison values for other groundwater use categories.

The VOC MTBE was detected in GTA-7 at a concentration of 67 micrograms per liter ($\mu\text{g/L}$), which exceeds the MDE GCS of 20 $\mu\text{g/L}$. Acetone was detected above the laboratory reporting limit but below the MDE GCS in GTA-9. The remaining VOCs were not detected above the laboratory's reporting limits.

TPH DRO was detected in the groundwater sample collected from GTA-9 at a concentration of 470 $\mu\text{g/L}$, above the MDE GCS of 47 $\mu\text{g/L}$. TPH GRO was detected in the groundwater sample collected from GTA-7 at a concentration of 100 $\mu\text{g/L}$, above the MDE GCS of 47 $\mu\text{g/L}$. Concentrations of TPH DRO and TPH GRO were not detected above the laboratory's reporting limits for the remaining samples.

5.0 SUMMARY

GTA performed four soil borings and collected four soil samples to further evaluate the subsurface conditions on the subject property. Soil borings generally encountered existing fill underlain by native silty/clayey sands with interbedded layers of gravel ranging from 1 to 15 feet bgs, but predominantly between 3 to 8 feet bgs. An apparently greyish brown clay layer was encountered in one soil boring a depth of 18 feet bgs. Soil samples collected from GTA-1, GTA-4, GTA-7, and GTA-9 did not identify VOCs, TPH DRO, or TPH GRO at concentrations above the MDE RCS.

Temporary groundwater monitoring points were installed in the four environmental soil borings. These borings were located on the northeastern portion of the subject property near the former gasoline station, on the southwestern portion of the subject property, adjacently northeast of the site building, in the vicinity of the existing and former locations of two 10,000-gallon heating oil USTs, and south of the site building in the approximate former location of a 10,000-gallon heating oil UST. Groundwater samples were collected from each of the four temporary

groundwater monitoring points, and laboratory analysis detected concentrations of MTBE, TPH DRO, and TPH GRO above the MDE GCS.

6.0 CONCLUSIONS

Based on the results of the Phase II ESA activities described herein, limited groundwater impacts have been identified at the subject property, which can be managed during the planned excavation and redevelopment of the site. GTA recommends that these impacts be reviewed with MDE staff to identify the appropriate regulatory process for addressing these impacts as part of planned redevelopment and future use of the site.

******* END OF REPORT *******

Important Information about This

Geoenvironmental Report

Geoenvironmental studies are commissioned to gain information about environmental conditions on and beneath the surface of a site. The more comprehensive the study, the more reliable the assessment is likely to be. But remember: Any such assessment is to a greater or lesser extent based on professional opinions about conditions that cannot be seen or tested. Accordingly, no matter how many data are developed, risks created by unanticipated conditions will always remain. *Have realistic expectations.* Work with your geoenvironmental consultant to manage known and unknown risks. Part of that process should already have been accomplished, through the risk allocation provisions you and your geoenvironmental professional discussed and included in your contract's general terms and conditions. This document is intended to explain some of the concepts that may be included in your agreement, and to pass along information and suggestions to help you manage your risk.

Beware of Change; Keep Your Geoenvironmental Professional Advised

The design of a geoenvironmental study considers a variety of factors that are subject to change. Changes can undermine the applicability of a report's findings, conclusions, and recommendations. *Advise your geoenvironmental professional about any changes you become aware of.* Geoenvironmental professionals cannot accept responsibility or liability for problems that occur because a report fails to consider conditions that did not exist when the study was designed. Ask your geoenvironmental professional about the types of changes you should be particularly alert to. Some of the most common include:

- modification of the proposed development or ownership group,
- sale or other property transfer,
- replacement of or additions to the financing entity,

- amendment of existing regulations or introduction of new ones, or
- changes in the use or condition of adjacent property.

Should you become aware of any change, *do not rely on a geoenvironmental report.* Advise your geoenvironmental professional immediately; follow the professional's advice.

Recognize the Impact of Time

A geoenvironmental professional's findings, recommendations, and conclusions cannot remain valid indefinitely. The more time that passes, the more likely it is that important latent changes will occur. *Do not rely on a geoenvironmental report if too much time has elapsed since it was completed.* Ask your environmental professional to define "too much time." In the case of Phase I Environmental Site Assessments (ESAs), for example, more than 180 days after submission is generally considered "too much."

Prepare To Deal with Unanticipated Conditions

The findings, recommendations, and conclusions of a Phase I ESA report typically are based on a review of historical information, interviews, a site "walkover," and other forms of noninvasive research. When site subsurface conditions are not sampled in any way, the risk of unanticipated conditions is higher than it would otherwise be.

While borings, installation of monitoring wells, and similar invasive test methods can help reduce the risk of unanticipated conditions, *do not overvalue the effectiveness of testing.* Testing provides information about actual conditions only at the precise locations where samples are taken, and only when they are taken. Your geoenvironmental

professional has applied that specific information to develop a general opinion about environmental conditions. *Actual conditions in areas not sampled may differ (sometimes sharply) from those predicted in a report.* For example, a site may contain an unregistered underground storage tank that shows no surface trace of its existence. *Even conditions in areas that were tested can change, sometimes suddenly, due to any number of events, not the least of which include occurrences at adjacent sites.* Recognize, too, that *even some conditions in tested areas may go undiscovered*, because the tests or analytical methods used were designed to detect only those conditions assumed to exist.

Manage your risks by retaining your geoenvironmental professional to work with you as the project proceeds. Establish a contingency fund or other means to enable your geoenvironmental professional to respond rapidly, in order to limit the impact of unforeseen conditions. And to help prevent any misunderstanding, identify those empowered to authorize changes and the administrative procedures that should be followed.

Do Not Permit Any Other Party To Rely on the Report

Geoenvironmental professionals design their studies and prepare their reports to meet the specific needs of the clients who retain them, in light of the risk management methods that the client and geoenvironmental professional agree to, and the statutory, regulatory, or other requirements that apply. The study designed for a developer may differ sharply from one designed for a lender, insurer, public agency...or even another developer. *Unless the report specifically states otherwise, it was developed for you and only you.* Do not unilaterally permit any other party to rely on it. The report and the study underlying it may not be adequate for another party's needs, and you could be held liable for shortcomings your geoenvironmental professional was powerless to prevent or anticipate. Inform your geoenvironmental professional when you know or expect that someone else—a third-party—will want to use or rely on the report. *Do not permit third-party use or reliance until you first confer with the geoenvironmental professional who prepared the report.* Additional testing, analysis, or study may be required and, in any event, appropriate terms and conditions should be agreed to so both you and your geoenvironmental professional are protected from third-party risks. *Any party who relies on a geoenvironmental report without the express written permission of the professional who prepared it and the client for whom it was prepared may be solely liable for any problems that arise.*

Avoid Misinterpretation of the Report

Design professionals and other parties may want to rely on the report in developing plans and specifications. They need to be advised, in writing, that their needs may not have been considered when the study's scope was developed, and, even if their needs were considered, they might misinterpret geoenvironmental findings, conclusions, and recommendations. *Commission your geoenvironmental professional to explain pertinent elements of the report to others who are permitted to rely on it, and to review any plans, specifications or other instruments of professional service that incorporate any of the report's findings, conclusions, or recommendations.* Your geoenvironmental professional has the best understanding of the issues involved, including the fundamental assumptions that underpinned the study's scope.

Give Contractors Access to the Report

Reduce the risk of delays, claims, and disputes by giving contractors access to the full report, *providing that it is accompanied by a letter of transmittal that can protect you* by making it unquestionably clear that: 1) the study was not conducted and the report was not prepared for purposes of bid development, and 2) the findings, conclusions, and recommendations included in the report are based on a variety of opinions, inferences, and assumptions and are subject to interpretation. Use the letter to also advise contractors to consult with your geoenvironmental professional to obtain clarifications, interpretations, and guidance (a fee may be required for this service), and that—in any event—they should conduct additional studies to obtain the specific type and extent of information each prefers for preparing a bid or cost estimate. Providing access to the full report, with the appropriate caveats, helps prevent formation of adversarial attitudes and claims of concealed or differing conditions. If a contractor elects to ignore the warnings and advice in the letter of transmittal, it would do so at its own risk. Your geoenvironmental professional should be able to help you prepare an effective letter.

Do Not Separate Documentation from the Report

Geoenvironmental reports often include supplemental documentation, such as maps and copies of regulatory files, permits, registrations, citations, and correspondence with regulatory agencies. If subsurface explorations were performed, the report may contain final boring logs and copies of laboratory data. If remediation activities occurred on site, the report may include: copies of daily field reports; waste manifests; and information about the disturbance of subsurface materials, the type and thickness of any fill placed on site, and fill placement practices, among other types of documentation. *Do not separate supplemental documentation from the report. Do not, and do not permit any other party to redraw or modify any of the supplemental documentation for incorporation into other professionals' instruments of service.*

Understand the Role of Standards

Unless they are incorporated into statutes or regulations, standard practices and standard guides developed by the American Society for Testing and Materials (ASTM) and other recognized standards-developing organizations (SDOs) are little more than aspirational methods agreed to by a consensus of a committee. The committees that develop standards may not comprise those best-qualified to establish methods and, no matter what, no standard method can possibly consider the infinite client- and project-specific variables that fly in the face of the theoretical "standard conditions" to which standard practices and standard guides apply. In fact, these variables can be so pronounced that geoenvironmental professionals who comply with every directive of an ASTM or other standard procedure could run afoul of local custom and practice, thus violating the standard of care. Accordingly, when geoenvironmental professionals indicate in their reports that they have performed a service "in general compliance" with one standard or another, it means they have applied professional judgement in creating and implementing a scope of service designed for the specific client and project involved, and which follows some of the general precepts laid out in the referenced standard. To the extent that a report indicates "general compliance" with a standard, you may wish to speak with your geoenvironmental professional to learn more about what was and was not done. *Do not assume a given standard was followed to the letter.* Research indicates that that seldom is the case.

Realize That Recommendations May Not Be Final

The technical recommendations included in a geoenvironmental report are based on assumptions about actual conditions, and so are preliminary or tentative. Final recommendations can be prepared only by observing actual conditions as they are exposed. For that reason, you should retain the geoenvironmental professional of record to observe construction and/or remediation activities on site, to permit rapid response to unanticipated conditions. *The geoenvironmental professional who prepared the report cannot assume responsibility or liability for the report's recommendations if that professional is not retained to observe relevant site operations.*

Understand That Geotechnical Issues Have Not Been Addressed

Unless geotechnical engineering was specifically included in the scope of professional service, a report is not likely to relate any findings, conclusions, or recommendations about the suitability of subsurface materials for construction purposes, especially when site remediation has been accomplished through the removal, replacement, encapsulation, or chemical treatment of on-site soils. The equipment, techniques, and testing used by geotechnical engineers differ markedly from those used by geoenvironmental professionals; their education, training, and experience are also significantly different. If you plan to build on the subject site, but have not yet had a geotechnical engineering study conducted, your geoenvironmental professional should be able to provide guidance about the next steps you should take. The same firm may provide the services you need.

Read Responsibility Provisions Closely

Geoenvironmental studies cannot be exact; they are based on professional judgement and opinion. Nonetheless, some clients, contractors, and others assume geoenvironmental reports are or certainly should be unerringly precise. Such assumptions have created unrealistic expectations that have led to wholly unwarranted claims and disputes. To help prevent such problems, geoenvironmental professionals have developed a number of report provisions and contract terms that explain who is responsible for what, and how risks are to be allocated. Some people mistake these for “exculpatory clauses,” that is, provisions whose purpose is to transfer one party’s rightful responsibilities and liabilities to someone else. Read the responsibility provisions included in a report and in the contract you and your geoenvironmental professional agreed to. *Responsibility provisions are not “boilerplate.”* They are important.

Rely on Your Geoenvironmental Professional for Additional Assistance

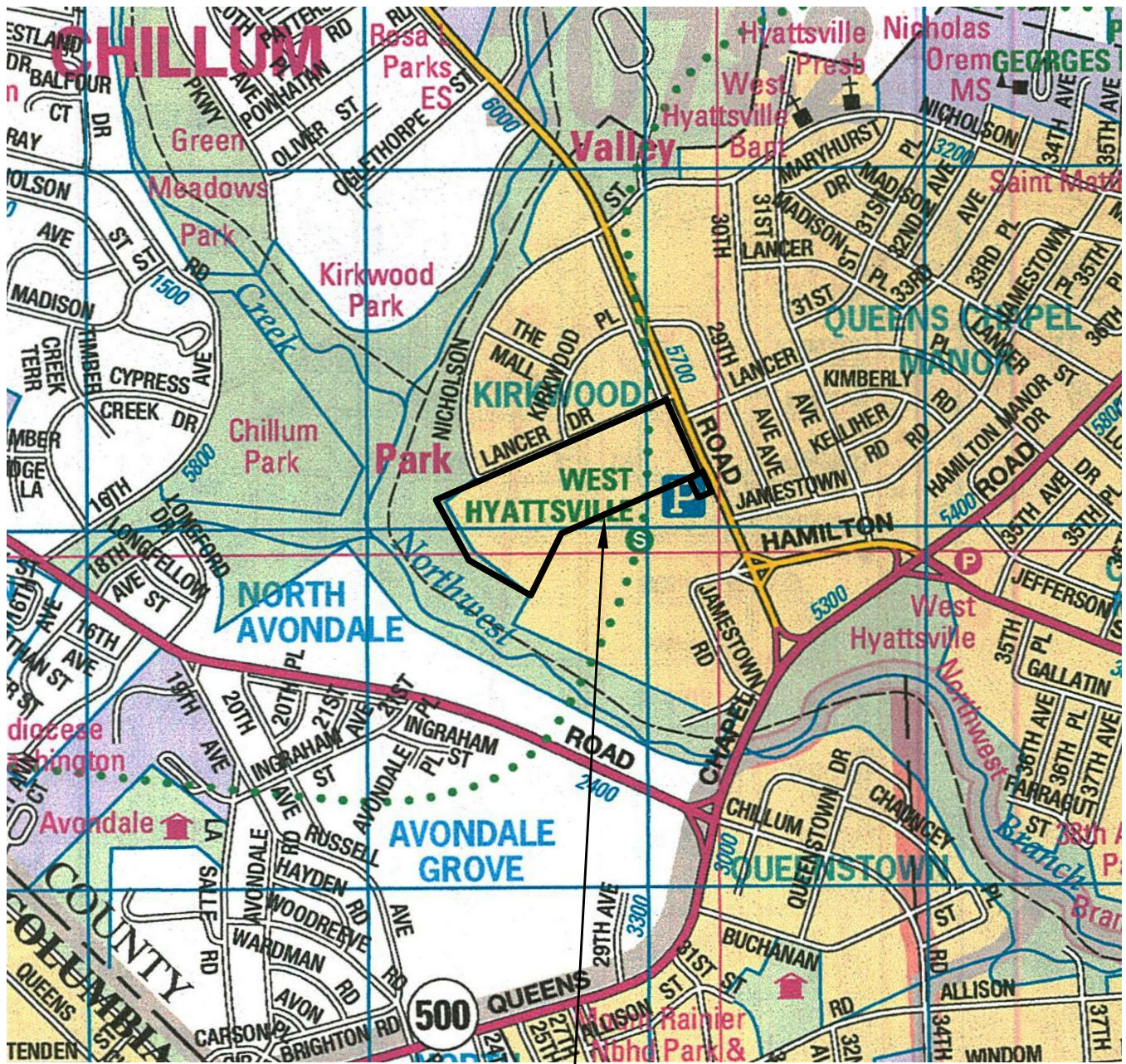
Membership in the Geoprofessional Business Association exposes geoenvironmental professionals to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a geoenvironmental project. Confer with your GBA-member geoenvironmental professional for more information.



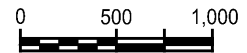
8811 Colesville Road/Suite G106, Silver Spring, MD 20910
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FIGURES



Approximate Subject Property Boundary



Approximate Scale
1 inch = 1,000 feet



Notes

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WEST HYATTSVILLE METRO
PROPERTY
PRINCE GEORGE'S COUNTY, MARYLAND

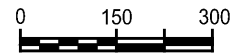
SITE LOCATION MAP



Approximate Subject
Property Boundary

Notes

Base image obtained from Google Earth (©2015 Google).



Approximate Scale
1 inch = 300 feet



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**WEST HYATTSVILLE
METRO PROPERTY**

PRINCE GEORGE'S COUNTY, MARYLAND

2014 AERIAL PHOTOGRAPH

PROJECT: 150938

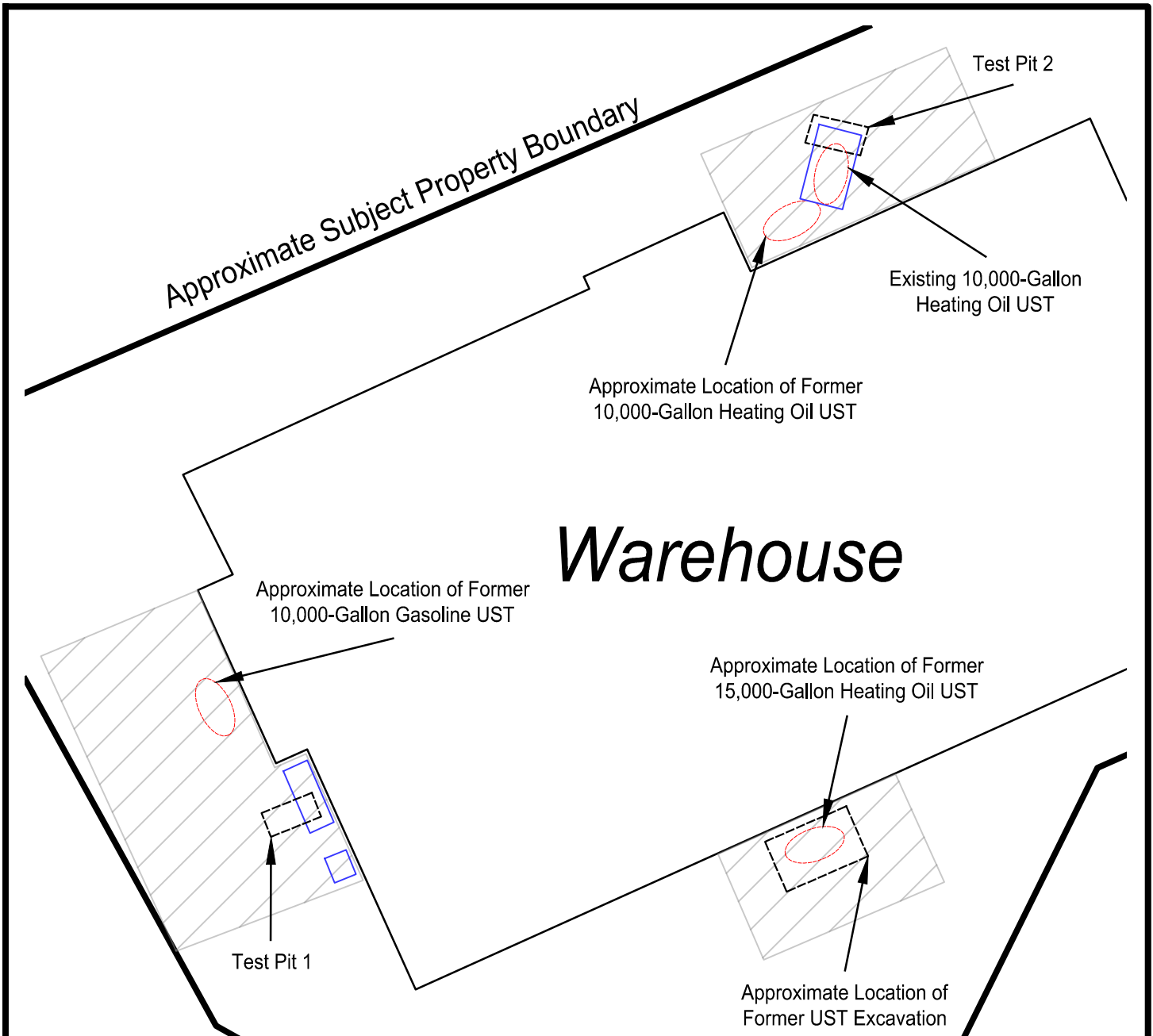
DATE: AUGUST 2015

SCALE: 1" = 300'




DESIGN BY: AMF

REVIEW BY: JWM

FIGURE: 2

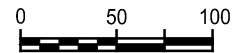


Legend

-  Approximate Reported Location of Former and/or Existing USTs.
-  Approximate Locations of Detected Geophysical Anomalies.
-  Approximate Area of Geophysical Survey.

Notes

1. Based on a 2014 aerial photograph and site observations.
2. Property boundaries and site conditions are approximate.



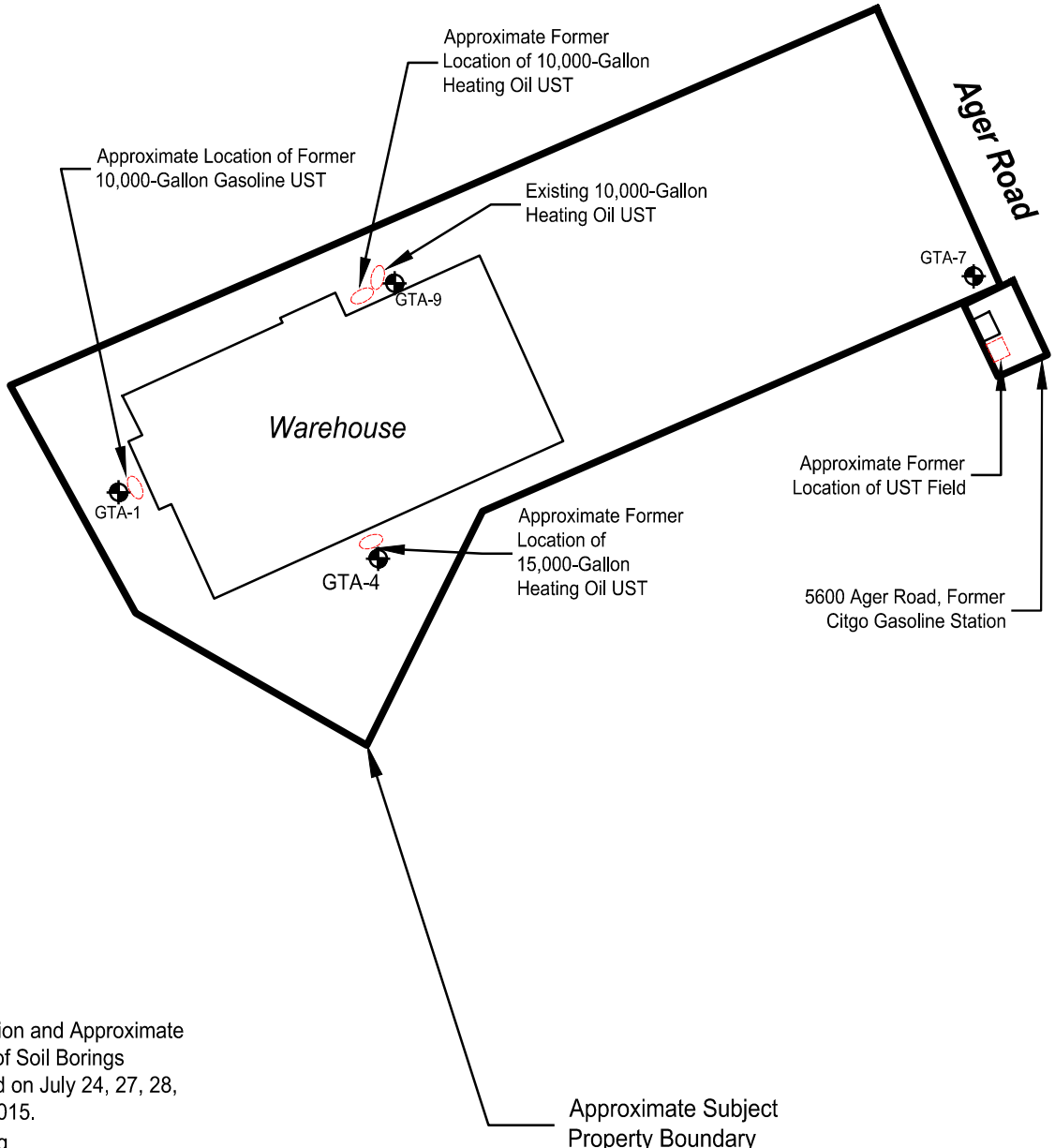
Approximate Scale
1 inch = 100 feet





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WEST HYATTSVILLE METRO
PROPERTY
PRINCE GEORGE'S COUNTY, MARYLAND
**GEOPHYSICAL ANOMALY
LOCATION PLAN**



Legend

-  Identification and Approximate Location of Soil Borings Performed on July 24, 27, 28, and 29, 2015.
-  Building

Notes

1. Based on a 2014 aerial photograph and site observations.
2. Property boundaries and site conditions are approximate.



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WEST HYATTSVILLE METRO
 PROPERTY
 PRINCE GEORGE'S COUNTY, MARYLAND
SAMPLE LOCATION PLAN

TABLES

Table 1
Sample Matrix Table
 West Hyattsville Metro Property, 5620 Ager Road, Hyattsville, Maryland

Media	Location	Depth (feet)	Analysis/USEPA Method					Location/Sampling Rationale
			VOCs	TPH DRO	TPH GRO	SVOCs	VOCs	
			8260B	8015	8015	8270C	TO-15	
Soil	GTA-1	18.5-20	✓	✓	✓			Approximate former location of UST
	GTA-4	0-1.5	✓	✓	✓			Approximate former location of UST
	GTA-7	13.5-15	✓	✓	✓			Near former location of gasoline station
	GTA-9	8.5-10	✓	✓	✓			Approximate former location of UST
Groundwater	GTA-1	Varies	✓	✓	✓			Approximate former location of UST
	GTA-4		✓	✓	✓			Approximate former location of UST
	GTA-7		✓	✓	✓			Near former location of gasoline station
	GTA-9		✓	✓	✓			Approximate former location of UST
Total Samples			8	8	8			

Notes:
 VOCs = Volatile Organic Compounds
 TPH DRO = Total Petroleum Hydrocarbons, Diesel-Range Organics
 TPH-GRO = Total Petroleum Hydrocarbons, Gasoline-Range Organics



Table 2
Soil Analysis Summary

Sample Identification	GTA-1	GTA-4	GTA-7	GTA-9	Comparison Values	
Depth (feet)	18.5-20	0-1.5	13.5-15	8.5-10	RCS	ATC Eastern
VOCs						
Acetone	--	0.051	0.045	0.029	7,000	NA
Carbon Disulfide	--	--	--	0.012	780	NA
Remaining VOCs	--	--	--	--	varies	NA
TPH						
TPH DRO	--	--	--	50	230	NA
TPH GRO	1.3	--	0.26	0.87	230	NA

Notes:

Samples collected on July 28 and July 29, 2015

Results in milligrams per kilogram (mg/kg), or parts per million (ppm)

Only detected compounds shown

-- = Not detected at or above the laboratory's reporting limit

NA = Not applicable

RCS = MDE Residential Cleanup Standards for soil

ATC = Anticipated Typical Concentration for soils in Eastern Maryland (MDE Interim Final Guidance Update No. 2.1, June 2008)

Shaded and bold values represent exceedance of MDE RCS (and ATC, if applicable)

VOCs = Volatile Organic Compounds

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics



Table 3
Groundwater Analysis Summary

Sample Identification	GTA-1	GTA-4	GTA-7	GTA-9	Comparison Value
					GCS
VOCs					
Acetone	--	--	--	19	550
Methyl-t-Butyl Ether	--	--	67	--	20
Remaining VOCs	--	--	--	--	varies
TPH					
TPH DRO	--	--	--	470	47
TPH GRO	--	--	100	--	47

Notes:

Samples collected July 29, 2015

Results in micrograms per liter (µg/L), or parts per billion (ppb)

Only detected compounds are shown

-- = Not detected at or above the laboratory's reporting limit

GCS = Groundwater Cleanup Standard

GCS = MDE Groundwater Cleanup Standard for Type I and II Aquifers (MDE Interim Final Guidance Update No. 2.1, June 2008)

Shaded and bold values represent exceedance of the GCS

VOCs = Volatile Organic Compounds

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics



APPENDIX A
SITE PHOTOGRAPHS



Photo 1: Boring GTA-1.



Photo 2: Boring GTA-4.



Photo 3: Boring GTA-7.



Photo 4: Boring GTA-9.



Photo 1: Test Pit 1.



Photo 2: Test Pit 1.



Photo 3: Test Pit 2.



Photo 4: Test Pit 2.

APPENDIX B

SOIL BORING LOGS

LOG OF BORING NO. GTA-1

Sheet 1 of 1

PROJECT: **West Hyattsville Metro Property**
 PROJECT NO.: **150938**
 PROJECT LOCATION: **Prince George's County, Maryland**

WATER LEVEL (ft): ∇ Dry ∇ Dry ∇ _____
 DATE: 7/27/2015 7/29/2015 _____
 CAVED (ft): 5.3 6.0 _____

DATE STARTED: **7/27/2015**
 DATE COMPLETED: **7/27/2015**
 DRILLING CONTRACTOR: **Geo-Technology Associates, Inc.**
 DRILLER: **P. Stephens**
 DRILLING METHOD: **HSA**
 SAMPLING METHOD: **Split Spoon with Automatic Hammer**

WATER ENCOUNTERED DURING DRILLING (ft) ∇ **9.0**
 GROUND SURFACE ELEVATION: **36.0**
 DATUM: **Topo**
 EQUIPMENT: **CME-55**
 LOGGED BY: **TLC**
 CHECKED BY: **ADM**

SAMPLE NUMBER	SAMPLE DEPTH (ft.)	SAMPLE RECOVERY (in.)	SAMPLE BLOWS/6 inches	N (blows/ft.)	ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION		REMARKS
									DESCRIPTION		
S-1	0.0	9	5-14-14	28	36.0	0	SP		Brown, dry to moist, medium dense, Poorly Graded SAND with Gravel, trace Silt.		Topsoil: 2 in. PID = 1
S-2	2.5	15	22-30-37	67	34.0		SP-SM		Brown, moist, very dense, Poorly Graded SAND with Silt and Gravel.		PID = 1
S-3	5.0	14	22-30-35	65	29.0		SP		Light Brown to Light Gray, moist, very dense, Poorly Graded SAND with Gravel, trace Silt.		PID = 1
S-4	8.5	7	3-10-9	19	24.0	10	SM		Light Brown, wet, medium dense, Silty SAND.		PID = 61
S-5	13.5	16	3-4-3	7	24.0		SP		Light Brown, wet, loose, Poorly Graded SAND.		PID = 2
S-6	18.5	18	8-10-16	26	16.0	20	SP		Light Brown to Light Gray, wet, medium dense, Poorly Graded SAND, trace Silt and Lignitic Fragments.		PID = 289
									Boring terminated at 20 feet.		
									Infiltration test at 5 feet. Stabilized Infiltration Rate > 12 inches per hour.		

NOTES:



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LOG OF BORING NO. GTA-1

Sheet 1 of 1


LOG OF BORING NO. GTA-4

PROJECT: **West Hyattsville Metro Property**
 PROJECT NO.: **150938**
 PROJECT LOCATION: **Prince George's County, Maryland**

WATER LEVEL (ft): ∇ **Dry** ∇ **6.4** ∇ _____
 DATE: **7/27/2015** **7/30/2015** _____
 CAVED (ft): **13.5** **Pipe** _____

DATE STARTED: **7/27/2015**
 DATE COMPLETED: **7/27/2015**
 DRILLING CONTRACTOR: **Geo-Technology Associates, Inc.**
 DRILLER: **P. Stephens**
 DRILLING METHOD: **HSA**
 SAMPLING METHOD: **Split Spoon with Automatic Hammer**

WATER ENCOUNTERED DURING DRILLING (ft) ∇ **7.0**
 GROUND SURFACE ELEVATION: **36.0**
 DATUM: **Topo**
 EQUIPMENT: **CME-55**
 LOGGED BY: **TLC**
 CHECKED BY: **ADM**

SAMPLE NUMBER	SAMPLE DEPTH (ft.)	SAMPLE RECOVERY (in.)	SAMPLE BLOWS/6 inches	N (blows/ft.)	ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION		REMARKS
									DESCRIPTION		
S-1	0.0	11	8-10-15	25	36.0	0			Asphalt: 5 in. Subbase: 5 in.		PID = 17 PID = 2 PID = 1 PID = 1 PID = 1 PID = 1
S-2	2.5	3	6-6-10	16	35.6		FILL		Light to Dark Gray, dry, medium dense, Concrete and Asphalt Rubble with Sand (Fill).		
S-3	5.0	3	7-6-7	13	35.2		FILL		Brown, moist, medium dense, Silty SAND with Gravel (Fill).		
S-4	8.5	3	12-8-5	13			FILL		Brown, wet, medium dense, Poorly Graded GRAVEL with Sand, trace Silt (Fill).		
S-5	13.5	1	50/2"	50/2"		10	FILL		Light Gray, moist, very dense, Poorly Graded SAND with Gravel, trace Silt (Fill).		
S-6	18.5		50/2"	50/2"	19.0	19.0	SP		Brown, wet, very dense, Poorly Graded SAND with Gravel, trace Silt.		
					16.0	20				Boring terminated at 20 feet.	
									Infiltration test at 5 feet. Stabilized Infiltration Rate < 0.1 inches per hour.		

NOTES:



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LOG OF BORING NO. GTA-4




LOG OF BORING NO. GTA-7

PROJECT: **West Hyattsville Metro Property**
 PROJECT NO.: **150938**
 PROJECT LOCATION: **Prince George's County, Maryland**

WATER LEVEL (ft): ∇ **15.6** ∇ **11.2** ∇ _____
 DATE: **7/28/2015** **7/30/2015** _____
 CAVED (ft): **Pipe** **Pipe** _____

DATE STARTED: **7/28/2015**
 DATE COMPLETED: **7/28/2015**
 DRILLING CONTRACTOR: **Geo-Technology Associates, Inc.**
 DRILLER: **P. Stephens**
 DRILLING METHOD: **HSA**
 SAMPLING METHOD: **Split Spoon with Automatic Hammer**

WATER ENCOUNTERED DURING DRILLING (ft) ∇ **25.0**
 GROUND SURFACE ELEVATION: **44.5**
 DATUM: **Topo**
 EQUIPMENT: **CME-55**
 LOGGED BY: **TLC**
 CHECKED BY: **ADM**

SAMPLE NUMBER	SAMPLE DEPTH (ft.)	SAMPLE RECOVERY (in.)	SAMPLE BLOWS/6 inches	N (blows/ft.)	ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION		REMARKS
S-1	0.0	7	2-3-5	8	44.5	0	FILL		Brown, dry to moist, loose, Silty SAND with Rock Pieces, Gravel and Trace Root Fragments (Fill).	Topsoil: 3 in. PID = 1	
S-2	2.5	18	10-15-7	22	42.5		SM		Brown, moist, medium dense, Silty SAND with Gravel.	PID = 1	
S-3	5.0	15	4-7-14	21			SM		Light Brown, moist, medium dense, Micaceous Silty SAND with Gravel.	PID = 1	
S-4	8.5	7	22-50/5"	50		10				PID = 33 ∇	
S-5	13.5	18	13-15-8	23						PID = 137 ∇	
S-6	18.5	18	8-25-32	57		20				PID = 13 ∇	
S-7	23.5	18	13-18-18	36	19.5					PID = 2 ∇	
									Boring terminated at 25 feet.		

NOTES:



GEO-TECHNOLOGY ASSOCIATES, INC.

14280 Park Center Drive, Suite A
 Laurel, MD 20707

LOG OF BORING NO. GTA-7

LOG OF BORING NO. GTA-9



Sheet 1 of 1

PROJECT: **West Hyattsville Metro Property**
 PROJECT NO.: **150938**
 PROJECT LOCATION: **Prince George's County, Maryland**

WATER LEVEL (ft): ∇ 6.0 ∇ 7.4 ∇ _____
 DATE: 7/28/2015 7/30/2015 _____
 CAVED (ft): 7.0 Pipe _____

DATE STARTED: **7/28/2015**
 DATE COMPLETED: **7/28/2015**
 DRILLING CONTRACTOR: **Geo-Technology Associates, Inc.**
 DRILLER: **P. Stephens**
 DRILLING METHOD: **HSA**
 SAMPLING METHOD: **Split Spoon with Automatic Hammer**

WATER ENCOUNTERED DURING DRILLING (ft) ∇ **9.0**
 GROUND SURFACE ELEVATION: **38.0**
 DATUM: **Topo**
 EQUIPMENT: **CME-55**
 LOGGED BY: **TLC**
 CHECKED BY: **ADM**

SAMPLE NUMBER	SAMPLE DEPTH (ft.)	SAMPLE RECOVERY (in.)	SAMPLE BLOWS/6 inches	N (blows/ft.)	ELEVATION (ft.)	DEPTH (ft.)	USCS	GRAPHIC SYMBOL	DESCRIPTION		REMARKS
									DESCRIPTION		
S-1	0.0	8	2-10-8	18	38.0	0	FILL		Light Gray to Light Brown, dry to moist, medium dense, Poorly Graded SAND (Fill).		Topsoil: 3 in. PID = 32 PID = 19.5 PID = 34 PID = 156
S-2	2.5	10	4-3-3	6		FILL	Brown, moist, loose, Poorly Graded SAND, trace Silt, Mica, Gravel, and Organics (Root Fragments) (Fill).				
S-3	5.0	6	4-4-4	8		FILL	Brown, moist, loose, Silty SAND with Gravel (Fill).				
S-4	8.5	6	2-1-50/5"	50/5"		FILL	Gray, wet, very dense, Poorly Graded GRAVEL with Sand (Fill).				
						10					
						26.0					
S-5	13.5	18	10-13-28	41			SP		Light Brown, wet, dense, Poorly Graded SAND.		PID = 1
							SP		Light Brown, wet, medium dense, Poorly Graded SAND.		PID = 2
S-6	18.5	18	13-13-16	29	18.0	20			Boring terminated at 20 feet.		
						30					
						40					
						50					
						60					

NOTES:



GEO-TECHNOLOGY ASSOCIATES, INC.

14280 Park Center Drive, Suite A
 Laurel, MD 20707

LOG OF BORING NO. GTA-9

Sheet 1 of 1

APPENDIX C

LABORATORY ANALYSIS REPORTS

Analytical Report for

GTA - Laurel

Certificate of Analysis No.: 15073003

Project Manager: Jeff Mutter

Project Name : 150938

Project ID : 150938



August 6, 2015

Phase Separation Science, Inc.

6630 Baltimore National Pike

Baltimore, MD 21228

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Fax: (410) 788-8723

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PHASE SEPARATION SCIENCE, INC.



August 6, 2015

Jeff Mutter
GTA - Laurel
14280 Park Center Dr., Ste. A
Laurel, MD 20707

Reference: PSS Work Order(s) No: **15073003**

Project Name: 150938

Project ID.: 150938

Dear Jeff Mutter :

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order(s) numbered **15073003**.

All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on September 3, 2015. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 5 years, after which time it will be disposed of without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

Dan Prucnal

Laboratory Manager



Sample Summary
Client Name: GTA - Laurel
Project Name: 150938

Work Order Number(s): 15073003

Project ID: 150938

The following samples were received under chain of custody by Phase Separation Science (PSS) on 07/30/2015 at 10:00 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
15073003-001	GTA-1 (18.5-20)	SOIL	07/27/15 13:25
15073003-002	GTA-4 (0-1.5)	SOIL	07/27/15 09:00
15073003-003	GTA-7 (13.5-15)	SOIL	07/28/15 13:30
15073003-004	GTA-9 (8.5-10)	SOIL	07/28/15 09:00
15073003-005	GTA-1-GW	GROUND WATER	07/29/15 14:30
15073003-006	GTA-4-GW	GROUND WATER	07/29/15 13:55
15073003-007	GTA-7-GW	GROUND WATER	07/29/15 16:15
15073003-008	GTA-9-GW	GROUND WATER	07/29/15 15:30

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

Notes:

1. The presence of a common laboratory contaminant such as methylene chloride may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. Unless otherwise noted in the case narrative, results are reported on a dry weight basis with the exception of pH, flashpoint, moisture, and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminants, and part 141.3, for the secondary drinking water contaminants.
5. Sample prepared under EPA 3550C with concentrations greater than 20 mg/Kg should employ the microtip extraction procedure if required to meet data quality objectives.
6. The analysis of acrolein by EPA 624 must be analyzed within three days of sampling unless pH is adjusted to 4-5 units [40 CFR part 136.3(e)].
7. Method 180.1, The Determination of Turbidity by Nephelometry, recommends samples over 40 NTU be diluted until the turbidity falls below 40 units. Routine samples over 40 NTU may not be diluted as long as the data quality objectives are not affected.
8. Alkalinity results analyzed by EPA 310.2 that are reported by dilution are estimated and are not in compliance with method requirements.

Standard Flags/Abbreviations:

- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- C Results Pending Final Confirmation.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
- J The target analyte was positively identified below the reporting limit but greater than the MDL.
- MDL This is the Laboratory Method Detection Limit which is equivalent to the Limit of Detection (LOD). The LOD is an estimate of the minimum amount of a substance that an analytical process can reliably detect. This value will remain constant across multiple similar instrumentation and among different analysts. An LOD is analyte and matrix specific.
- ND Not Detected at or above the reporting limit.
- RL PSS Reporting Limit.
- U Not detected.

Certifications:

NELAP Certifications: PA 68-03330, VA 460156
State Certifications: MD 179, WV 303
Regulated Soil Permit: P330-12-00268
NSWC USCG Accepted Laboratory
LDBE MWAA LD1997-0041-2015



Sample Summary
Client Name: GTA - Laurel
Project Name: 150938

Work Order Number(s): 15073003

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-1 (18.5-20)	Date/Time Sampled: 07/27/2015 13:25	PSS Sample ID: 15073003-001
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 86

Total Petroleum Hydrocarbons - DRO

Analytical Method: SW-846 8015 C

Preparation Method: SW3550C

	<u>Result</u>	<u>Units</u>	<u>RL</u>	<u>Flag</u>	<u>Dil</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>
TPH-DRO (Diesel Range Organics)	ND	mg/kg	11		1	08/01/15	08/01/15 21:44	1045

Total Petroleum Hydrocarbons-GRO

Analytical Method: SW-846 8015C

Preparation Method: 5030

	<u>Result</u>	<u>Units</u>	<u>RL</u>	<u>Flag</u>	<u>Dil</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>
TPH-GRO (Gasoline Range Organics)	1,300	ug/kg	120		1	07/30/15	07/30/15 16:08	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-1 (18.5-20)	Date/Time Sampled: 07/27/2015 13:25	PSS Sample ID: 15073003-001
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 86

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5035A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	ND	ug/kg	20		1	08/04/15	08/04/15 17:16	1011
Benzene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Bromochloromethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Bromodichloromethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Bromoform	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Bromomethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
2-Butanone (MEK)	ND	ug/kg	20		1	08/04/15	08/04/15 17:16	1011
Carbon Disulfide	ND	ug/kg	10		1	08/04/15	08/04/15 17:16	1011
Carbon Tetrachloride	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Chlorobenzene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Chloroethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Chloroform	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Chloromethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Cyclohexane	ND	ug/kg	20		1	08/04/15	08/04/15 17:16	1011
1,2-Dibromo-3-Chloropropane	ND	ug/kg	40		1	08/04/15	08/04/15 17:16	1011
Dibromochloromethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,2-Dibromoethane (EDB)	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,2-Dichlorobenzene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,3-Dichlorobenzene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,4-Dichlorobenzene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Dichlorodifluoromethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,1-Dichloroethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,2-Dichloroethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,1-Dichloroethene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,2-Dichloropropane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
cis-1,2-Dichloroethene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
cis-1,3-Dichloropropene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
trans-1,2-Dichloroethene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
trans-1,3-Dichloropropene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Ethylbenzene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-1 (18.5-20)	Date/Time Sampled: 07/27/2015 13:25	PSS Sample ID: 15073003-001
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 86

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5035A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2-Hexanone	ND	ug/kg	20		1	08/04/15	08/04/15 17:16	1011
Isopropylbenzene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Methyl Acetate	ND	ug/kg	20		1	08/04/15	08/04/15 17:16	1011
Methylcyclohexane	ND	ug/kg	20		1	08/04/15	08/04/15 17:16	1011
Methylene Chloride	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
4-Methyl-2-Pentanone	ND	ug/kg	20		1	08/04/15	08/04/15 17:16	1011
Methyl-t-butyl ether	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Naphthalene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Styrene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Tetrachloroethene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Toluene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,2,3-Trichlorobenzene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,2,4-Trichlorobenzene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,1,1-Trichloroethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,1,2-Trichloroethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Trichloroethene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Trichlorofluoromethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
Vinyl Chloride	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011
m,p-Xylenes	ND	ug/kg	10		1	08/04/15	08/04/15 17:16	1011
o-Xylene	ND	ug/kg	5.0		1	08/04/15	08/04/15 17:16	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-4 (0-1.5)	Date/Time Sampled: 07/27/2015 09:00	PSS Sample ID: 15073003-002
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 81

Total Petroleum Hydrocarbons - DRO Analytical Method: SW-846 8015 C Preparation Method: SW3550C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	ND	mg/kg	12		1	08/01/15	08/01/15 23:24	1045

Total Petroleum Hydrocarbons-GRO Analytical Method: SW-846 8015C Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	ND	ug/kg	120		1	07/30/15	07/30/15 16:37	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-4 (0-1.5)	Date/Time Sampled: 07/27/2015 09:00	PSS Sample ID: 15073003-002
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 81

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5035A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	51	ug/kg	19		1	08/04/15	08/04/15 17:47	1011
Benzene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Bromochloromethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Bromodichloromethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Bromoform	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Bromomethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
2-Butanone (MEK)	ND	ug/kg	19		1	08/04/15	08/04/15 17:47	1011
Carbon Disulfide	ND	ug/kg	9.4		1	08/04/15	08/04/15 17:47	1011
Carbon Tetrachloride	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Chlorobenzene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Chloroethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Chloroform	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Chloromethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Cyclohexane	ND	ug/kg	19		1	08/04/15	08/04/15 17:47	1011
1,2-Dibromo-3-Chloropropane	ND	ug/kg	38		1	08/04/15	08/04/15 17:47	1011
Dibromochloromethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,2-Dibromoethane (EDB)	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,2-Dichlorobenzene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,3-Dichlorobenzene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,4-Dichlorobenzene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Dichlorodifluoromethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,1-Dichloroethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,2-Dichloroethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,1-Dichloroethene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,2-Dichloropropane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
cis-1,2-Dichloroethene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
cis-1,3-Dichloropropene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
trans-1,2-Dichloroethene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
trans-1,3-Dichloropropene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Ethylbenzene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-4 (0-1.5)	Date/Time Sampled: 07/27/2015 09:00	PSS Sample ID: 15073003-002
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 81

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5035A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2-Hexanone	ND	ug/kg	19		1	08/04/15	08/04/15 17:47	1011
Isopropylbenzene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Methyl Acetate	ND	ug/kg	19		1	08/04/15	08/04/15 17:47	1011
Methylcyclohexane	ND	ug/kg	19		1	08/04/15	08/04/15 17:47	1011
Methylene Chloride	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
4-Methyl-2-Pentanone	ND	ug/kg	19		1	08/04/15	08/04/15 17:47	1011
Methyl-t-butyl ether	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Naphthalene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Styrene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Tetrachloroethene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Toluene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,2,3-Trichlorobenzene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,2,4-Trichlorobenzene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,1,1-Trichloroethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,1,2-Trichloroethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Trichloroethene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Trichlorofluoromethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
Vinyl Chloride	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011
m,p-Xylenes	ND	ug/kg	9.4		1	08/04/15	08/04/15 17:47	1011
o-Xylene	ND	ug/kg	4.7		1	08/04/15	08/04/15 17:47	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-7 (13.5-15)	Date/Time Sampled: 07/28/2015 13:30	PSS Sample ID: 15073003-003
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 77

Total Petroleum Hydrocarbons - DRO

Analytical Method: SW-846 8015 C

Preparation Method: SW3550C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	ND	mg/kg	13		1	08/01/15	08/01/15 20:03	1045

Total Petroleum Hydrocarbons-GRO

Analytical Method: SW-846 8015C

Preparation Method: 5030

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	260	ug/kg	130		1	07/30/15	07/30/15 17:07	1035

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CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-7 (13.5-15)	Date/Time Sampled: 07/28/2015 13:30	PSS Sample ID: 15073003-003
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 77

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5035A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	45	ug/kg	22		1	08/04/15	08/04/15 18:18	1011
Benzene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Bromochloromethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Bromodichloromethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Bromoform	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Bromomethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
2-Butanone (MEK)	ND	ug/kg	22		1	08/04/15	08/04/15 18:18	1011
Carbon Disulfide	ND	ug/kg	11		1	08/04/15	08/04/15 18:18	1011
Carbon Tetrachloride	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Chlorobenzene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Chloroethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Chloroform	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Chloromethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Cyclohexane	ND	ug/kg	22		1	08/04/15	08/04/15 18:18	1011
1,2-Dibromo-3-Chloropropane	ND	ug/kg	44		1	08/04/15	08/04/15 18:18	1011
Dibromochloromethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,2-Dibromoethane (EDB)	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,2-Dichlorobenzene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,3-Dichlorobenzene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,4-Dichlorobenzene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Dichlorodifluoromethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,1-Dichloroethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,2-Dichloroethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,1-Dichloroethene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
cis-1,2-Dichloroethene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,2-Dichloropropane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
cis-1,3-Dichloropropene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
trans-1,2-Dichloroethene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
trans-1,3-Dichloropropene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Ethylbenzene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-7 (13.5-15)	Date/Time Sampled: 07/28/2015 13:30	PSS Sample ID: 15073003-003
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 77

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5035A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2-Hexanone	ND	ug/kg	22		1	08/04/15	08/04/15 18:18	1011
Isopropylbenzene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Methyl Acetate	ND	ug/kg	22		1	08/04/15	08/04/15 18:18	1011
Methylcyclohexane	ND	ug/kg	22		1	08/04/15	08/04/15 18:18	1011
Methylene Chloride	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
4-Methyl-2-Pentanone	ND	ug/kg	22		1	08/04/15	08/04/15 18:18	1011
Methyl-t-butyl ether	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Naphthalene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Styrene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Tetrachloroethene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Toluene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,2,3-Trichlorobenzene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,2,4-Trichlorobenzene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,1,1-Trichloroethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,1,2-Trichloroethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Trichloroethene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Trichlorofluoromethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
Vinyl Chloride	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011
m,p-Xylenes	ND	ug/kg	11		1	08/04/15	08/04/15 18:18	1011
o-Xylene	ND	ug/kg	5.5		1	08/04/15	08/04/15 18:18	1011

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CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-9 (8.5-10)	Date/Time Sampled: 07/28/2015 09:00	PSS Sample ID: 15073003-004
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 89

Total Petroleum Hydrocarbons - DRO	Analytical Method: SW-846 8015 C	Preparation Method: SW3550C
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	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	50	mg/kg	11		1	08/01/15	08/01/15 22:09	1045

Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030
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	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	870	ug/kg	110		1	07/30/15	07/30/15 17:36	1035

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CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-9 (8.5-10)	Date/Time Sampled: 07/28/2015 09:00	PSS Sample ID: 15073003-004
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 89

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5035A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	29	ug/kg	17		1	08/04/15	08/04/15 18:48	1011
Benzene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Bromochloromethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Bromodichloromethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Bromoform	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Bromomethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
2-Butanone (MEK)	ND	ug/kg	17		1	08/04/15	08/04/15 18:48	1011
Carbon Disulfide	12	ug/kg	8.6		1	08/04/15	08/04/15 18:48	1011
Carbon Tetrachloride	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Chlorobenzene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Chloroethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Chloroform	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Chloromethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Cyclohexane	ND	ug/kg	17		1	08/04/15	08/04/15 18:48	1011
1,2-Dibromo-3-Chloropropane	ND	ug/kg	34		1	08/04/15	08/04/15 18:48	1011
Dibromochloromethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,2-Dibromoethane (EDB)	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,2-Dichlorobenzene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,3-Dichlorobenzene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,4-Dichlorobenzene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Dichlorodifluoromethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,1-Dichloroethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,2-Dichloroethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,1-Dichloroethene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
cis-1,2-Dichloroethene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,2-Dichloropropane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
cis-1,3-Dichloropropene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
trans-1,2-Dichloroethene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
trans-1,3-Dichloropropene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Ethylbenzene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-9 (8.5-10)	Date/Time Sampled: 07/28/2015 09:00	PSS Sample ID: 15073003-004
Matrix: SOIL	Date/Time Received: 07/30/2015 10:00	% Solids: 89

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5035A

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2-Hexanone	ND	ug/kg	17		1	08/04/15	08/04/15 18:48	1011
Isopropylbenzene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Methyl Acetate	ND	ug/kg	17		1	08/04/15	08/04/15 18:48	1011
Methylcyclohexane	ND	ug/kg	17		1	08/04/15	08/04/15 18:48	1011
Methylene Chloride	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
4-Methyl-2-Pentanone	ND	ug/kg	17		1	08/04/15	08/04/15 18:48	1011
Methyl-t-butyl ether	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Naphthalene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Styrene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Tetrachloroethene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Toluene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,2,3-Trichlorobenzene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,2,4-Trichlorobenzene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,1,1-Trichloroethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,1,2-Trichloroethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Trichloroethene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Trichlorofluoromethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
Vinyl Chloride	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011
m,p-Xylenes	ND	ug/kg	8.6		1	08/04/15	08/04/15 18:48	1011
o-Xylene	ND	ug/kg	4.3		1	08/04/15	08/04/15 18:48	1011

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CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-1-GW	Date/Time Sampled: 07/29/2015 14:30	PSS Sample ID: 15073003-005
Matrix: GROUND WATER	Date/Time Received: 07/30/2015 10:00	

Total Petroleum Hydrocarbons - DRO Analytical Method: SW-846 8015 C Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	ND	mg/L	0.10		1	07/31/15	08/06/15 00:39	1045

Total Petroleum Hydrocarbons-GRO Analytical Method: SW-846 8015C Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	ND	ug/L	100		1	07/30/15	07/30/15 19:34	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003

GTA - Laurel, Laurel, MD

August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-1-GW	Date/Time Sampled: 07/29/2015 14:30	PSS Sample ID: 15073003-005
Matrix: GROUND WATER	Date/Time Received: 07/30/2015 10:00	

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	ND	ug/L	10		1	08/03/15	08/03/15 12:56	1011
Benzene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Bromochloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Bromodichloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Bromoform	ND	ug/L	5.0		1	08/03/15	08/03/15 12:56	1011
Bromomethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
2-Butanone (MEK)	ND	ug/L	10		1	08/03/15	08/03/15 12:56	1011
Carbon Disulfide	ND	ug/L	10		1	08/03/15	08/03/15 12:56	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Chlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Chloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Chloroform	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Chloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Cyclohexane	ND	ug/L	10		1	08/03/15	08/03/15 12:56	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	08/03/15	08/03/15 12:56	1011
Dibromochloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Dichlorodifluoromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Ethylbenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-1-GW **Date/Time Sampled: 07/29/2015 14:30** **PSS Sample ID: 15073003-005**
Matrix: GROUND WATER **Date/Time Received: 07/30/2015 10:00**

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2-Hexanone	ND	ug/L	10		1	08/03/15	08/03/15 12:56	1011
Isopropylbenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Methyl Acetate	ND	ug/L	10		1	08/03/15	08/03/15 12:56	1011
Methylcyclohexane	ND	ug/L	10		1	08/03/15	08/03/15 12:56	1011
Methylene Chloride	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	08/03/15	08/03/15 12:56	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Naphthalene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Styrene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Tetrachloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Toluene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Trichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	08/03/15	08/03/15 12:56	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
Vinyl Chloride	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011
m,p-Xylenes	ND	ug/L	2.0		1	08/03/15	08/03/15 12:56	1011
o-Xylene	ND	ug/L	1.0		1	08/03/15	08/03/15 12:56	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-4-GW	Date/Time Sampled: 07/29/2015 13:55	PSS Sample ID: 15073003-006
Matrix: GROUND WATER	Date/Time Received: 07/30/2015 10:00	

Total Petroleum Hydrocarbons - DRO Analytical Method: SW-846 8015 C Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	ND	mg/L	0.10		1	07/31/15	08/06/15 01:14	1045

Total Petroleum Hydrocarbons-GRO Analytical Method: SW-846 8015C Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	ND	ug/L	100		1	07/30/15	07/30/15 19:59	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003

GTA - Laurel, Laurel, MD

August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-4-GW	Date/Time Sampled: 07/29/2015 13:55	PSS Sample ID: 15073003-006
Matrix: GROUND WATER	Date/Time Received: 07/30/2015 10:00	

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	ND	ug/L	10		1	08/03/15	08/03/15 18:00	1011
Benzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Bromochloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Bromodichloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Bromoform	ND	ug/L	5.0		1	08/03/15	08/03/15 18:00	1011
Bromomethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
2-Butanone (MEK)	ND	ug/L	10		1	08/03/15	08/03/15 18:00	1011
Carbon Disulfide	ND	ug/L	10		1	08/03/15	08/03/15 18:00	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Chlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Chloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Chloroform	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Chloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Cyclohexane	ND	ug/L	10		1	08/03/15	08/03/15 18:00	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	08/03/15	08/03/15 18:00	1011
Dibromochloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Dichlorodifluoromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Ethylbenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-4-GW **Date/Time Sampled: 07/29/2015 13:55** **PSS Sample ID: 15073003-006**
Matrix: GROUND WATER **Date/Time Received: 07/30/2015 10:00**

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2-Hexanone	ND	ug/L	10		1	08/03/15	08/03/15 18:00	1011
Isopropylbenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Methyl Acetate	ND	ug/L	10		1	08/03/15	08/03/15 18:00	1011
Methylcyclohexane	ND	ug/L	10		1	08/03/15	08/03/15 18:00	1011
Methylene Chloride	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	08/03/15	08/03/15 18:00	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Naphthalene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Styrene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Tetrachloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Toluene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Trichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	08/03/15	08/03/15 18:00	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
Vinyl Chloride	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011
m,p-Xylenes	ND	ug/L	2.0		1	08/03/15	08/03/15 18:00	1011
o-Xylene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:00	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-7-GW	Date/Time Sampled: 07/29/2015 16:15	PSS Sample ID: 15073003-007
Matrix: GROUND WATER	Date/Time Received: 07/30/2015 10:00	

Total Petroleum Hydrocarbons - DRO Analytical Method: SW-846 8015 C Preparation Method: 3510C

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	ND	mg/L	0.10		1	07/31/15	08/06/15 01:14	1045

Total Petroleum Hydrocarbons-GRO Analytical Method: SW-846 8015C Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	100	ug/L	100		1	07/30/15	07/30/15 20:25	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003

GTA - Laurel, Laurel, MD

August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-7-GW	Date/Time Sampled: 07/29/2015 16:15	PSS Sample ID: 15073003-007
Matrix: GROUND WATER	Date/Time Received: 07/30/2015 10:00	

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	ND	ug/L	10		1	08/03/15	08/03/15 18:40	1011
Benzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Bromochloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Bromodichloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Bromoform	ND	ug/L	5.0		1	08/03/15	08/03/15 18:40	1011
Bromomethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
2-Butanone (MEK)	ND	ug/L	10		1	08/03/15	08/03/15 18:40	1011
Carbon Disulfide	ND	ug/L	10		1	08/03/15	08/03/15 18:40	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Chlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Chloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Chloroform	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Chloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Cyclohexane	ND	ug/L	10		1	08/03/15	08/03/15 18:40	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	08/03/15	08/03/15 18:40	1011
Dibromochloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Dichlorodifluoromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Ethylbenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011

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CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-7-GW **Date/Time Sampled: 07/29/2015 16:15** **PSS Sample ID: 15073003-007**
Matrix: GROUND WATER **Date/Time Received: 07/30/2015 10:00**

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2-Hexanone	ND	ug/L	10		1	08/03/15	08/03/15 18:40	1011
Isopropylbenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Methyl Acetate	ND	ug/L	10		1	08/03/15	08/03/15 18:40	1011
Methylcyclohexane	ND	ug/L	10		1	08/03/15	08/03/15 18:40	1011
Methylene Chloride	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	08/03/15	08/03/15 18:40	1011
Methyl-t-butyl ether	67	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Naphthalene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Styrene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Tetrachloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Toluene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Trichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	08/03/15	08/03/15 18:40	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
Vinyl Chloride	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011
m,p-Xylenes	ND	ug/L	2.0		1	08/03/15	08/03/15 18:40	1011
o-Xylene	ND	ug/L	1.0		1	08/03/15	08/03/15 18:40	1011

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CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-9-GW	Date/Time Sampled: 07/29/2015 15:30	PSS Sample ID: 15073003-008
Matrix: GROUND WATER	Date/Time Received: 07/30/2015 10:00	

Total Petroleum Hydrocarbons - DRO		Analytical Method: SW-846 8015 C			Preparation Method: 3510C			
	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-DRO (Diesel Range Organics)	0.47	mg/L	0.10		1	07/31/15	08/06/15 01:48	1045
Total Petroleum Hydrocarbons-GRO		Analytical Method: SW-846 8015C			Preparation Method: 5030B			
	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	ND	ug/L	100		1	07/30/15	07/30/15 20:50	1035

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003

GTA - Laurel, Laurel, MD

August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-9-GW	Date/Time Sampled: 07/29/2015 15:30	PSS Sample ID: 15073003-008
Matrix: GROUND WATER	Date/Time Received: 07/30/2015 10:00	

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Acetone	19	ug/L	10		1	08/03/15	08/03/15 19:18	1011
Benzene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Bromochloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Bromodichloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Bromoform	ND	ug/L	5.0		1	08/03/15	08/03/15 19:18	1011
Bromomethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
2-Butanone (MEK)	ND	ug/L	10		1	08/03/15	08/03/15 19:18	1011
Carbon Disulfide	ND	ug/L	10		1	08/03/15	08/03/15 19:18	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Chlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Chloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Chloroform	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Chloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Cyclohexane	ND	ug/L	10		1	08/03/15	08/03/15 19:18	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	08/03/15	08/03/15 19:18	1011
Dibromochloromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Dichlorodifluoromethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Ethylbenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011

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PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 15073003
GTA - Laurel, Laurel, MD
 August 6, 2015

Project Name: 150938

Project ID: 150938

Sample ID: GTA-9-GW **Date/Time Sampled: 07/29/2015 15:30** **PSS Sample ID: 15073003-008**
Matrix: GROUND WATER **Date/Time Received: 07/30/2015 10:00**

TCL Volatile Organic Compounds

Analytical Method: SW-846 8260 B

Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
2-Hexanone	ND	ug/L	10		1	08/03/15	08/03/15 19:18	1011
Isopropylbenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Methyl Acetate	ND	ug/L	10		1	08/03/15	08/03/15 19:18	1011
Methylcyclohexane	ND	ug/L	10		1	08/03/15	08/03/15 19:18	1011
Methylene Chloride	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	08/03/15	08/03/15 19:18	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Naphthalene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Styrene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Tetrachloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Toluene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Trichloroethene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	08/03/15	08/03/15 19:18	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
Vinyl Chloride	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011
m,p-Xylenes	ND	ug/L	2.0		1	08/03/15	08/03/15 19:18	1011
o-Xylene	ND	ug/L	1.0		1	08/03/15	08/03/15 19:18	1011



Case Narrative Summary

Client Name: GTA - Laurel

Project Name: 150938

Work Order Number(s): 15073003

Project ID: 150938

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for drinking water and non-potable samples tested for compliance have a maximum holding time of 15 minutes. As such, all laboratory analyses for these analytes exceed holding times.

Matrix spike and matrix spike duplicate analyses may not be performed due to insufficient sample quantity. In these instances, a laboratory control sample and laboratory control sample duplicate are analyzed unless otherwise noted or specified in the method.

Sample Receipt:

All sample receipt conditions were acceptable.

NELAP accreditation was held for all analyses performed unless noted below. See www.phaseonline.com for complete PSS scope of accreditation.



Analytical Data Package Information Summary

Work Order(s): 15073003

Report Prepared For: GTA - Laurel, Laurel, MD

Project Name: 150938

Project Manager: Jeff Mutter

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
ASTM D2216 05	GTA-1 (18.5-20)	Initial	15073003-001	1045	S	124772	124772	07/27/2015	08/03/2015 12:53	08/03/2015 12:53
	GTA-4 (0-1.5)	Initial	15073003-002	1045	S	124772	124772	07/27/2015	08/03/2015 12:53	08/03/2015 12:53
	GTA-7 (13.5-15)	Initial	15073003-003	1045	S	124772	124772	07/28/2015	08/03/2015 12:53	08/03/2015 12:53
	GTA-9 (8.5-10)	Initial	15073003-004	1045	S	124772	124772	07/28/2015	08/03/2015 12:53	08/03/2015 12:53
SW-846 8015 C	GTA-1 (18.5-20)	Initial	15073003-001	1045	S	56596	124848	07/27/2015	08/01/2015 07:48	08/01/2015 21:44
	GTA-4 (0-1.5)	Initial	15073003-002	1045	S	56596	124848	07/27/2015	08/01/2015 07:48	08/01/2015 23:24
	GTA-7 (13.5-15)	Initial	15073003-003	1045	S	56596	124848	07/28/2015	08/01/2015 07:48	08/01/2015 20:03
	GTA-9 (8.5-10)	Initial	15073003-004	1045	S	56596	124848	07/28/2015	08/01/2015 07:48	08/01/2015 22:09
	56596-1-BKS	BKS	56596-1-BKS	1045	S	56596	124848	-----	08/01/2015 07:48	08/01/2015 20:03
	56596-1-BLK	BLK	56596-1-BLK	1045	S	56596	124848	-----	08/01/2015 07:48	08/01/2015 19:38
	56596-1-BSD	BSD	56596-1-BSD	1045	S	56596	124848	-----	08/01/2015 07:48	08/01/2015 20:29
	UST-3 S	MS	15072914-003 S	1045	S	56596	124848	07/29/2015	08/01/2015 07:48	08/01/2015 21:19
	UST-3 SD	MSD	15072914-003 SD	1045	S	56596	124848	07/29/2015	08/01/2015 07:48	08/01/2015 21:44
	GTA-1-GW	Initial	15073003-005	1045	W	56583	124900	07/29/2015	07/31/2015 11:21	08/06/2015 00:39
	GTA-4-GW	Initial	15073003-006	1045	W	56583	124900	07/29/2015	07/31/2015 11:21	08/06/2015 01:14
	GTA-7-GW	Initial	15073003-007	1045	W	56583	124900	07/29/2015	07/31/2015 11:21	08/06/2015 01:14
	GTA-9-GW	Initial	15073003-008	1045	W	56583	124900	07/29/2015	07/31/2015 11:21	08/06/2015 01:48
	56583-1-BKS	BKS	56583-1-BKS	1045	W	56583	124900	-----	07/31/2015 11:21	08/05/2015 21:13
	56583-1-BLK	BLK	56583-1-BLK	1045	W	56583	124900	-----	07/31/2015 11:21	08/05/2015 20:38
	56583-1-BSD	BSD	56583-1-BSD	1045	W	56583	124900	-----	07/31/2015 11:21	08/05/2015 21:47
SW-846 8015C	GTA-1 (18.5-20)	Initial	15073003-001	1035	S	56576	124714	07/27/2015	07/30/2015 09:41	07/30/2015 16:08
	GTA-4 (0-1.5)	Initial	15073003-002	1035	S	56576	124714	07/27/2015	07/30/2015 09:41	07/30/2015 16:37
	GTA-7 (13.5-15)	Initial	15073003-003	1035	S	56576	124714	07/28/2015	07/30/2015 09:41	07/30/2015 17:07
	GTA-9 (8.5-10)	Initial	15073003-004	1035	S	56576	124714	07/28/2015	07/30/2015 09:41	07/30/2015 17:36
	56576-2-BKS	BKS	56576-2-BKS	1035	S	56576	124714	-----	07/30/2015 09:41	07/30/2015 13:41
	56576-2-BLK	BLK	56576-2-BLK	1035	S	56576	124714	-----	07/30/2015 09:41	07/30/2015 11:14
	GTA-9 (8.5-10) S	MS	15073003-004 S	1035	S	56576	124714	07/28/2015	07/30/2015 09:41	07/30/2015 19:05
	GTA-9 (8.5-10) SD	MSD	15073003-004 SD	1035	S	56576	124714	07/28/2015	07/30/2015 09:41	07/30/2015 19:34



Analytical Data Package Information Summary

Work Order(s): 15073003

Report Prepared For: GTA - Laurel, Laurel, MD

Project Name: 150938

Project Manager: Jeff Mutter

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8015C	GTA-1-GW	Initial	15073003-005	1035	W	56577	124715	07/29/2015	07/30/2015 10:05	07/30/2015 19:34
	GTA-4-GW	Initial	15073003-006	1035	W	56577	124715	07/29/2015	07/30/2015 10:05	07/30/2015 19:59
	GTA-7-GW	Initial	15073003-007	1035	W	56577	124715	07/29/2015	07/30/2015 10:05	07/30/2015 20:25
	GTA-9-GW	Initial	15073003-008	1035	W	56577	124715	07/29/2015	07/30/2015 10:05	07/30/2015 20:50
	56577-2-BKS	BKS	56577-2-BKS	1035	W	56577	124715	-----	07/30/2015 10:05	07/30/2015 11:29
	56577-2-BLK	BLK	56577-2-BLK	1035	W	56577	124715	-----	07/30/2015 10:05	07/30/2015 11:03
	MW29 S	MS	15072926-001 S	1035	W	56577	124715	07/28/2015	07/30/2015 10:05	07/30/2015 21:16
	MW29 SD	MSD	15072926-001 SD	1035	W	56577	124715	07/28/2015	07/30/2015 10:05	07/30/2015 21:41
SW-846 8260 B	GTA-1-GW	Initial	15073003-005	1011	W	56634	124799	07/29/2015	08/03/2015 08:31	08/03/2015 12:56
	GTA-4-GW	Initial	15073003-006	1011	W	56634	124799	07/29/2015	08/03/2015 08:31	08/03/2015 18:00
	GTA-7-GW	Initial	15073003-007	1011	W	56634	124799	07/29/2015	08/03/2015 08:31	08/03/2015 18:40
	GTA-9-GW	Initial	15073003-008	1011	W	56634	124799	07/29/2015	08/03/2015 08:31	08/03/2015 19:18
	56634-1-BKS	BKS	56634-1-BKS	1011	W	56634	124799	-----	08/03/2015 08:31	08/03/2015 10:55
	56634-1-BLK	BLK	56634-1-BLK	1011	W	56634	124799	-----	08/03/2015 08:31	08/03/2015 12:06
	GTA-1-GW S	MS	15073003-005 S	1011	W	56634	124799	07/29/2015	08/03/2015 08:31	08/03/2015 16:01
	GTA-1-GW SD	MSD	15073003-005 SD	1011	W	56634	124799	07/29/2015	08/03/2015 08:31	08/03/2015 16:40
	GTA-1 (18.5-20)	Initial	15073003-001	1011	S	56652	124842	07/27/2015	08/04/2015 10:56	08/04/2015 17:16
	GTA-4 (0-1.5)	Initial	15073003-002	1011	S	56652	124842	07/27/2015	08/04/2015 10:56	08/04/2015 17:47
	GTA-7 (13.5-15)	Initial	15073003-003	1011	S	56652	124842	07/28/2015	08/04/2015 10:56	08/04/2015 18:18
	GTA-9 (8.5-10)	Initial	15073003-004	1011	S	56652	124842	07/28/2015	08/04/2015 10:56	08/04/2015 18:48
	56652-1-BKS	BKS	56652-1-BKS	1011	S	56652	124842	-----	08/04/2015 10:56	08/04/2015 12:07
	56652-1-BLK	BLK	56652-1-BLK	1011	S	56652	124842	-----	08/04/2015 10:56	08/04/2015 13:08
	CS1-072915 S	MS	15073011-001 S	1011	S	56652	124842	07/29/2015	08/04/2015 10:56	08/04/2015 14:12
	CS1-072915 SD	MSD	15073011-001 SD	1011	S	56652	124842	07/29/2015	08/04/2015 10:56	08/04/2015 14:42

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8015 C

Seq Number: 124848

PSS Sample ID: 15073003-001

Matrix: Soil

Prep Method: SW3550C

Date Prep: 08/01/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
o-Terphenyl	73		42-129	%	08/01/15 21:44

Analytical Method: SW-846 8015C

Seq Number: 124714

PSS Sample ID: 15073003-001

Matrix: Soil

Prep Method: SW5030

Date Prep: 07/30/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	85		55-142	%	07/30/15 16:08

Analytical Method: SW-846 8260 B

Seq Number: 124842

PSS Sample ID: 15073003-001

Matrix: Soil

Prep Method: SW5035

Date Prep: 08/04/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	98		80-125	%	08/04/15 17:16
Dibromofluoromethane	104		85-115	%	08/04/15 17:16
Toluene-D8	103		91-109	%	08/04/15 17:16

Analytical Method: SW-846 8015 C

Seq Number: 124848

PSS Sample ID: 15073003-002

Matrix: Soil

Prep Method: SW3550C

Date Prep: 08/01/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
o-Terphenyl	77		42-129	%	08/01/15 23:24

Analytical Method: SW-846 8015C

Seq Number: 124714

PSS Sample ID: 15073003-002

Matrix: Soil

Prep Method: SW5030

Date Prep: 07/30/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	83		55-142	%	07/30/15 16:37

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8260 B

Seq Number: 124842

PSS Sample ID: 15073003-002

Matrix: Soil

Prep Method: SW5035

Date Prep: 08/04/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	104		80-125	%	08/04/15 17:47
Dibromofluoromethane	109		85-115	%	08/04/15 17:47
Toluene-D8	102		91-109	%	08/04/15 17:47

Analytical Method: SW-846 8015 C

Seq Number: 124848

PSS Sample ID: 15073003-003

Matrix: Soil

Prep Method: SW3550C

Date Prep: 08/01/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
o-Terphenyl	77		42-129	%	08/01/15 20:03

Analytical Method: SW-846 8015C

Seq Number: 124714

PSS Sample ID: 15073003-003

Matrix: Soil

Prep Method: SW5030

Date Prep: 07/30/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	82		55-142	%	07/30/15 17:07

Analytical Method: SW-846 8260 B

Seq Number: 124842

PSS Sample ID: 15073003-003

Matrix: Soil

Prep Method: SW5035

Date Prep: 08/04/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	122		80-125	%	08/04/15 18:18
Dibromofluoromethane	104		85-115	%	08/04/15 18:18
Toluene-D8	102		91-109	%	08/04/15 18:18

Analytical Method: SW-846 8015 C

Seq Number: 124848

PSS Sample ID: 15073003-004

Matrix: Soil

Prep Method: SW3550C

Date Prep: 08/01/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
o-Terphenyl	74		42-129	%	08/01/15 22:09

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8015C

Seq Number: 124714

PSS Sample ID: 15073003-004

Matrix: Soil

Prep Method: SW5030

Date Prep: 07/30/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	84		55-142	%	07/30/15 17:36

Analytical Method: SW-846 8260 B

Seq Number: 124842

PSS Sample ID: 15073003-004

Matrix: Soil

Prep Method: SW5035

Date Prep: 08/04/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	98		80-125	%	08/04/15 18:48
Dibromofluoromethane	106		85-115	%	08/04/15 18:48
Toluene-D8	104		91-109	%	08/04/15 18:48

Analytical Method: SW-846 8015 C

Seq Number: 124900

PSS Sample ID: 15073003-005

Matrix: Ground Water

Prep Method: SW3510C

Date Prep: 07/31/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
o-Terphenyl	77		37-136	%	08/06/15 00:39

Analytical Method: SW-846 8015C

Seq Number: 124715

PSS Sample ID: 15073003-005

Matrix: Ground Water

Prep Method: SW5030B

Date Prep: 07/30/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	83		65-111	%	07/30/15 19:34

Analytical Method: SW-846 8260 B

Seq Number: 124799

PSS Sample ID: 15073003-005

Matrix: Ground Water

Prep Method: SW5030B

Date Prep: 08/03/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	104		81-133	%	08/03/15 12:56
Dibromofluoromethane	106		84-110	%	08/03/15 12:56
Toluene-D8	103		94-109	%	08/03/15 12:56

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8015 C

Seq Number: 124900

PSS Sample ID: 15073003-006

Matrix: Ground Water

Prep Method: SW3510C

Date Prep: 07/31/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
o-Terphenyl	84		37-136	%	08/06/15 01:14

Analytical Method: SW-846 8015C

Seq Number: 124715

PSS Sample ID: 15073003-006

Matrix: Ground Water

Prep Method: SW5030B

Date Prep: 07/30/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	83		65-111	%	07/30/15 19:59

Analytical Method: SW-846 8260 B

Seq Number: 124799

PSS Sample ID: 15073003-006

Matrix: Ground Water

Prep Method: SW5030B

Date Prep: 08/03/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	102		81-133	%	08/03/15 18:00
Dibromofluoromethane	106		84-110	%	08/03/15 18:00
Toluene-D8	102		94-109	%	08/03/15 18:00

Analytical Method: SW-846 8015 C

Seq Number: 124900

PSS Sample ID: 15073003-007

Matrix: Ground Water

Prep Method: SW3510C

Date Prep: 07/31/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
o-Terphenyl	73		37-136	%	08/06/15 01:14

Analytical Method: SW-846 8015C

Seq Number: 124715

PSS Sample ID: 15073003-007

Matrix: Ground Water

Prep Method: SW5030B

Date Prep: 07/30/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	84		65-111	%	07/30/15 20:25

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8260 B

Seq Number: 124799

PSS Sample ID: 15073003-007

Matrix: Ground Water

Prep Method: SW5030B

Date Prep: 08/03/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	102		81-133	%	08/03/15 18:40
Dibromofluoromethane	108		84-110	%	08/03/15 18:40
Toluene-D8	103		94-109	%	08/03/15 18:40

Analytical Method: SW-846 8015 C

Seq Number: 124900

PSS Sample ID: 15073003-008

Matrix: Ground Water

Prep Method: SW3510C

Date Prep: 07/31/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
o-Terphenyl	89		37-136	%	08/06/15 01:48

Analytical Method: SW-846 8015C

Seq Number: 124715

PSS Sample ID: 15073003-008

Matrix: Ground Water

Prep Method: SW5030B

Date Prep: 07/30/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	83		65-111	%	07/30/15 20:50

Analytical Method: SW-846 8260 B

Seq Number: 124799

PSS Sample ID: 15073003-008

Matrix: Ground Water

Prep Method: SW5030B

Date Prep: 08/03/2015

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	101		81-133	%	08/03/15 19:18
Dibromofluoromethane	108		84-110	%	08/03/15 19:18
Toluene-D8	103		94-109	%	08/03/15 19:18

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

H= Recovery of BS,BSD or both exceeded the laboratory control limits

L = Recovery of BS,BSD or both below the laboratory control limits

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8015 C

Seq Number: 124900

MB Sample Id: 56583-1-BLK

Matrix: Water

LCS Sample Id: 56583-1-BKS

Prep Method: SW3510C

Date Prep: 07/31/15

LCSD Sample Id: 56583-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-DRO (Diesel Range Organics)	<0.1000	1.000	0.9858	99	0.8568	86	61-119	14	20	mg/L	08/05/15 21:13	
Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	LCSD Result	LCSD Flag	Limits	Units	Analysis Date			
o-Terphenyl	104		100		86		37-136	%	08/05/15 21:13			

Analytical Method: SW-846 8015 C

Seq Number: 124848

MB Sample Id: 56596-1-BLK

Matrix: Solid

LCS Sample Id: 56596-1-BKS

Prep Method: SW3550C

Date Prep: 08/01/15

LCSD Sample Id: 56596-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-DRO (Diesel Range Organics)	<9.997	33.32	32.14	96	30.52	92	56-117	5	25	mg/kg	08/01/15 20:03	
Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	LCSD Result	LCSD Flag	Limits	Units	Analysis Date			
o-Terphenyl	67		81		80		42-129	%	08/01/15 20:03			

Analytical Method: SW-846 8015C

Seq Number: 124714

MB Sample Id: 56576-2-BLK

Matrix: Solid

LCS Sample Id: 56576-2-BKS

Prep Method: SW5030

Date Prep: 07/30/15

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
TPH-GRO (Gasoline Range Organic)	<97.47	4873	5623	115	60-112	ug/kg	07/30/15 13:41	H
Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date	
a,a,a-Trifluorotoluene	84		102		55-142	%	07/30/15 13:41	

Analytical Method: SW-846 8015C

Seq Number: 124715

MB Sample Id: 56577-2-BLK

Matrix: Water

LCS Sample Id: 56577-2-BKS

Prep Method: SW5030B

Date Prep: 07/30/15

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
TPH-GRO (Gasoline Range Organic)	<100	5000	4673	93	61-138	ug/L	07/30/15 11:29	
Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date	
a,a,a-Trifluorotoluene	83		90		65-111	%	07/30/15 11:29	

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8015C

Seq Number: 124714

Parent Sample Id: 15073003-004

Matrix: Soil

MS Sample Id: 15073003-004 S

Prep Method: SW5030

Date Prep: 07/30/15

MSD Sample Id: 15073003-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
TPH-GRO (Gasoline Range Organic)	866.7	5573	2815	35	2842	36	36-131	1	30	ug/kg	07/30/15 19:05	X
Surrogate			MS Result	MS Flag		MSD Result	MSD Flag	Limits		Units	Analysis Date	
a,a,a-Trifluorotoluene			95			95		55-142		%	07/30/15 19:05	

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8260 B

Seq Number: 124799

MB Sample Id: 56634-1-BLK

Matrix: Water

LCS Sample Id: 56634-1-BKS

Prep Method: SW5030B

Date Prep: 08/03/15

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Acetone	<10.00	50.00	41.07	82	53-146	ug/L	08/03/15 10:55	
Benzene	<1.000	50.00	52.74	105	77-122	ug/L	08/03/15 10:55	
Bromochloromethane	<1.000	50.00	55.61	111	71-122	ug/L	08/03/15 10:55	
Bromodichloromethane	<1.000	50.00	56.08	112	76-122	ug/L	08/03/15 10:55	
Bromoform	<5.000	50.00	51.31	103	69-115	ug/L	08/03/15 10:55	
Bromomethane	<1.000	50.00	44.08	88	40-147	ug/L	08/03/15 10:55	
2-Butanone (MEK)	<10.00	50.00	49.73	99	56-133	ug/L	08/03/15 10:55	
Carbon Disulfide	<10.00	50.00	53.08	106	62-134	ug/L	08/03/15 10:55	
Carbon Tetrachloride	<1.000	50.00	53.19	106	74-127	ug/L	08/03/15 10:55	
Chlorobenzene	<1.000	50.00	50.88	102	76-116	ug/L	08/03/15 10:55	
Chloroethane	<1.000	50.00	44.23	88	59-132	ug/L	08/03/15 10:55	
Chloroform	<1.000	50.00	53.70	107	71-118	ug/L	08/03/15 10:55	
Chloromethane	<1.000	50.00	39.90	80	62-131	ug/L	08/03/15 10:55	
Cyclohexane	<10.00	50.00	49.35	99	46-150	ug/L	08/03/15 10:55	
1,2-Dibromo-3-Chloropropane	<10.00	50.00	56.58	113	59-135	ug/L	08/03/15 10:55	
Dibromochloromethane	<1.000	50.00	46.33	93	75-114	ug/L	08/03/15 10:55	
1,2-Dibromoethane (EDB)	<1.000	50.00	54.54	109	78-121	ug/L	08/03/15 10:55	
1,2-Dichlorobenzene	<1.000	50.00	53.26	107	80-122	ug/L	08/03/15 10:55	
1,3-Dichlorobenzene	<1.000	50.00	51.77	104	80-122	ug/L	08/03/15 10:55	
1,4-Dichlorobenzene	<1.000	50.00	50.50	101	77-118	ug/L	08/03/15 10:55	
Dichlorodifluoromethane	<1.000	50.00	41.39	83	54-139	ug/L	08/03/15 10:55	
1,1-Dichloroethane	<1.000	50.00	51.89	104	51-136	ug/L	08/03/15 10:55	
1,2-Dichloroethane	<1.000	50.00	53.58	107	64-130	ug/L	08/03/15 10:55	
1,1-Dichloroethene	<1.000	50.00	47.08	94	59-123	ug/L	08/03/15 10:55	
cis-1,2-Dichloroethene	<1.000	50.00	55.72	111	77-119	ug/L	08/03/15 10:55	
1,2-Dichloropropane	<1.000	50.00	51.97	104	75-125	ug/L	08/03/15 10:55	
cis-1,3-Dichloropropene	<1.000	50.00	51.69	103	74-123	ug/L	08/03/15 10:55	
trans-1,3-Dichloropropene	<1.000	50.00	52.50	105	73-116	ug/L	08/03/15 10:55	
trans-1,2-Dichloroethene	<1.000	50.00	54.21	108	58-134	ug/L	08/03/15 10:55	
Ethylbenzene	<1.000	50.00	51.68	103	79-122	ug/L	08/03/15 10:55	
2-Hexanone	<10.00	50.00	48.50	97	56-134	ug/L	08/03/15 10:55	
Isopropylbenzene	<1.000	50.00	52.53	105	80-128	ug/L	08/03/15 10:55	
Methyl Acetate	<10.00	50.00	51.09	102	47-145	ug/L	08/03/15 10:55	
Methylcyclohexane	<10.00	50.00	52.48	105	61-155	ug/L	08/03/15 10:55	
Methylene Chloride	<1.000	50.00	52.71	105	61-126	ug/L	08/03/15 10:55	
4-Methyl-2-Pentanone	<5.000	50.00	47.20	94	45-145	ug/L	08/03/15 10:55	
Methyl-t-butyl ether	<1.000	50.00	58.68	117	30-168	ug/L	08/03/15 10:55	
Naphthalene	<1.000	50.00	53.99	108	46-154	ug/L	08/03/15 10:55	
Styrene	<1.000	50.00	47.81	96	73-118	ug/L	08/03/15 10:55	
1,1,2,2-Tetrachloroethane	<1.000	50.00	53.76	108	71-126	ug/L	08/03/15 10:55	
Tetrachloroethene	<1.000	50.00	53.39	107	78-113	ug/L	08/03/15 10:55	
Toluene	<1.000	50.00	53.94	108	77-123	ug/L	08/03/15 10:55	
1,2,3-Trichlorobenzene	<1.000	50.00	54.46	109	66-140	ug/L	08/03/15 10:55	
1,2,4-Trichlorobenzene	<1.000	50.00	53.76	108	72-143	ug/L	08/03/15 10:55	
1,1,1-Trichloroethane	<1.000	50.00	52.18	104	66-133	ug/L	08/03/15 10:55	
1,1,2-Trichloroethane	<1.000	50.00	56.29	113	72-128	ug/L	08/03/15 10:55	
Trichloroethene	<1.000	50.00	52.93	106	72-127	ug/L	08/03/15 10:55	
Trichlorofluoromethane	<5.000	50.00	49.04	98	45-130	ug/L	08/03/15 10:55	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<1.000	50.00	38.33	77	56-126	ug/L	08/03/15 10:55	
Vinyl Chloride	<1.000	50.00	42.33	85	64-132	ug/L	08/03/15 10:55	
m,p-Xylenes	<2.000	100	102.9	103	78-119	ug/L	08/03/15 10:55	

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8260 B

Seq Number: 124799

MB Sample Id: 56634-1-BLK

Matrix: Water

LCS Sample Id: 56634-1-BKS

Prep Method: SW5030B

Date Prep: 08/03/15

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
o-Xylene	<1.000	50.00	48.36	97	79-123	ug/L	08/03/15 10:55	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	103		98		81-133	%	08/03/15 10:55
Dibromofluoromethane	105		106		84-110	%	08/03/15 10:55
Toluene-D8	103		102		94-109	%	08/03/15 10:55

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8260 B

Seq Number: 124842

MB Sample Id: 56652-1-BLK

Matrix: Solid

LCS Sample Id: 56652-1-BKS

Prep Method: SW5030

Date Prep: 08/04/15

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Acetone	<19.92	59.76	55.82	93	24-197	ug/kg	08/04/15 12:07	
Benzene	<4.980	59.76	70.75	118	69-128	ug/kg	08/04/15 12:07	
Bromochloromethane	<4.980	59.76	57.16	96	64-121	ug/kg	08/04/15 12:07	
Bromodichloromethane	<4.980	59.76	58.64	98	60-125	ug/kg	08/04/15 12:07	
Bromoform	<4.980	59.76	56.69	95	46-128	ug/kg	08/04/15 12:07	
Bromomethane	<4.980	59.76	62.46	105	45-199	ug/kg	08/04/15 12:07	
2-Butanone (MEK)	<19.92	59.76	49.79	83	35-173	ug/kg	08/04/15 12:07	
Carbon Disulfide	<9.960	59.76	65.36	109	58-153	ug/kg	08/04/15 12:07	
Carbon Tetrachloride	<4.980	59.76	65.38	109	55-152	ug/kg	08/04/15 12:07	
Chlorobenzene	<4.980	59.76	59.05	99	61-124	ug/kg	08/04/15 12:07	
Chloroethane	<4.980	59.76	67.21	112	59-151	ug/kg	08/04/15 12:07	
Chloroform	<4.980	59.76	59.53	100	65-126	ug/kg	08/04/15 12:07	
Chloromethane	<4.980	59.76	57.44	96	62-143	ug/kg	08/04/15 12:07	
Cyclohexane	<19.92	59.76	73.35	123	50-148	ug/kg	08/04/15 12:07	
1,2-Dibromo-3-Chloropropane	<39.84	59.76	47.51	80	43-149	ug/kg	08/04/15 12:07	
Dibromochloromethane	<4.980	59.76	56.53	95	55-128	ug/kg	08/04/15 12:07	
1,2-Dibromoethane (EDB)	<4.980	59.76	56.24	94	64-123	ug/kg	08/04/15 12:07	
1,2-Dichlorobenzene	<4.980	59.76	56.56	95	38-128	ug/kg	08/04/15 12:07	
1,3-Dichlorobenzene	<4.980	59.76	57.18	96	42-123	ug/kg	08/04/15 12:07	
1,4-Dichlorobenzene	<4.980	59.76	57.27	96	40-121	ug/kg	08/04/15 12:07	
Dichlorodifluoromethane	<4.980	59.76	57.04	95	53-144	ug/kg	08/04/15 12:07	
1,1-Dichloroethane	<4.980	59.76	61.78	103	60-148	ug/kg	08/04/15 12:07	
1,2-Dichloroethane	<4.980	59.76	56.03	94	62-127	ug/kg	08/04/15 12:07	
1,1-Dichloroethene	<4.980	59.76	66.80	112	60-154	ug/kg	08/04/15 12:07	
1,2-Dichloropropane	<4.980	59.76	56.50	95	66-125	ug/kg	08/04/15 12:07	
cis-1,2-Dichloroethene	<4.980	59.76	59.98	100	67-126	ug/kg	08/04/15 12:07	
cis-1,3-Dichloropropene	<4.980	59.76	59.08	99	59-122	ug/kg	08/04/15 12:07	
trans-1,2-Dichloroethene	<4.980	59.76	64.49	108	60-153	ug/kg	08/04/15 12:07	
trans-1,3-Dichloropropene	<4.980	59.76	58.51	98	56-124	ug/kg	08/04/15 12:07	
Ethylbenzene	<4.980	59.76	61.01	102	58-130	ug/kg	08/04/15 12:07	
2-Hexanone	<19.92	59.76	49.74	83	30-175	ug/kg	08/04/15 12:07	
Isopropylbenzene	<4.980	59.76	62.38	104	52-130	ug/kg	08/04/15 12:07	
Methyl Acetate	<19.92	59.76	52.81	88	47-151	ug/kg	08/04/15 12:07	
Methylcyclohexane	<19.92	59.76	71.09	119	41-142	ug/kg	08/04/15 12:07	
Methylene Chloride	<4.980	59.76	59.10	99	56-140	ug/kg	08/04/15 12:07	
4-Methyl-2-Pentanone	<19.92	59.76	48.52	81	22-173	ug/kg	08/04/15 12:07	
Methyl-t-butyl ether	<4.980	59.76	58.51	98	59-133	ug/kg	08/04/15 12:07	
Naphthalene	<4.980	59.76	55.26	92	30-155	ug/kg	08/04/15 12:07	
Styrene	<4.980	59.76	60.97	102	54-123	ug/kg	08/04/15 12:07	
1,1,2,2-Tetrachloroethane	<4.980	59.76	54.94	92	50-134	ug/kg	08/04/15 12:07	
Tetrachloroethene	<4.980	59.76	65.36	109	55-145	ug/kg	08/04/15 12:07	
Toluene	<4.980	59.76	72.74	122	66-127	ug/kg	08/04/15 12:07	
1,2,3-Trichlorobenzene	<4.980	59.76	56.99	95	15-144	ug/kg	08/04/15 12:07	
1,2,4-Trichlorobenzene	<4.980	59.76	57.80	97	14-143	ug/kg	08/04/15 12:07	
1,1,1-Trichloroethane	<4.980	59.76	64.40	108	60-145	ug/kg	08/04/15 12:07	
1,1,2-Trichloroethane	<4.980	59.76	58.61	98	65-120	ug/kg	08/04/15 12:07	
Trichloroethene	<4.980	59.76	62.50	105	68-130	ug/kg	08/04/15 12:07	
Trichlorofluoromethane	<4.980	59.76	65.31	109	54-175	ug/kg	08/04/15 12:07	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<4.980	59.76	70.25	118	50-162	ug/kg	08/04/15 12:07	
Vinyl Chloride	<4.980	59.76	60.36	101	61-156	ug/kg	08/04/15 12:07	
m,p-Xylenes	<9.960	119.5	148.4	124	60-131	ug/kg	08/04/15 12:07	

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel
150938

Analytical Method: SW-846 8260 B

Seq Number: 124842

MB Sample Id: 56652-1-BLK

Matrix: Solid

LCS Sample Id: 56652-1-BKS

Prep Method: SW5030

Date Prep: 08/04/15

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
o-Xylene	<4.980	59.76	74.71	125	60-126	ug/kg	08/04/15 12:07	
Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date	
4-Bromofluorobenzene	94		95		80-125	%	08/04/15 12:07	
Dibromofluoromethane	100		102		85-115	%	08/04/15 12:07	
Toluene-D8	103		101		91-109	%	08/04/15 12:07	

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8260 B

Seq Number: 124799

Parent Sample Id: 15073003-005

Matrix: Ground Water

MS Sample Id: 15073003-005 S

Prep Method: SW5030B

Date Prep: 08/03/15

MSD Sample Id: 15073003-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Acetone	<10.00	50.00	41.43	83	50.42	101	41-161	20	25	ug/L	08/03/15 16:01	
Benzene	<1.000	50.00	51.27	103	52.99	106	75-132	3	25	ug/L	08/03/15 16:01	
Bromochloromethane	<1.000	50.00	54.00	108	56.04	112	67-130	4	25	ug/L	08/03/15 16:01	
Bromodichloromethane	<1.000	50.00	53.96	108	55.93	112	69-134	4	25	ug/L	08/03/15 16:01	
Bromoform	<5.000	50.00	50.62	101	53.50	107	65-115	6	25	ug/L	08/03/15 16:01	
Bromomethane	<1.000	50.00	43.51	87	42.31	85	29-154	3	25	ug/L	08/03/15 16:01	
2-Butanone (MEK)	<10.00	50.00	58.67	117	67.19	134	47-140	14	25	ug/L	08/03/15 16:01	
Carbon Disulfide	<10.00	50.00	51.57	103	52.50	105	59-146	2	25	ug/L	08/03/15 16:01	
Carbon Tetrachloride	<1.000	50.00	50.59	101	52.14	104	74-136	3	25	ug/L	08/03/15 16:01	
Chlorobenzene	<1.000	50.00	48.91	98	50.74	101	78-115	4	25	ug/L	08/03/15 16:01	
Chloroethane	<1.000	50.00	41.09	82	40.22	80	40-150	2	25	ug/L	08/03/15 16:01	
Chloroform	<1.000	50.00	51.33	103	52.92	106	67-130	3	25	ug/L	08/03/15 16:01	
Chloromethane	<1.000	50.00	39.15	78	37.94	76	59-144	3	25	ug/L	08/03/15 16:01	
Cyclohexane	<10.00	50.00	50.42	101	51.09	102	34-161	1	25	ug/L	08/03/15 16:01	
1,2-Dibromo-3-Chloropropane	<10.00	50.00	65.71	131	72.57	145	45-125	10	25	ug/L	08/03/15 16:01	X
Dibromochloromethane	<1.000	50.00	44.41	89	46.95	94	73-114	6	25	ug/L	08/03/15 16:01	
1,2-Dibromoethane (EDB)	<1.000	50.00	54.35	109	58.12	116	72-126	7	25	ug/L	08/03/15 16:01	
1,2-Dichlorobenzene	<1.000	50.00	50.64	101	52.57	105	73-117	4	25	ug/L	08/03/15 16:01	
1,3-Dichlorobenzene	<1.000	50.00	48.55	97	50.66	101	73-117	4	25	ug/L	08/03/15 16:01	
1,4-Dichlorobenzene	<1.000	50.00	47.56	95	49.46	99	72-111	4	25	ug/L	08/03/15 16:01	
Dichlorodifluoromethane	<1.000	50.00	41.62	83	41.43	83	47-159	0	25	ug/L	08/03/15 16:01	
1,1-Dichloroethane	<1.000	50.00	50.38	101	52.08	104	44-152	3	25	ug/L	08/03/15 16:01	
1,2-Dichloroethane	<1.000	50.00	52.46	105	54.24	108	60-142	3	25	ug/L	08/03/15 16:01	
1,1-Dichloroethene	<1.000	50.00	45.04	90	46.79	94	50-136	4	25	ug/L	08/03/15 16:01	
cis-1,2-Dichloroethene	<1.000	50.00	51.58	103	54.52	109	76-127	6	25	ug/L	08/03/15 16:01	
1,2-Dichloropropane	<1.000	50.00	50.65	101	51.57	103	70-139	2	25	ug/L	08/03/15 16:01	
cis-1,3-Dichloropropene	<1.000	50.00	45.76	92	50.44	101	64-127	10	25	ug/L	08/03/15 16:01	
trans-1,3-Dichloropropene	<1.000	50.00	51.12	102	52.78	106	62-123	3	25	ug/L	08/03/15 16:01	
trans-1,2-Dichloroethene	<1.000	50.00	52.57	105	53.55	107	54-144	2	25	ug/L	08/03/15 16:01	
Ethylbenzene	<1.000	50.00	50.17	100	52.02	104	74-129	4	25	ug/L	08/03/15 16:01	
2-Hexanone	<10.00	50.00	58.79	118	69.10	138	50-130	16	25	ug/L	08/03/15 16:01	X
Isopropylbenzene	<1.000	50.00	50.58	101	51.71	103	72-130	2	25	ug/L	08/03/15 16:01	
Methyl Acetate	<10.00	50.00	49.70	99	51.54	103	37-143	4	25	ug/L	08/03/15 16:01	
Methylcyclohexane	<10.00	50.00	52.03	104	52.53	105	55-148	1	25	ug/L	08/03/15 16:01	
Methylene Chloride	<1.000	50.00	50.77	102	51.19	102	56-137	1	25	ug/L	08/03/15 16:01	
4-Methyl-2-Pentanone	<5.000	50.00	52.95	106	63.63	127	44-133	18	25	ug/L	08/03/15 16:01	
Methyl-t-butyl ether	<1.000	50.00	59.07	118	63.14	126	22-182	7	25	ug/L	08/03/15 16:01	
Naphthalene	<1.000	50.00	60.44	121	66.77	134	7-137	10	25	ug/L	08/03/15 16:01	
Styrene	<1.000	50.00	45.49	91	47.22	94	67-121	4	25	ug/L	08/03/15 16:01	
1,1,2,2-Tetrachloroethane	<1.000	50.00	57.37	115	62.58	125	68-127	9	25	ug/L	08/03/15 16:01	
Tetrachloroethene	<1.000	50.00	52.20	104	53.91	108	69-126	3	25	ug/L	08/03/15 16:01	
Toluene	<1.000	50.00	53.27	107	54.67	109	74-132	3	25	ug/L	08/03/15 16:01	
1,2,3-Trichlorobenzene	<1.000	50.00	56.44	113	60.38	121	9-139	7	25	ug/L	08/03/15 16:01	
1,2,4-Trichlorobenzene	<1.000	50.00	51.41	103	53.86	108	31-135	5	25	ug/L	08/03/15 16:01	
1,1,1-Trichloroethane	<1.000	50.00	52.03	104	52.55	105	70-138	1	25	ug/L	08/03/15 16:01	
1,1,2-Trichloroethane	<1.000	50.00	58.36	117	60.31	121	65-143	3	25	ug/L	08/03/15 16:01	
Trichloroethene	<1.000	50.00	51.22	102	53.62	107	67-139	5	25	ug/L	08/03/15 16:01	
Trichlorofluoromethane	<5.000	50.00	49.30	99	49.48	99	37-147	0	25	ug/L	08/03/15 16:01	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<1.000	50.00	48.34	97	43.43	87	47-139	11	25	ug/L	08/03/15 16:01	
Vinyl Chloride	<1.000	50.00	40.36	81	39.58	79	60-146	2	25	ug/L	08/03/15 16:01	
m,p-Xylenes	<2.000	100	100.3	100	104.6	105	78-119	4	25	ug/L	08/03/15 16:01	

PHASE SEPARATION SCIENCE, INC.

QC Summary 15073003

GTA - Laurel

150938

Analytical Method: SW-846 8260 B

Seq Number: 124799

Parent Sample Id: 15073003-005

Matrix: Ground Water

MS Sample Id: 15073003-005 S

Prep Method: SW5030B

Date Prep: 08/03/15

MSD Sample Id: 15073003-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
o-Xylene	<1.000	50.00	45.28	91	47.33	95	80-123	4	25	ug/L	08/03/15 16:01	

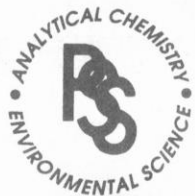
Surrogate	MS Result	MS Flag	MSD Result	MSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	98		97		81-133	%	08/03/15 16:01
Dibromofluoromethane	106		106		84-110	%	08/03/15 16:01
Toluene-D8	103		102		94-109	%	08/03/15 16:01

F = RPD exceeded the laboratory control limits

X = Recovery of MS, MSD or both outside of QC Criteria

H = Recovery of BS, BSD or both exceeded the laboratory control limits

L = Recovery of BS, BSD or both below the laboratory control limits



SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

www.phaseonline.com
email: info@phaseonline.com

1 *CLIENT: <u>GTA</u> *OFFICE LOC: <u>Laurel</u>					PSS Work Order #: <u>15073003</u> PAGE ____ OF ____																																																	
*PROJECT MGR: <u>Jeffrey Muller</u> *PHONE NO.: <u>(410)-984-9476</u>					Matrix Codes: SW=Surface Wtr DW=Drinking Wtr GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil L=Liquid SOL=Solid A=Air WI=Wipe																																																	
EMAIL: <u>jmulter@gtacng.com</u> <u>atrailer@gtacng.com</u> FAX NO.: ()					<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="4" style="writing-mode: vertical-rl; transform: rotate(180deg);">No. CONTAINERS</th> <th rowspan="4" style="writing-mode: vertical-rl; transform: rotate(180deg);">SAMPLE TYPE</th> <th colspan="10">Preservatives Used</th> <th rowspan="4" style="writing-mode: vertical-rl; transform: rotate(180deg);">REMARKS</th> </tr> <tr> <th colspan="10">Analysis/Method Required</th> </tr> <tr> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">C = COMP</th> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">G = GRAB</th> <th colspan="10" style="text-align: center;">③</th> </tr> <tr> <th colspan="10" style="text-align: center;">*</th> </tr> </table>					No. CONTAINERS	SAMPLE TYPE	Preservatives Used										REMARKS	Analysis/Method Required										C = COMP	G = GRAB	③										*									
No. CONTAINERS	SAMPLE TYPE	Preservatives Used										REMARKS																																										
		Analysis/Method Required																																																				
		C = COMP	G = GRAB	③																																																		
				*																																																		
*PROJECT NAME: <u>150938</u> PROJECT NO.: <u>150938</u>																																																						
SITE LOCATION: P.O. NO.:																																																						
SAMPLER(S): <u>Amanda Frailer</u> DW CERT NO.:																																																						
2 LAB NO.		*SAMPLE IDENTIFICATION		*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)																																																
1		GTA-1 (18.5-20)		7/27/15	1:25 PM	S	A	G	X	X	X																																											
2		GTA-4 (0-1.5)		7/27/15	9:00 AM	S	A	G	X	X	X																																											
3		GTA-7 (13.5-15)		7/28/15	1:30 PM	S	A	G	X	X	X																																											
4		GTA-9 (8.5-10)		7/28/15	9:00 AM	S	A	G	X	X	X																																											
5		GTA-1-GW		7/29/15	2:30 PM	G	G	G	X	X	X																																											
6		GTA-4-GW		7/29/15	1:55 PM	G	G	G	X	X	X																																											
7		GTA-7-GW		7/29/15	4:15 PM	G	G	G	X	X	X																																											
8		GTA-9-GW		7/29/15	3:30 PM	G	G	G	X	X	X																																											
5 Relinquished By: (1)		Date	Time	Received By:		4 *Requested TAT (One TAT per COC) <input checked="" type="checkbox"/> 5-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> 2-Day <input type="checkbox"/> Next Day <input type="checkbox"/> Emergency <input type="checkbox"/> Other Data Deliverables Required: COA QC SUMM CLP LIKE OTHER <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____ Special Instructions: <div style="text-align: center; font-size: 1.2em;">Tier 2 Pricing</div>					# of Coolers: _____																																											
Relinquished By: (2)		Date	Time	Received By:							Custody Seal: <u>ABS</u>																																											
Relinquished By: (3)		Date	Time	Received By:							Ice Present: <u>PRES</u> Temp: <u>30</u>																																											
Relinquished By: (4)		Date	Time	Received By:							Shipping Carrier: <u>CLIENT</u>																																											
						DW COMPLIANCE? YES <input type="checkbox"/> EDD FORMAT TYPE _____ STATE RESULTS REPORTED TO: MD <input type="checkbox"/> DE <input type="checkbox"/> PA <input type="checkbox"/> VA <input type="checkbox"/> WV <input type="checkbox"/> OTHER _____																																																



Phase Separation Science, Inc

Sample Receipt Checklist

Work Order # 15073003 **Received By** Rachel Davis
Client Name GTA - Laurel **Date Received** 07/30/2015 10:00:00 AM
Project Name 150938 **Delivered By** Client
Project Number 150938 **Tracking No** Not Applicable
Disposal Date 09/03/2015 **Logged In By** Jacob Prucnal

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	3
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

COC agrees with sample labels?	Yes	Sampler Name	<u>Amanda Frailer</u>
Chain of Custody	Yes	MD DW Cert. No.	<u>N/A</u>

Sample Container

Appropriate for Specified Analysis?	Yes	Custody Seal(s) Intact?	Not Applicable
Intact?	Yes	Seal(s) Signed / Dated	Not Applicable
Labeled and Labels Legible?	Yes		

Total No. of Samples Received 8

Total No. of Containers Received 40

Preservation

Metals	(pH<2)	N/A
Cyanides	(pH>12)	N/A
Sulfide	(pH>9)	N/A
TOC, COD, Phenols	(pH<2)	N/A
TOX, TKN, NH3, Total Phos	(pH<2)	N/A
VOC, BTEX (VOA Vials Rcvd Preserved)	(pH<2)	Yes
Do VOA vials have zero headspace?		Yes
624 VOC (Rcvd at least one unpreserved VOA vial)		N/A

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Samples Inspected/Checklist Completed By:

Jacob Prucnal

Date: 07/30/2015

Jacob Prucnal

PM Review and Approval:

Shirley Rivera

Date: 07/30/2015

Shirley Rivera