Second Quarter 2014 –Quarterly Monitoring Report

7-Eleven Store No. 32785
125 Hanover Pike
Hampstead, MD
Facility ID No. 11266
Case No. 2006-0282-CL

AECOM Environment
August 11, 2014
Document No.: 60144916

AECOM

AECOM
8320 Guilford Road, Suite L
Columbia, MD 21046

240.565.6501 tel
410.884.9271 fax

August 11, 2014

Mr. Jim Richmond
Maryland Department of Environment
Oil Control Program
1800 Washington Blvd. Suite 620
Baltimore, Maryland 21230-1719

AECOM Project #: 60144916

Subject: Second Quarter 2014 – Quarterly Monitoring Report
Compliance Reporting Date: August 15, 2014
7-Eleven Store No. 32785
125 Hanover Pike
Hampstead, MD
Facility ID No. 11266
Case No. 2006-0282-CL

Dear Mr. Richmond,

On behalf of 7-Eleven, Inc. (7-Eleven), AECOM has prepared the attached quarterly monitoring report for the above-referenced site. This report was prepared to meet the requirements set forth in the Consent Order between 7-Eleven and the Maryland Department of the Environment (MDE) dated March 21, 2011.

All ten on-site monitoring wells were sampled this period on June 9, 2014. The 7-Eleven on-site potable well was not sampled this period. The two tank field wells were gauged and were determined to be dry or had insufficient water for sampling.

The monitoring wells are gauged monthly and sampled quarterly; the tank field wells are gauged and sampled quarterly when sufficient water is present. The on-site potable well is sampled semi-annually as directed by the MDE. This site is located within the "High Risk Groundwater Use Area"; however, the sampling exceeds the frequency requirements set forth in MDE's Emergency Oil Pollution and Tank Management Regulations for sites located in a "High Risk Groundwater Use Area", effective January 26, 2005.

As directed by MDE, AECOM installed a point-of-entry-treatment (POET) system on the 124 Hanover Pike potable well on May 27, 2010; AECOM currently samples the system bimonthly. No volatile organic compounds (VOCs), including methyl-tert-butyl ether (MTBE), have been detected above laboratory detection limits in the final effluent. Six carbon changes had been conducted prior to this quarter the most recent of which was conducted on December 28, 2012.

AECOM will continue to conduct quarterly sampling of the monitoring and tank field wells. The next scheduled event is for September 2014. Based on historical observations and analytical data, AECOM requested a change to annual sampling for the 7-Eleven potable well, which was subsequently, approved my MDE. The next sampling event for the 7-Eleven potable well is approximately March 2015.

During this monitoring period, AECOM maintained and operated the groundwater recovery system per the MDE approved Corrective Action Plan (CAP) with revisions. System startup occurred on October 8, 2013; monthly system performance reports were submitted to MDE in December 2013 and January and February 2014. Warranty repairs were conducted by SCE, under AECOM oversight on May 6, 2014.

If you have any questions, please contact the undersigned at (240) 565-6501.

Yours sincerely,

Peter Pecora
Environmental Scientist
Peter.Pecora@aecom.com

John J. Canzeri
Project Manager
John.Canzeri@aecom.com

Marie Treiber
Regional Senior Project Manager
Marie.Treiber@aecom.com

Attachments:

Figure 1 – Groundwater Elevation Map – Shallow Wells, June 9, 2014
Figure 2 – Dissolved-Phase Hydrocarbon Concentration Map, June 9, 2014
Table 1 – Depth to Water and Groundwater Elevation of Monitoring Wells
Table 2 – Groundwater Analytical Results of Monitoring Well Sampling
Table 3 – 124 Hanover Pike Sampling Results
Table 4 - Residential Potable Well Sampling Results
Table 5 –Groundwater Remediation System Performance Data
Table 6 – Summary of Treatment System Analytical Results
Attachment A – Groundwater Laboratory Results – Monitoring Wells
Attachment B– MTBE Concentration Graphs-Over-Time
Attachment C – Residential Treatment and Non-Treatment Potable Well Lab Reports
Attachment D - Residential Treatment System Influent MTBE Concentrations Over Time
Attachment E – Groundwater Drawdown Graphs (Pumping Wells)
Attachment F – Groundwater Treatment System Laboratory Reports
Attachment G – Air Stripper Influent MTBE and TPH-GRO Concentration Graphs-Over-Time

cc: 7-Eleven Project File

QUARTERLY MONITORING REPORT- SECOND QUARTER 2014
7-ELEVEN STORE NO. 32785
125 Hanover Pike
Hampstead, MD
Facility ID No. 11266
Case No. 2006-0282-CL
AECOM Project 60144916

Compliance Reporting Date – August 15, 2014

AECOM Contacts:	John J. Canzeri, Project Manager Marie Treiber, Regional Senior Project Manager
7-Eleven, Inc. Contact:	Jose Rios, Manager Environmental Services

---

CURRENT SITE STATUS

- The site is an active 7-Eleven convenience store and retail gasoline station.
- Currently, ten monitoring wells, two tank field wells, and four shallow injection wells are located on the site. The monitoring wells are gauged monthly and sampled quarterly; the tank field wells are gauged and sampled quarterly when sufficient water is present. The on-site potable well is sampled annually as directed by the MDE. The sampling exceeds the frequency requirements set forth in MDE's Emergency Oil Pollution and Tank Management Regulations for sites located in a "High Risk Groundwater Use Area". The shallow injection wells were used in an Enhanced Bio-Augmentation Pilot Test through November 2011.
- The potable well and treatment system at 124 Hanover Pike is sampled bimonthly and monthly at the directive of MDE.
- Per MDE-approved Corrective Action Plan (CAP) with revisions, AECOM began installation of the ex-situ groundwater extraction and treatment system at the site on August 19, 2013.
- AECOM conducted the remediation system startup and shakedown on October 8, 2013.

PAST ACTIVITIES

- Two USTs (RUL #1 and PUL #2) and associated UST system were installed at the site in March 2000.
- On July 7, 8 and 11, 2005, AECOM installed three monitoring wells (MW-1 through MW-3) at the site to meet the requirements set forth in MDE's Emergency Oil Pollution and Tank Management Regulations, effective January 26, 2005. COMAR 26.10.02.03-4 requires installation of a minimum of three monitoring wells outside of the UST tank field for release detection and determination of groundwater flow direction at the site.

- On September 15, 2005, AECOM submitted a Monitoring Well Installation and Observation Report to MDE. ENSR on behalf of 7-Eleven recommended the installation of two additional monitoring wells at the site based on the presence of elevated concentrations of MTBE in monitoring wells MW-1 and MW-3.

- On October 5, 2005, MDE issued a directive letter approving installation of two additional monitoring wells at the site. MDE requested a self-audit of the underground storage tank (UST) system. MDE also required completion of a receptor survey, including review of all well completion records within a ½-mile radius of the site. On November 18, 2005, 7-Eleven submitted to MDE the results of an UST system self audit conducted October 26, 2005.

- On November 21 and 22, 2005, AECOM installed two additional monitoring wells (MW-4 and MW-5) at the site.

- On January 26, 2005, AECOM submitted the results of the receptor survey to MDE.

- On August 25, 2006, MDE issued a directive letter requesting a Supplemental Work Plan, detailing a plan to define the extent of petroleum hydrocarbons in the soil and groundwater and to determine if there was any off-site migration of either liquid or dissolved-phase hydrocarbons. Further, the letter requested submittal of an Interim Corrective Action Plan (CAP), evaluating subsurface vapors in the vicinity of the active UST field, and determining the most efficient and effective means of reducing the vapors should they be present in the vicinity of the active UST field and on-site monitoring well MW-1.

- On October 13, 2006, AECOM submitted the Supplemental Work Plan and Interim CAP requested in MDE's August 25, 2006 directive letter. The Interim CAP included a discussion of potential remediation and mitigation of contamination at the site through soil vapor extraction (SVE), as requested by MDE, while the Supplemental Work Plan entailed the use of geoprobe direct push technology to install borings and collect soil and groundwater samples.

- On January 22, 2007, MDE issued an approval letter, indicating that they were in agreement with the proposed plans. Further, MDE requested several additional items, including an increase in frequency of groundwater sampling from a semi-annual schedule to a quarterly schedule for the on-site monitoring wells and tank field wells, with the on-site potable well to remain on the current semi-annual sampling schedule. All monitoring well and tank field well samples were to continue to be analyzed for full-suite VOCs via EPA Method 8260B (also including fuel oxygenates) and total petroleum hydrocarbons via EPA method 8015B (diesel and gasoline range organics). The potable samples were to continue to be analyzed for full-suite VOCs via EPA Method 524.2 (including fuel oxygenates).

- On February 20, 2007, AECOM submitted a request for modification to and/or postponement of MDE's increased scope requirements in light of the January 2007 sampling results, historical analytical data and the groundwater flow direction on site. Since sampling was initiated in July 2005, MTBE concentrations in the up-gradient well MW-1 steadily decreased from 31,000 ug/l to below laboratory detection limits in the January 2007 sampling event. Additionally, MTBE concentrations in all sampled wells were below the MDE guideline of 20 µg/l during the January 2007 event. ENSR proposed that current site monitoring be increased to quarterly (with the exception of the on-site potable well which would remain semi-annual), as recommended by MDE in their January 22, 2007 letter, and recommended delayed completion of a Site Investigation Work Plan and a Site Conceptual Model.

- On April 26, 2007, MDE issued a directive letter, temporarily delaying completion of a Site Investigation Work Plan and a Site Conceptual Model pending the results of the Interim CAP.

- On July 17, 2007, six off-site private supply wells were sampled at the request of MDE. The six

private supply wells were located in the immediate area of the 7-Eleven facility, including 114, 118, 123, 124, 130 and 135 Hanover Pike. MTBE was detected at concentrations of 0.6 micrograms-per-liter (μg/l), 2.9 μg/l, 44 μg/l and 0.6 μg/l at 114, 118, 124 and 135 Hanover Pike. MTBE was below laboratory detection limits at 123 and 130 Hanover Pike. All other VOCs, including BTEX, were non-detect (ND) in each of the private supply wells sampled.

- On July 30, 2007 a confirmation sample was collected from 124 Hanover Pike, per MDE directive. The analytical results indicated an MTBE concentration of 150 μg/l.

- On July 22, 2008, MDE issued a directive for a Corrective Action Plan (CAP). Based on discussions with the MDE the CAP was to be prepared after additional monitoring wells were installed and feasibility testing could be completed.

- A Delineation Work Plan for the installation of three additional monitoring wells was submitted to the MDE on August 15, 2008 and was approved October 7, 2008.

- On November 17-19, 2008, three monitoring wells (one shallow and two deep wells) were installed.

- On December 1 and 2, 2008, geophysical testing was performed on the two deep wells. This survey was conducted in order to better define the fracture orientation, evaluate water-bearing zones and evaluate remedial strategies.

- On March 23, 2009, AECOM reviewed MDE files related to the former Crown Station 142 (Case #2003-0376 CL) located at 201 Hanover Pike. Geologic and sampling data were reviewed for possible relationships to the project site.

- On March 27, 2009, AECOM submitted an Enhanced Bio-Augmentation Pilot Test Work Plan to MDE, including installation of four 2-inch injection wells, Inj-1 to Inj-4, in the vicinity of monitoring well MW-6.

- On August 7, 2009, MDE approved the Enhanced Bio-Augmentation Pilot Test Work Plan and requested sampling of 124 and 130 Hanover Pike potable wells (pre-, mid-, and post-monitoring period).

- On September 28 and 29, 2009, four 2” diameter injection wells (INJ-1 through INJ-4) were installed and developed in the area of MW-6, as proposed in the Enhanced Bio-Augmentation Pilot Test Work Plan.

- On October 22, 2009, conduits connecting the wells and to a future storage tank were installed, and the wells were completed with manholes. These wells and the piping system will be used to determine the feasibility of subsurface injection of bio-remediation products.

- On April 1, 2010, AECOM began bio-remediation injections as part of the Enhanced Bio-Augmentation Pilot Test; results are summarized in Bio-Augmentation Reports under separate cover.

- On May 27, 2010, per MDE, AECOM installed a carbon treatment system on the potable well located at 124 Hanover Pike.

- On June 1 through 3, 2010, AECOM installed two deep monitoring wells (MW-9 and MW-10). The wells were installed as part of the preparation of the Corrective Action Plan to help delineate the bedrock aquifer.

- On January 4, 2011, per discussions with MDE, AECOM installed an ISOC in well INJ-3, one of

the two injection wells (INJ-2 and INJ-3), to enhance the bioremediation activity at the site. An ISOC could not be placed into well INJ-2 due to frozen lines. In December 2010 through February 2011, bio-remediation injections were postponed due to freezing conditions.

- On March 21, 2011, MDE issued an Administrative Consent Order to 7-Eleven, detailing the regulatory-mandated activities and reporting schedules for the site.

- As directed by MDE in their June 7, 2011 correspondence, samples collected from the treatment system located at 124 Hanover Pike will be sampled for Nitrate and Nitrite via EPA method 353.3 and Orthophosphate via EPA method 365.2 in alternating months. Further, well MW-9 will be added to the monthly gauging and DO monitoring schedule effective immediately.

- On March 5, 2012, AECOM prepared and submitted a work plan to conduct a 48-hour continuous pump test from either monitoring well MW-8 or MW-9. It was approved by MDE on May 9, 2012. The approval letter indicated that no later than August 1, 2012, a comprehensive report explaining the results of the pumping test activities must be submitted, which also needed to include a revised schedule for the submittal/implementation of a CAP.

- On March 27, 2012, AECOM submitted a Notice of Intent (NOI) request for authorization to discharge treated groundwater under a general discharge permit, MDE approved this request on May 8, 2012.

- On May 14, 2012, AECOM, on behalf of 7-Eleven, sub mitted an application to the MD-SHA District 7 Office for a District Office (DO) permit to discharge groundwater treated on site into a stormwater retention pond located adjacent to the property. This request was approved in a directive letter dated August 9, 2012.

- On August 1, 2012, AECOM submitted a request for an extension of the submittal date for the Pumping Test Summary Report to September 3, 2012, which was subsequently approved by Jim Richmond of MD-SHA.

- As approved by MDE, the Maryland State Highway Administration (MD-SHA) District 7 Office, and as permitted by the District Office (DC), a 48-hour continuous pump test from monitoring well MW-10 was performed on October 26, 2012.

- On December 21, 2012, a Corrective Action Plan including the pump test results was submitted to MDE.

- On December 21, 2012, AECOM submitted the Corrective Action Plan Submitted to MDE.

- MDE approved the CAP in a letter dated February 20, 2013. AECOM was required to submit a contingency plan (within 45 days of the CAP Approval letter) which will outline the procedures under which operation of the groundwater remediation system will continue, in the event that site conditions change, which may require alternative methods of wastewater disposal.

- On May 1, 2013, AECOM submitted the contingency plan for approval.

- On October 8, 2013, AECOM performed the startup and shakedown of the groundwater remediation system.

- On May 6, 2014, SCE, under the oversight of AECOM, performed warranty repairs on the fittings associated with the equipment installed in well MW-9.

ACTIVITIES THIS PERIOD

Monitoring Period: April through June 2014

Site Visit(s): April 8, 14, 21, and; May 3, 6, 7, 8, 12, 15, 16, 20, 21, 23, and 27; and June 9 and 24, 2014

Field Activities: Activities included monthly well gauging, quarterly well gauging and sampling of the monitoring and tank field wells, potable system sampling at 124 Hanover Pike, and ex-situ groundwater extraction system operation, maintenance and warranty repairs conducted by SCE.

Depth-to-Water: On June 9, 2014, depth-to-water in wells not under pumping conditions ranged from 19.36 feet below ground surface (bgs) in well MW-3 to 25.15 feet bgs in wells MW-2 and MW-7. In the three pumping wells (MW-8, MW-9 and MW-10), depth-to-water ranged from 105.29 feet bgs in well MW-10 to 136.06 feet bgs in well MW-9. Groundwater elevation maps for the shallow wells are shown as **Figure 1** and historical groundwater elevations are listed in **Table 1**. Bedrock and shallow groundwater flow is historically toward the southeast; shallow groundwater flow was to the southeast. A groundwater elevation map was not created for the bedrock wells due to three of the wells working under pumping conditions.

Liquid-Phase Hydrocarbons: No LPH has been observed at the site.

Number of Wells/ Wells Sampled: The ten on-site monitoring wells were sampled this period on June 9, 2014. The 7-Eleven potable well was not sampled this quarter. The two tank field wells could not be sampled because they were either dry or lacked sufficient water for sampling (**Table 2, Figure 2** and **Attachment A**).

Residential wells located at 114 and 118 Hanover Pike were sampled this period on June 24, 2014. Residential wells at 95 and 97 Phillips Drive were not vacant because there was no answer and no psi on the hose at 95 Phillips Drive, and 97 Phillips Drive remains vacant. Historical analytical results are provided in **Table 3**. Samples were collected from the POET system of the potable well servicing 124 Hanover Pike this period on May 3 and June 24, 2014. Historical analytical results are provided in **Table 4**.

ANALYTICAL SUMMARY

Groundwater

Groundwater samples were collected on June 9, 2014 from the ten on-site monitoring wells. Groundwater samples from the wells were analyzed for total volatile organic compounds (VOCs) and

oxygenates, including BTEX, MTBE, tert-Butyl alcohol (TBA) and tert-Amyl methyl ether (TAME) by EPA Method 8260, and TPH-GRO via EPA Method 8015.

Analysis of groundwater samples collected from the ten monitoring wells did not reveal dissolved-phase concentrations above laboratory detection limits for benzene or BTEX.

A dissolved-phase MTBE concentration of 420 µg/l was reported in monitoring well MW-8 (pumping well), which is a decrease from the last quarterly sampling event (1,000 µg/l). A dissolved-phase MTBE concentration of 760 µg/l was reported in monitoring well MW-9, a decrease from 3,500 µg/l during the last reporting period. Monitoring well MW-8 had a dissolved-phase concentration of TPH-GRO of 350 µg/l, the lowest such value since March 2012. Well MW-9 had a dissolved-phased concentration of TPH-GRO of 660 µg/l, which represents a decrease from the last reporting period (3,800 µg/l). A TAME concentration of 21 µg/l was reported in well MW-9. All remaining analytes in the pumping wells reported concentrations below detection limits.

All analytes reported concentrations below detection limits in monitoring well MW-10, the second such occurrence since June 2011. This represents the second consecutive quarter in which MTBE was observed below detection limits since that time as well.

Monitoring well MW-1 reported a MTBE concentration of 1 µg/l. Monitoring well MW-2 observed a MTBE concentration of 11 µg/l, the lowest such value since February 2010. Monitoring well MW-5 reported a MTBE concentration of 3.4 µg/l during this monitoring period.

A dissolved-phase MTBE concentration of 720 µg/l was reported in monitoring well MW-6, which represents a decrease over each of the last two quarters. Monitoring well MW-6 had a dissolved-phase concentration of TPH-GRO of 720 µg/l, which also represents a decrease over each of the last two quarters. All remaining analytes reported concentrations below detection limits.

A dissolved-phase MTBE concentration of 2.5 µg/l was reported in monitoring well MW-7. All remaining analytes reported concentrations below detection limits.

No other VOCs were detected above laboratory detection limits in the monitoring wells. Summary and laboratory reports are included as **Figure 2**, **Table 2**, and **Attachment A**. MTBE concentration graphs-over-time are provided as **Attachment B**.

7-Eleven Potable Well

Annual sampling of the on-site potable well was not performed this quarter. Historical analytical data is summarized in **Table 2**.

Residential Treatment Potable Well

Samples were collected from the POET system of the potable well servicing 124 Hanover Pike this quarter, on May 3 and June 24, 2014. At the request of MDE, the POET system was sampled monthly during the system startup for the first 90 days. The samples were analyzed for total VOCs plus oxygenates via EPA Method 524.2. AECOM samples the system bimonthly (pre-, mid-, and post-injection), based on carbon breakthrough data. MTBE Concentrations in the influent sample have steadily decreased since September 9, 2012 through the end of this quarter. The June 24, 2014 sampling event reported the lowest MTBE concentration on record (0.54 µg/l). Six carbon changes have been conducted to date, including change-out of all three carbon units on July 20, 2010, February 8, 2011, June 28, 2011, February 21, 2012, June 26, 2012 and December 28, 2012, based on TBA breakthrough of the first carbon unit. No VOCs, including MTBE, have been detected above laboratory detection limits in the final effluent. Residential treatment and non-treatment potable well sampling results are included in **Table 3**, and **Attachment C**. A graph depicting influent MTBE concentrations in the potable well located at 124 Hanover Pike over time is provided as **Attachment D**.

Residential Non-Treatment Potable Wells

Annual sampling of two residential wells located at 114 and 118 Hanover Pike was conducted this quarter on June 24, 2014. Sampling of the residential wells at 95 and 97 Phillips Drive was not conducted this quarter. No residents were home at 95 Phillips Drive at the time of the sampling event, and 97 Phillips Drive residence remains vacant. No analytes reported concentrations above detection limits in any of the residential wells sampled. No other residential wells were sampled during this quarter. Residential potable well sampling results are included in **Table 4**.

REMEDIATION SYSTEM SUMMARY

AECOM began installation of the ex-situ groundwater extraction and treatment system at the site on August 19, 2013. System startup and shakedown took place on October 8, 2013 following extensive inspections and piping testing to ensure maximum efficiency and operability. Based on decreasing methyl tert-butyl ether (MTBE) trends and MDE approval, AECOM excluded monitoring well MW-6 from the system. Electric submersible pumps have been installed in monitoring wells MW-8, MW-9 and MW-10 at depths from the top-of-casing of 180 feet (ft), 185 ft, and 185 ft below ground surface (bgs), respectively.

All extracted groundwater is treated through an air stripper, two particulate filters, and two 500-pound granular activated carbon (GAC) units prior to discharge. The treated groundwater is discharged to the stormwater collection system on the vicinity of the 7-Eleven property. The treated groundwater is discharged in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) General Permit and all necessary permits obtained from Carroll County. The air stripper system received an exemption from the requirements of the General Permit to Construct for Soil Vapor Extraction and Groundwater Air Stripping Equipment due to the concentrations remaining well below the de minimis standards.

In accordance with the MDE CAP Approval letter and Discharge Monitoring Reporting requirements dated February 20, 2013, AECOM samples the remediation system effluent twice monthly and completes twice monthly operation and maintenance (O&M) site visits, including gauging of the monitoring wells, to evaluate the operation of the remediation system and to complete any necessary system maintenance.

The remediation system was started on October 8, 2013. A total of 1,522,385 gallons of treated groundwater have been discharged through the end of this reporting period, 526,712 of which were discharged from the system during this reporting period (April through June 2014): 104,407 gallons were pumped from monitoring well MW-8 at an average rate of 0.85 gallons-per-minute (gpm); 22,867 gallons were pumped from monitoring well MW-9 at an average rate of 0.19 gpm; and 399,438 gallons were pumped from monitoring well MW-10 at an average rate of 3.26 gpm. System performance data is provided in **Table 5.**

Depth-to-water during this quarter in monitoring well MW-8 ranged from 109.34 feet bgs on April 21, 2014 to 132.62 feet bgs on June 9, 2014. Depth-to-water during this quarter in monitoring well MW-9 ranged from 53.60 feet bgs on April 21, 2014 (pump was inoperable) to 177.55 feet bgs on May 7, 2014. Depth-to-water during this quarter in monitoring well MW-10 83.65 feet bgs on May 7, 2014 to 134.77 feet bgs on April 21, 2014. Groundwater drawdown graphs of the pumping wells (MW-8, MW-9 and MW-10) are provided in **Attachment E**.

Groundwater Treatment System Analytical Summary

Air stripper influent and effluent samples were collected and submitted for laboratory analysis on April 8, May 7 and June 9, 2014 (also includes a GAC 1 influent and GAC 2 effluent sample). The April 8, 2014 sampling event revealed an air stripper influent MTBE concentration of 240 µg/l, while the remaining two sampling event air stripper influent samples reported MTBE concentrations of 180 µg/l. Tert-butanol (TBA) was only reported during the May 7, 2014 sampling event, when it was revealed to be 25 µg/l. During this quarter, the three sampling events revealed TPH-GRO concentrations of 170 µg/l, 260 µg/l and 180 µg/l, respectively. Tert-amyl methyl ether (TAME) has not been detected in the air stripper influent since it was first sampled on October 17, 2013, which it reported a concentration of 12 µg/l. All remaining analytes in the air stripper influent revealed concentrations below detection limits during all three sampling events this quarter. The air stripper effluent sample reported all analytes below detection limits during all three sampling events this quarter with the exception of MTBE during the April 8, 2014 sampling event, which revealed a concentration of 1.7 µg/l, representing an air stripper efficiency of more than 99%. The GAC 1 effluent sample from all three sampling events during this reporting period revealed all analytes below detection limits. A system final effluent (GAC 2) sample was collected on April 8 and 21, 2014, May 7 and 20, 2014, and June 9 and 24, 2014, the results of which revealed all analyte parameters below detection limits.

A summary of the analytical results are provided in **Table 6**. Laboratory reports are provided in **Attachment F**. Graphs depicting the air stripper MTBE and TPH-GRO concentrations over time is provided in **Attachment G**.

Summary

Based on historical analytical data and groundwater flow direction, dissolved-phase MTBE was initially concentrated in the area near the tank field (MW-1 and MW-6). MTBE concentrations in well MW-1 have dropped nearly two orders of magnitude since the well was sampled in July 2005. Decreases in MTBE were observed in wells MW-1, MW-2, and MW-6 through MW-9. Decreases in TPH-GRO concentrations were observed in wells MW-6, MW-8 and MW-9, with the remaining wells reporting TPH-GRO concentrations below detection limits. Dissolved-phase gasoline compounds in bedrock well MW-7 remain below laboratory detection limits with the exception of a MTBE concentration of 2.5 µg/l. MTBE was not detected in bedrock well MW-10 for the second consecutive quarter, representing the only two quarters with no detectable concentration since June 2011. Bedrock well MW-8 revealed a decrease in MTBE concentration this quarter with the lowest such value since June 2012 (420 µg/l) MTBE concentrations in bedrock well MW-9 also decreased since last quarter, dropping more than 78% from 3,500 µg/l to 760 µg/l during this reporting period. Following system warranty repairs in May 2014, the system appears to be operating with the most efficiency sine startup in October 2013. Furthermore, MTBE influent concentrations in the potable well servicing 124 Hanover Pike dropped to the lowest such value on record during this reporting period (0.54 µg/l).

ACTIVITIES FOR THE THIRD QUARTER 2014

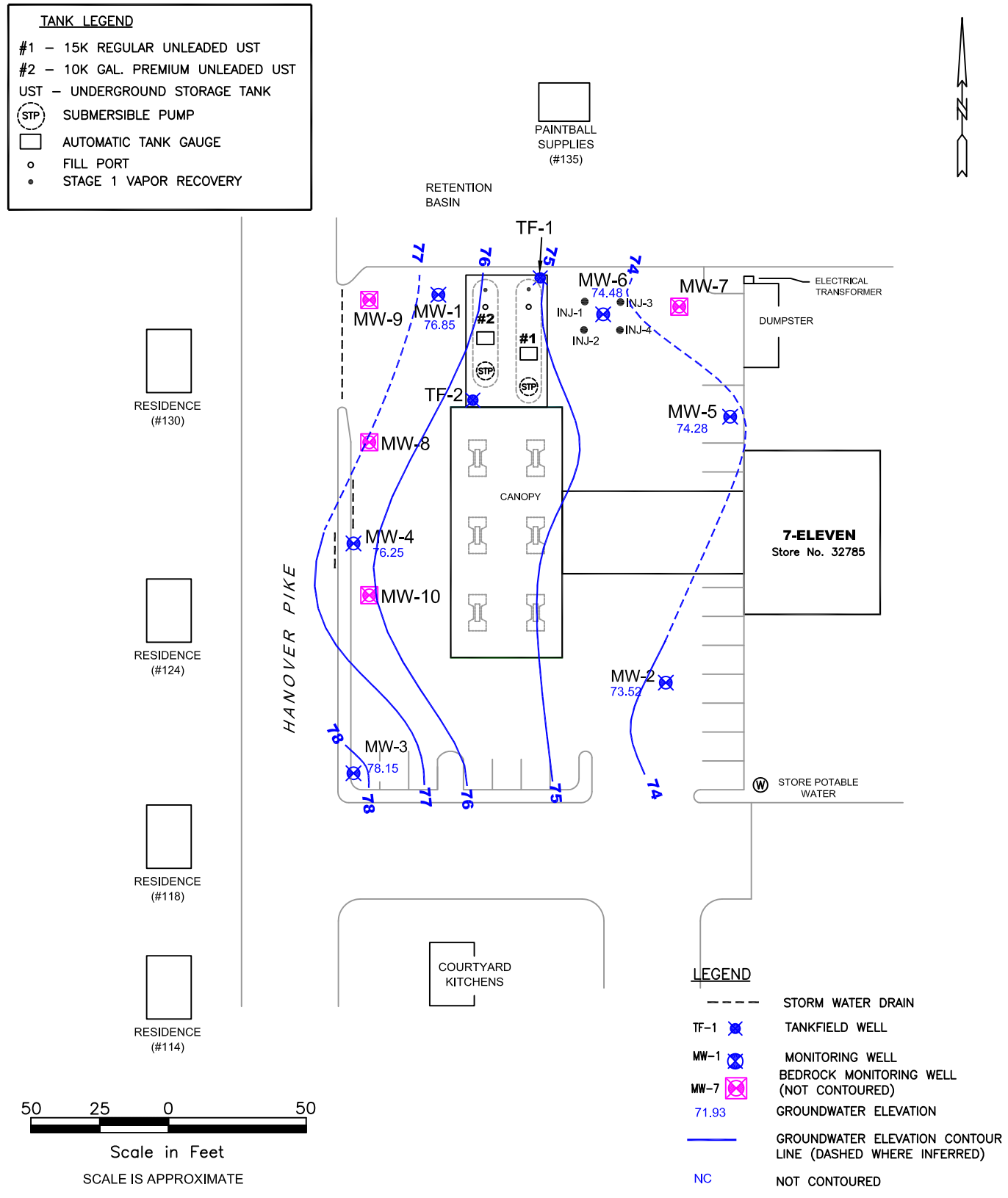
- July 2014 – Conduct bimonthly sampling of potable well at 124 Hanover Pike; complete carbon change of 124 Hanover Pike potable well treatment system as necessary; conduct monthly well gauging. Conduct system monitoring and monthly sampling regimen.

- August 2014 – Complete carbon change of 124 Hanover Pike potable well treatment system as necessary; monthly well gauging. Conduct system monitoring and monthly sampling regimen.

- September 2014 – Conduct bimonthly sampling of potable well at 124 Hanover Pike; conduct quarterly gauging and sampling of monitoring and tank field wells. Complete

carbon change of 124 Hanover Pike potable well treatment system as necessary; monthly well gauging. Conduct system monitoring and monthly sampling regimen.

FIGURES



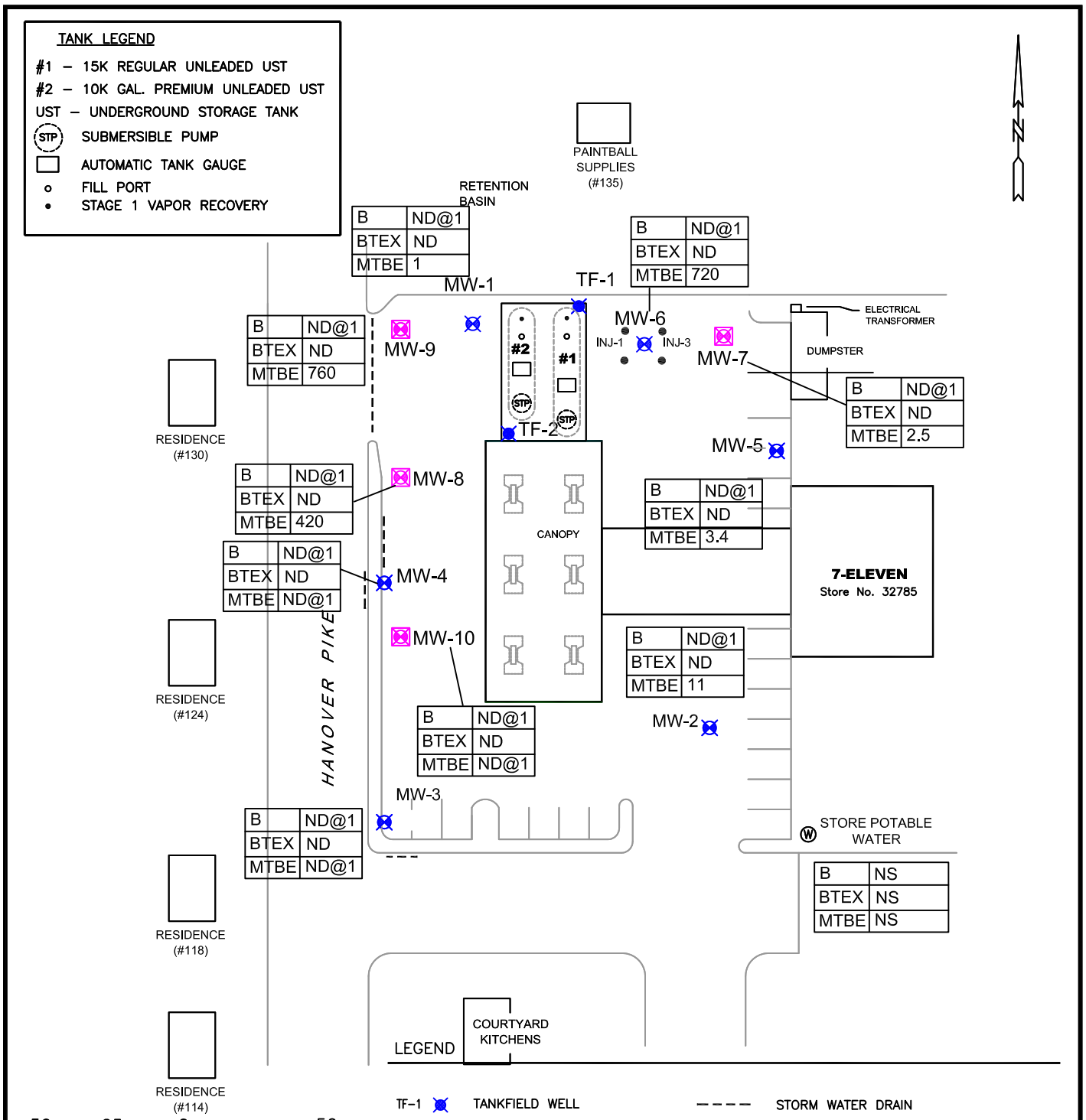
AECOM
AECOM CORPORATION
8320 GUILFORD ROAD, SUITE L
COLUMBIA, MD 21046
PHONE: (410) 884-9280
FAX: (410) 884-9271
WEB: HTTP://WWW.AECOM.COM

GROUNDWATER ELEVATION MAP SHALLOW WELLS (PUMPING CONDITIONS) June 9, 2014

7-ELEVEN STORE NO. 32785
125 HANOVER PIKE
HAMPSTEAD, MD

FIGURE NUMBER: 1

DRAWN BY:	CHECKED BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
PP	JC	8/6/14	60144916	1 OF 1



NOTE:

MW–1 THROUGH MW–3 WERE INSTALLED 7/2005.
MW–4 THROUGH MW–5 WERE INSTALLED 11/2005.
MW–6 THROUGH MW–8 WERE INSTALLED 12/2008.

AECOM ENVIRONMENT
8320 GUILFORD ROAD, SUITE L
COLUMBIA, MD 21046
PHONE: (410) 884–9280
FAX: (410) 884–9271
WEB: HTTP://WWW.AECOM.COM

DISSOLVED-PHASE HYDROCARBON CONCENTRATION MAP (ug/l)
June 9, 2014

7–ELEVEN STORE NO. 32785
125 HANOVER PIKE
HAMPSTEAD, MD

FIGURE NUMBER: 2

DRAWN BY:	CHECKED BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
PP	JC	8/5/14	60144916	1 OF 1

TABLES

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
MW-1	96.54	7/25/05	24.47	72.07
		8/18/05	25.98	70.56
Installed 7/7/05		1/25/06	24.92	71.62
Total depth 35'		7/11/06	25.74	70.80
Screened 15' to 35'		9/7/06	28.08	68.46
4" casing; .020 slot screen		1/9/07	25.45	71.09
		6/14/07	25.32	71.22
		11/30/07	31.10	65.44
		2/14/08	29.20	67.34
		5/23/08	25.04	71.50
		8/7/08	25.36	71.18
		12/3/08	27.22	69.32
		2/12/09	26.15	70.39
		5/12/09	23.56	72.98
		8/19/09	24.86	71.68
		11/4/09	21.88	74.66
		2/26/10	22.26	74.28
		5/13/10	23.85	72.69
		8/17/10	25.37	71.17
		11/28/10	28.04	68.50
		2/2/11	28.78	67.76
		3/31/11	23.52	73.02
		4/6/11	24.26	72.28
		5/26/11	22.25	74.29
		6/28/11	25.66	70.88
		7/29/11	26.25	70.29
		8/26/11	25.03	71.51
		9/26/11	23.75	72.79
		10/14/11	24.45	72.09
		11/23/11	23.71	72.83
		12/20/11	21.85	74.69
		1/10/12	22.09	74.45
		2/24/12	24.28	72.26
		3/8/12	23.63	72.91
		6/7/12	21.54	75.00
		7/17/12	24.69	71.85
		8/21/12	24.34	72.20
		9/19/12	26.18	70.36
		10/24/12	24.74	71.80
		10/31/12	23.67	72.87
		11/27/12	24.14	72.40
		12/21/12	25.20	71.34
		1/22/13	24.07	72.47
		2/26/13	23.40	73.14
		3/29/13	22.60	73.94
		4/17/13	23.78	72.76
		5/30/13	24.57	71.97
		6/5/13	24.98	71.56
		7/23/13	24.88	71.66
		8/29/13	26.09	70.45
		9/25/13	27.68	68.86
		10/14/13	26.21	70.33
		10/15/13	25.68	70.86
		10/17/13	25.04	71.50
		10/21/13	24.77	71.77
		11/14/13	26.10	70.44
		11/25/13	26.48	70.06
		12/16/13	23.81	72.73
		1/13/14	22.28	74.26
		1/29/14	NA	NA
		2/10/14	22.00	74.54
		3/11/14	20.59	75.95
		4/21/14	19.04	77.50
		5/7/14	18.05	78.49
		6/9/14	19.69	76.85

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
MW-2	98.67	7/25/05	27.60	71.07
		8/18/05	28.38	70.29
Installed 7/7/05		1/25/06	27.85	70.82
Total depth 35'		7/11/06	28.92	69.75
Screened 15' to 35'		9/7/06	30.15	68.52
4" casing; .020 slot screen		1/9/07	28.36	70.31
		6/14/07	27.51	71.16
		11/30/07	33.37	65.30
		2/14/08	32.17	66.50
		5/23/08	28.63	70.04
		8/7/08	28.58	70.09
		12/3/08	31.07	67.60
		2/12/09	29.10	69.57
		5/12/09	28.56	70.11
		8/19/09	28.56	70.11
		11/4/09	27.27	71.40
		2/26/10	25.49	73.18
		5/13/10	25.33	73.34
		8/17/10	28.98	69.69
		11/28/10	30.78	67.89
		2/2/11	31.34	67.33
		3/31/11	26.01	72.66
		4/6/11	28.63	70.04
		5/26/11	26.46	72.21
		6/28/11	27.59	71.08
		7/29/11	29.38	69.29
		8/26/11	29.97	68.70
		9/26/11	27.99	70.68
		10/14/11	27.49	71.18
		11/23/11	27.19	71.48
		12/20/11	22.24	76.43
		1/10/12	25.82	72.85
		2/24/12	26.39	72.28
		3/8/12	26.66	72.01
		6/7/12	27.22	71.45
		7/17/12	28.41	70.26
		8/21/12	28.50	70.17
		9/19/12	29.13	69.54
		10/24/12	29.14	69.53
		10/31/12	28.94	69.73
		11/27/12	28.51	70.16
		12/21/12	27.76	70.91
		1/22/13	27.67	71.00
		2/26/13	26.86	71.81
		3/29/13	26.60	72.07
		4/17/13	26.83	71.84
		5/30/13	27.41	71.26
		6/5/13	27.70	70.97
		7/23/13	27.67	71.00
		8/29/13	29.15	69.52
		9/25/13	30.29	68.38
		10/14/13	31.34	67.33
		10/15/13	31.43	67.24
		10/17/13	31.45	67.22
		10/21/13	31.57	67.10
		11/14/13	31.82	66.85
		11/25/13	32.17	66.50
		12/16/13	31.49	67.18
		1/13/14	29.88	68.79
		1/29/14	28.68	69.99
		2/10/14	28.75	69.92
		3/11/14	27.81	70.86
		4/21/14	26.22	72.45
		5/7/14	25.80	72.87
		6/9/14	25.15	73.52

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
MW-3	97.51	7/25/05	25.02	72.49
		8/18/05	27.41	70.10
Installed 7/11/05		1/25/06	24.56	72.95
Total depth 35'		7/11/06	25.42	72.09
Screened 15' to 35'		9/7/06	28.17	69.34
4" casing; .020 slot screen		1/9/07	24.29	73.22
		6/14/07	26.85	70.66
		11/30/07	32.45	65.06
		2/14/08	29.80	67.71
		5/23/08	24.09	73.42
		8/7/08	26.85	70.66
		12/3/08	29.55	67.96
		2/12/09	28.17	69.34
		5/12/09	25.63	71.88
		8/19/09	27.15	70.36
		11/4/09	23.84	73.67
		2/26/10	NG	--
		5/13/10	24.64	72.87
		8/17/10	26.04	71.47
		11/28/10	29.93	67.58
		2/2/11	NG	--
		3/31/11	NG	--
		4/6/11	26.33	71.18
		5/26/11	24.52	72.99
		6/28/11	27.32	70.19
		7/29/11	29.02	68.49
		8/26/11	28.00	69.51
		9/26/11	25.48	72.03
		10/14/11	26.27	71.24
		11/23/11	25.38	72.13
		12/20/11	24.12	73.39
		1/10/12	24.48	73.03
		2/24/12	26.09	71.42
		3/8/12	25.58	71.93
		6/7/12	23.96	73.55
		7/17/12	26.86	70.65
		8/21/12	26.61	70.90
		9/19/12	28.22	69.29
		10/24/12	26.41	72.26
		10/31/12	25.36	73.31
		11/27/12	25.96	72.71
		12/21/12	26.85	71.82
		1/22/13	25.55	73.12
		2/26/13	25.27	73.40
		3/29/13	24.96	72.55
		4/17/13	25.86	71.65
		5/30/13	26.58	70.93
		6/5/13	26.89	70.62
		7/23/13	26.80	70.71
		8/29/13	28.20	69.31
		9/25/13	29.94	67.57
		10/14/13	26.21	71.30
		10/15/13	25.28	72.23
		10/17/13	24.41	73.10
		10/21/13	24.24	73.27
		11/14/13	25.05	72.46
		11/25/13	25.12	72.39
		12/16/13	23.48	74.03
		1/13/14	23.02	74.49
		1/29/14	24.96	72.55
		2/10/14	21.90	75.61
		3/11/14	20.42	77.09
		4/21/14	19.28	78.23
		5/7/14	17.75	79.76
		6/9/14	19.36	78.15

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
MW-4	96.30	7/25/05	NI	--
		8/18/05	NI	--
Installed 11/21/05		1/25/06	23.78	72.52
Total depth 35'		7/11/06	24.06	72.24
Screened 15' to 35'		9/7/06	28.29	68.01
4" casing; .020 slot screen		1/9/07	23.91	72.39
		6/14/07	25.49	70.81
		11/30/07	31.07	65.23
		2/14/08	28.36	67.94
		5/23/08	23.06	73.24
		8/7/08	25.40	70.90
		12/3/08	28.98	67.32
		2/12/09	26.65	69.65
		5/12/09	23.93	72.37
		8/19/09	25.43	70.87
		11/4/09	22.00	74.30
		2/26/10	22.79	73.51
		5/13/10	23.25	73.05
		8/17/10	25.91	70.39
		11/28/10	28.44	67.86
		2/2/11	29.19	67.11
		3/31/11	23.94	72.36
		4/6/11	24.63	71.67
		5/26/11	22.84	73.46
		6/28/11	25.85	70.45
		7/29/11	27.44	68.86
		8/26/11	25.97	70.33
		9/26/11	23.78	72.52
		10/14/11	24.77	71.53
		11/23/11	24.32	71.98
		12/20/11	22.47	73.83
		1/10/12	22.85	73.45
		2/24/12	24.49	71.81
		3/8/12	24.20	72.10
		6/7/12	22.01	74.29
		7/17/12	25.19	71.11
		8/21/12	NG	
		9/19/12	26.63	69.67
		10/24/12	25.05	71.25
		10/31/12	24.48	71.82
		11/27/12	24.36	71.94
		12/21/12	25.46	70.84
		1/22/13	24.12	72.18
		2/26/13	23.67	72.63
		3/29/13	23.38	72.92
		4/17/13	24.34	71.96
		5/30/13	26.37	69.93
		6/5/13	25.45	70.85
		7/23/13	25.24	71.06
		8/29/13	26.61	69.69
		9/25/13	29.48	66.82
		10/14/13	25.88	70.42
		10/15/13	24.65	71.65
		10/17/13	23.67	72.63
		10/21/13	23.50	72.80
		11/14/13	24.32	71.98
		11/25/13	24.35	71.95
		12/16/13	22.81	73.49
		1/13/14	22.07	74.23
		1/29/14	NA	NA
		2/10/14	20.90	75.40
		3/11/14	19.56	76.74
		4/21/14	19.00	77.30
		5/7/14	17.20	79.10
		6/9/14	20.05	76.25

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
MW-5	98.35	7/25/05	NI	--
		8/18/05	NI	--
Installed 11/22/05		1/25/06	27.55	70.80
Total depth 35'		7/11/06	28.54	69.81
Screened 15' to 35'		9/7/06	29.97	68.38
4" casing; .020 slot screen		1/9/07	28.08	70.27
		6/14/07	27.38	70.97
		11/30/07	33.06	65.29
		2/14/08	31.74	66.61
		5/23/08	28.02	70.33
		8/7/08	28.18	70.17
		12/3/08	30.45	67.90
		2/12/09	28.67	69.68
		5/12/09	27.88	70.47
		8/19/09	28.20	70.15
		11/4/09	26.55	71.80
		2/26/10	25.22	73.13
		5/13/10	25.21	73.14
		8/17/10	28.62	69.73
		11/28/10	30.49	67.86
		2/2/11	35.96	62.39
		3/31/11	27.91	70.44
		4/6/11	28.05	70.30
		5/26/11	25.96	72.39
		6/28/11	27.47	70.88
		7/29/11	29.18	69.17
		8/26/11	29.40	68.95
		9/26/11	27.36	70.99
		10/14/11	27.11	71.24
		11/23/11	26.85	71.50
		12/20/11	25.71	72.64
		1/10/12	25.43	72.92
		2/24/12	26.30	72.05
		3/8/12	26.42	71.93
		6/7/12	26.45	71.90
		7/17/12	27.66	70.69
		8/21/12	27.98	70.37
		9/19/12	28.79	69.56
		10/24/12	28.52	69.83
		10/31/12	28.28	70.07
		11/27/12	27.10	71.25
		12/21/12	27.41	70.94
		1/22/13	27.14	71.21
		2/26/13	26.38	71.97
		3/29/13	26.13	72.22
		4/17/13	26.59	71.76
		5/30/13	27.30	71.05
		6/5/13	27.68	70.67
		7/23/13	27.56	70.79
		8/29/13	28.81	69.54
		9/25/13	30.00	68.35
		10/14/13	NG	NG
		10/15/13	30.73	67.62
		10/17/13	30.64	67.71
		10/21/13	30.64	67.71
		11/14/13	NG	NG
		11/25/13	31.16	67.19
		12/16/13	30.15	68.20
		1/13/14	28.72	69.63
		1/29/14	NA	NA
		2/10/14	27.67	70.68
		3/11/14	26.49	71.86
		4/21/14	24.94	73.41
		5/7/14	24.26	74.09
		6/9/14	24.07	74.28

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
MW-6	95.74	12/3/08	28.89	66.85
		2/12/09	27.52	68.22
Installed 11/17/08		5/12/09	25.91	69.83
Total depth 40'		8/19/09	26.68	69.06
Screened 15' to 40'		11/4/09	24.30	71.44
4" casing; .020 slot screen		2/26/10	23.89	71.85
		5/13/10	24.06	71.68
		8/17/10	27.08	68.66
		11/28/10	29.18	66.56
		2/2/11	29.72	66.02
		3/31/11	25.84	69.90
		4/6/11	26.20	69.54
		5/26/11	24.36	71.38
		6/28/11	26.40	69.34
		7/29/11	27.98	67.76
		8/26/11	27.40	68.34
		9/26/11	25.46	70.28
		10/14/11	25.63	70.11
		11/23/11	25.37	70.37
		12/20/11	23.91	71.83
		1/10/12	23.92	71.82
		2/24/12	24.81	70.93
		3/8/12	25.19	70.55
		6/7/12	24.10	71.64
		7/17/12	26.15	69.59
		8/21/12	26.24	69.50
		9/19/12	27.36	68.38
		10/24/12	26.68	69.06
		10/31/12	26.22	69.52
		11/27/12	25.52	70.22
		12/21/12	26.10	69.64
		1/22/13	27.48	68.26
		2/26/13	24.87	70.87
		3/29/13	24.55	71.19
		4/17/13	25.20	70.54
		5/30/13	25.82	69.92
		6/5/13	26.18	69.56
		7/23/13	26.26	69.48
		8/29/13	27.38	68.36
		9/25/13	28.80	66.94
		10/14/13	28.34	67.40
		10/15/13	27.95	67.79
		10/17/13	27.44	68.30
		10/21/13	27.21	68.53
		11/14/13	27.69	68.05
		11/25/13	28.00	67.74
		12/16/13	26.41	69.33
		1/13/14	25.35	70.39
		1/29/14	25.21	70.53
		2/10/14	24.36	71.38
		3/11/14	22.92	72.82
		4/21/14	21.51	74.23
		5/7/14	20.44	75.30
		6/9/14	21.26	74.48

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
MW-7	95.71	12/3/08	29.61	66.10
		2/12/09	28.14	67.57
Installed 11/17/08		5/12/09	27.12	68.59
Total depth 200'		8/19/09	27.54	68.17
6' steel casing to 92'		11/4/09	26.05	69.66
		2/26/10	24.31	71.40
		5/13/10	24.40	71.31
		8/17/10	27.85	67.86
		11/28/10	29.62	66.09
		2/2/11	30.28	65.43
		3/31/11	27.38	68.33
		4/6/11	27.30	68.41
		5/26/11	25.24	70.47
		6/28/11	26.68	69.03
		7/29/11	28.41	67.30
		8/26/11	28.16	67.55
		9/26/11	26.73	68.98
		10/14/11	26.63	69.08
		11/23/11	26.03	69.68
		12/20/11	24.98	70.73
		1/10/12	24.68	71.03
		2/24/12	25.52	70.19
		3/8/12	25.65	70.06
		6/7/12	26.02	69.69
		7/17/12	27.02	68.69
		8/21/12	27.27	68.44
		9/19/12	28.01	67.70
		10/24/12	27.90	67.81
		10/31/12	27.62	68.09
		11/27/12	26.38	69.33
		12/21/12	26.80	68.91
		1/22/13	26.38	69.33
		2/26/13	25.64	70.07
		3/29/13	25.39	70.32
		4/17/13	25.69	70.02
		5/30/13	26.45	69.26
		6/5/13	26.83	68.88
		7/23/13	26.82	68.89
		8/29/13	28.12	67.59
		9/25/13	29.17	66.54
		10/14/13	30.92	64.79
		10/15/13	31.40	64.31
		10/17/13	31.53	64.18
		10/21/13	31.51	64.20
		11/14/13	31.81	63.90
		11/25/13	32.41	63.30
		12/16/13	31.52	64.19
		1/13/14	29.93	65.78
		1/29/14	NA	NA
		2/10/14	28.92	66.79
		3/11/14	27.95	67.76
		4/21/14	26.30	69.41
		5/7/14	25.49	70.22
		6/9/14	25.15	70.56

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
MW-8	96.97	12/3/08	28.56	68.41
		2/12/09	26.71	70.26
Installed 11/17/08		5/12/09	25.79	71.18
Total depth 200'		8/19/09	26.28	70.69
6' steel casing to 100'		11/4/09	24.46	72.51
		2/26/10	23.17	73.80
		5/13/10	23.24	73.73
		8/17/10	26.24	70.73
		11/28/10	28.30	68.67
		2/2/11	29.83	67.14
		3/31/11	25.93	71.04
		4/6/11	25.91	71.06
		5/26/11	24.14	72.83
		6/28/11	25.53	71.44
		7/29/11	27.26	69.71
		8/26/11	27.51	69.46
		9/26/11	26.55	70.42
		10/14/11	25.30	71.67
		11/23/11	24.95	72.02
		12/20/11	23.70	73.27
		1/10/12	23.51	73.46
		2/24/12	24.21	72.76
		3/8/12	24.24	72.73
		6/7/12	24.42	72.55
		7/17/12	25.72	71.25
		8/21/12	26.02	70.95
		9/19/12	26.72	70.25
		10/24/12	26.45	70.52
		10/31/12	26.17	70.80
		11/27/12	25.06	71.91
		12/21/12	25.67	71.30
		1/22/13	25.10	71.87
		2/26/13	24.39	72.58
		3/29/13	24.15	72.82
		4/17/13	24.51	72.46
		5/30/13	25.25	71.72
		6/5/13	25.56	71.41
		7/23/13	25.62	71.35
		8/29/13	26.89	70.08
		9/25/13	28.04	68.93
		10/14/13	85.23	**
		10/15/13	150.90	**
		10/17/13	158.33	**
		10/21/13	162.16	**
		11/14/12	153.81	**
		11/25/13	155.56	**
		12/16/13	160.70	**
		1/13/14	146.80	**
		1/29/13	129.04	**
		2/10/14	174.40	**
		3/11/14	NG	NG
		4/21/14	109.34	**
		5/7/14	166.17	**
		6/9/14	132.62	**

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
MW-9	97.26	8/17/10	26.90	70.36
		11/28/10	27.19	70.07
Installed 6/1/10		2/2/11	28.92	68.34
Total depth 200'		3/31/11	25.89	71.37
6' steel casing to 110'		4/6/11	25.00	72.26
		5/26/11	24.10	73.16
		6/28/11	25.53	71.73
		7/29/11	27.23	70.03
		8/26/11	27.51	69.75
		9/26/11	25.98	71.28
		10/14/11	25.18	72.08
		11/23/11	24.70	72.56
		12/20/11	23.77	73.49
		1/10/12	23.54	73.72
		2/24/12	24.17	73.09
		3/8/12	24.58	72.68
		6/7/12	25.15	72.11
		7/17/12	25.50	71.76
		8/21/12	26.05	71.21
		9/19/12	26.49	70.77
		10/24/12	26.49	70.77
		10/31/12	26.30	70.96
		11/27/12	24.96	72.30
		12/21/12	25.44	71.82
		1/22/13	24.99	72.27
		2/26/13	24.45	72.81
		3/29/13	24.25	73.01
		4/17/13	24.54	72.72
		5/30/13	25.34	71.92
		6/5/13	25.70	71.56
		7/23/13	25.73	71.53
		8/29/13	26.94	70.32
		9/25/13	28.02	69.24
		10/14/13	47.95	**
		10/15/13	58.64	**
		10/17/13	147.10	**
		11/14/13	127.01	**
		11/25/13	115.24	**
		12/16/13	102.31	**
		1/13/14	100.21	**
		1/29/14	104.50	**
		2/10/14	58.83	**
		3/11/14	57.08	**
		4/21/14	53.60	**
		5/7/14	177.55	**
		6/9/14	136.06	**

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
MW-10	96.40	8/17/10	27.98	68.42
		11/28/10	29.62	66.78
Installed 6/3/10		2/2/11	30.84	65.56
Total depth 200'		3/31/11	26.94	69.46
6' steel casing to 99'		4/6/11	27.02	69.38
		5/26/11	24.17	72.23
		6/28/11	27.51	68.89
		7/29/11	28.25	68.15
		8/26/11	28.80	67.60
		9/26/11	26.52	69.88
		10/14/11	26.15	70.25
		11/23/11	25.74	70.66
		12/20/11	24.85	71.55
		1/10/12	24.56	71.84
		2/24/12	26.26	70.14
		3/8/12	25.62	70.78
		6/7/12	26.09	70.31
		7/17/12	27.03	69.37
		8/21/12	NG	
		9/19/12	27.85	68.55
		10/24/12	26.99	69.41
		10/31/12	27.36	69.04
		11/27/12	26.15	70.25
		12/21/12	26.41	69.99
		1/22/13	26.20	70.20
		2/26/13	25.46	70.94
		3/29/13	25.28	71.12
		4/17/13	25.51	70.89
		5/30/13	25.01	71.39
		6/5/13	26.79	69.61
		7/23/13	26.72	69.68
		8/29/13	27.99	68.41
		9/25/13	29.05	67.35
		10/14/13	69.35	**
		10/15/13	92.20	**
		10/17/13	95.10	**
		10/21/13	94.08	**
		11/14/13	107.75	**
		11/25/13	126.95	**
		12/16/13	130.54	**
		1/13/14	131.18	**
		1/29/14	130.39	**
		2/10/14	129.70	**
		3/11/14	134.35	**
		4/21/14	134.77	**
		5/7/14	83.65	**
		6/9/14	105.29	**

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
INJ-1		11/4/09	23.72	--
		2/26/10	NG	--
Installed 9/28/09		5/13/10	NG	--
Total depth 35'		3/31/11	NG	--
Screened 10' to 35'		4/6/11	NG	--
2" casing; .020 slot screen		5/26/11	23.94	--
		6/28/11	26.33	--
		7/29/11	28.02	--
		8/26/11	27.45	--
		9/26/11	25.16	--
		10/14/11	NG	--
		11/23/11	NG	--
		12/20/11	NG	--
INJ-2		11/4/09	24.04	--
		2/26/10	23.75	--
Installed 9/28/09		5/13/10	NG	--
Total depth 35'		3/31/11	NG	--
Screened 10' to 35'		4/6/11	NG	--
2" casing; .020 slot screen		5/26/11	24.58	--
		6/28/11	26.49	--
		7/29/11	28.14	--
		8/26/11	27.05	--
		9/26/11	24.82	--
		10/14/11	NG	--
		11/23/11	NG	--
		12/20/11	NG	--
INJ-3		11/4/09	24.33	--
		2/26/10	23.80	--
Installed 9/28/09		5/13/10	NG	--
Total depth 35'		3/31/11	NG	--
Screened 10' to 35'		4/6/11	NG	--
2" casing; .020 slot screen		5/26/11	24.25	--
		6/28/11	26.53	--
		7/29/11	28.16	--
		8/26/11	27.67	--
		9/26/11	25.71	--
		10/14/11	NG	--
		11/23/11	NG	--
		12/20/11	NG	--

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
INJ-4		11/4/09	24.51	--
		2/26/10	24.01	--
Installed 9/28/09		5/13/10	NG	--
Total depth 35'		3/31/11	NG	--
Screened 10' to 35'		4/6/11	NG	--
2" casing; .020 slot screen		5/26/11	24.70	--
		6/28/11	26.76	--
		7/29/11	28.29	--
		8/26/11	27.93	--
		9/26/11	25.96	--
		10/14/11	NG	--
		11/23/11	NG	--
		12/20/11	NG	--
TF-1	96.74	7/25/05	Dry	--
4" PVC		8/18/05	Dry	--
Total Depth 13'		1/25/06	Dry	--
		7/11/06	Dry	--
		9/7/06	NG	--
		1/9/07	Dry	--
		6/14/07	Dry	--
		11/30/07	Dry	--
		2/14/08	Dry	--
		5/23/08	Dry	--
		8/7/08	Dry	--
		12/3/08	Dry	--
		2/12/09	Dry	--
		5/12/09	Dry	--
		8/19/09	Dry	--
		11/4/09	Dry	--
		2/26/10	Dry	--
		5/13/10	Dry	--
		8/17/10	Dry	--
		11/28/10	Dry	--
		2/2/11	NG	--
		3/31/11	Dry	--
		4/6/11	NG	--
		5/26/11	Dry	--
		6/28/11	Dry	--
		7/29/11	NG	--
		8/26/11	Dry	--
		9/26/11	Dry	--
		10/14/11	NG	--
		11/23/11	NG	--
		12/20/11	Dry	--
		1/10/12	NG	--
		2/24/12	NG	--
		3/8/12	Dry	--

Table 1: Depth to Water and Groundwater Elevation
7-Eleven Store No. 32785
Hampstead, Maryland

Well	Top of Casing	Date	Depth to Water (in feet)	Corrected Elevation
TF-2	97.08	7/25/05	Dry	--
4" PVC		8/18/05	Dry	--
Total Depth 13'		1/25/06	Dry	--
		7/11/06	Dry	--
		9/7/06	NG	--
		1/9/07	Dry	--
		6/14/07	Dry	
		11/30/07	Dry	--
		2/14/08	Dry	--
		5/23/08	Dry	--
		8/7/08	Dry	
		12/3/08	Dry	--
		2/12/09	Dry	--
		5/12/09	Dry	--
		8/19/09	Dry	--
		11/4/09	Dry	--
		2/26/10	Dry	--
		5/13/10	Dry	--
		8/17/10	Dry	--
		11/28/10	Dry	--
		2/2/11	Dry	--
		3/31/11	Dry	--
		4/6/11	NG	--
		5/26/11	12.95	--
		6/28/11	12.95	--
		7/29/11	NG	--
		8/26/11	Dry	--
		9/26/11	Dry	--
		10/14/11	NG	--
		11/23/11	NG	--
		12/20/11	Dry	--
		1/10/12	NG	--
		2/24/12	NG	--
		3/8/12	Dry	--

Groundwater Remediation System Started on October 8, 2013
Submersible pumps deployed into monitoring wells MW-8, MW-9 and MW-10
NI - not installed
NG - not gauged
NA - Frozen access
** represents well is under pumping conditions

Table 2: Groundwater Analytical Results
7-Eleven Store No. 32785
Hampstead, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
MW-1	7/25/05	ND@20	ND@20	ND@20	ND@60	ND	**31,000**	28,000	1,300	NA	NA
	1/25/06	ND@1	ND@1	ND@1	ND@3	ND	**22,000**	17,000	E1,000	NA	NA
	7/11/06	ND@1	ND@1	ND@1	ND@3	ND	**E 22,000**	12,000	E 600	NA	NA
	1/9/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	13,000	ND@1000	NA	NA
	6/14/07	ND@1	ND@1	ND@1	ND@3	ND	**E 6,500**	E 680	140	**450**	ND@0.5
	11/30/07	ND@1	ND@1	ND@1	ND@3	ND	**11,000**	2,900	ND@1000	**720**	ND@0.5
	2/14/08	ND@10	ND@10	ND@10	ND@30	ND	**16,000**	2,900	370	**16,000**	ND@0.5
	5/23/08	ND@200	ND@200	ND@200	ND@600	ND	**23,000**	14,000	ND@2000	**40,000**	ND@0.5
	8/7/08	ND@10	ND@10	ND@10	ND@30	ND	**4,600**	ND@200	ND@100	**1,100**	ND@0.5
	12/3/08	ND@10	ND@10	ND@10	ND@30	ND	**1,200**	ND@200	ND@100	**670**	ND@0.5
	2/12/09	ND@1	ND@1	ND@1	ND@3	ND	**370**	ND@20	ND@10	ND@100	ND@0.5
	5/12/09	ND@1	ND@1	ND@1	ND@3	ND	**530**	ND@20	14	ND@100	ND@0.5
	8/19/09	ND@1	ND@1	ND@1	ND@3	ND	**56**	ND@20	ND@10	ND@100	NA
	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	**190**	ND@20	ND@10	**240**	NA
	2/26/10	ND@1	ND@1	ND@1	ND@3	ND	**54**	ND@20	ND@10	ND@100	NA
	5/13/10	ND@1	ND@1	ND@1	ND@3	ND	**340**	86	ND@10	**310**	NA
	8/17/10	ND@1	ND@1	ND@1	ND@3	ND	6	ND@20	ND@10	ND@100	NA
	11/28/10	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	2/2/11	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	6/28/11	ND@1	ND@1	ND@1	ND@3	ND	**97**	ND@20	ND@10	ND@100	NA
	9/29/11	ND@1	ND@1	ND@1	ND@3	ND	**52**	ND@20	ND@10	ND@100	NA
	12/20/11	ND@1	ND@1	ND@1	ND@3	ND	15	ND@20	ND@10	ND@100	NA
	3/8/12	ND@1	ND@1	ND@1	ND@3	ND	6.8	ND@20	ND@10	ND@100	NA
	6/8/12	ND@1	ND@1	ND@1	ND@3	ND	6.9	ND@20	ND@10	ND@100	NA
	9/19/12	ND@1	ND@1	ND@1	ND@3	ND	1.8	ND@20	ND@10	ND@100	NA
	12/21/12	ND@1	ND@1	ND@1	ND@3	ND	8.2	ND@20	ND@10	ND@100	NA
	3/29/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/25/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/16/13	ND@1	ND@1	ND@1	ND@3	ND	**26**	ND@20	ND@10	ND@100	NA
	3/11/14	ND@1	ND@1	ND@1	ND@3	ND	14	ND@20	ND@10	ND@100	NA
	6/9/14	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
MW-2	7/25/05	ND@1	ND@1	ND@1	ND@3	ND	1	ND@25	ND@25	NA	NA
	1/25/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	NA	NA
	7/11/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	30	ND@25	NA	NA
	1/9/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	NA	NA
	6/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	11/30/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	2/14/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	5/23/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	8/7/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	12/3/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	2/12/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	5/12/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	8/19/09	ND@1	ND@1	ND@1	ND@3	ND	14	ND@20	ND@10	ND@100	NA
	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	7	ND@20	ND@10	ND@100	NA
	2/26/10	ND@1	ND@1	ND@1	ND@3	ND	8	ND@20	ND@10	ND@100	NA
	5/13/10	ND@1	ND@1	ND@1	ND@3	ND	**31**	ND@20	ND@10	ND@100	NA
	8/17/10	ND@1	ND@1	ND@1	ND@3	ND	**53**	ND@20	ND@10	ND@100	NA
	11/28/10	ND@1	ND@1	ND@1	ND@3	ND	**35**	ND@20	ND@10	ND@100	NA
	2/2/11	ND@1	ND@1	ND@1	ND@3	ND	**59**	ND@20	ND@10	ND@100	NA
	6/28/11	ND@1	ND@1	ND@1	ND@3	ND	**71**	ND@20	ND@10	ND@100	NA
	9/29/11	ND@1	ND@1	ND@1	ND@3	ND	**41**	ND@20	ND@10	ND@100	NA
	12/20/11	ND@1	ND@1	ND@1	ND@3	ND	**29**	ND@20	ND@10	ND@100	NA
	3/8/12	ND@1	ND@1	ND@1	ND@3	ND	**28**	ND@20	ND@10	ND@100	NA
	6/8/12	ND@1	ND@1	ND@1	ND@3	ND	**33**	ND@20	ND@10	ND@100	NA
	9/19/12	ND@1	ND@1	ND@1	ND@3	ND	**50**	ND@20	ND@10	ND@100	NA
	12/21/12	ND@1	ND@1	ND@1	ND@3	ND	**27**	ND@20	ND@10	ND@100	NA
	3/29/13	ND@1	ND@1	ND@1	ND@3	ND	13	ND@20	ND@10	ND@100	NA
	6/5/13	ND@1	ND@1	ND@1	ND@3	ND	**29**	ND@20	ND@10	ND@100	NA
	9/25/13	ND@1	ND@1	ND@1	ND@3	ND	**31**	ND@20	ND@10	ND@100	NA
	12/16/13	ND@1	ND@1	ND@1	ND@3	ND	**31**	ND@20	ND@10	ND@100	NA
	3/11/14	ND@1	ND@1	ND@1	ND@3	ND	**23**	ND@20	ND@10	ND@100	NA
	6/9/14	ND@1	ND@1	ND@1	ND@3	ND	11	ND@20	ND@10	ND@100	NA
MW-3	7/25/05	ND@1	ND@1	ND@1	ND@3	ND	**290**	180	ND@25	NA	NA
	1/25/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	NA	NA
	7/11/06	ND@1	ND@1	ND@1	ND@3	ND	**390**	140	ND@25	NA	NA
	1/9/07	ND@1	ND@1	ND@1	ND@3	ND	4	ND@10	ND@10	NA	NA
	6/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	11/30/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	2/14/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	5/23/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	8/7/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	12/3/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	2/12/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	5/12/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	8/19/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	2/26/10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/13/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	8/17/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	11/28/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	2/2/11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/28/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/8/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/8/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA

Table 2: Groundwater Analytical Results
7-Eleven Store No. 32785
Hampstead, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
	9/19/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/21/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/29/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/25/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/16/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/11/14	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/9/14	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
MW-4	7/25/05	NI	NI	NI	NI	NI	NI	NI	NI	NA	NA
	1/25/06	ND@1	ND@1	ND@1	ND@3	ND	2	ND@25	ND@25	NA	NA
	7/11/06	ND@1	ND@1	ND@1	ND@3	ND	6	ND@25	ND@25	NA	NA
	1/9/07	ND@1	ND@1	ND@1	ND@3	ND	4	ND@10	ND@10	NA	NA
	6/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	11/30/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.6
	2/14/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	5/23/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	8/7/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	12/3/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	2/12/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	5/12/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	8/19/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	2/26/10	ND@1	ND@1	ND@1	ND@3	ND	15	ND@20	ND@10	ND@100	NA
	5/13/10	ND@1	ND@1	ND@1	ND@3	ND	15	ND@20	ND@10	ND@100	NA
	8/17/10	ND@1	ND@1	ND@1	ND@3	ND	**64**	ND@20	ND@10	ND@100	NA
	11/28/10	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	2/2/11	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	NA
	6/28/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/8/12	ND@1	ND@1	ND@1	ND@3	ND	4.2	ND@20	ND@10	ND@100	NA
	6/8/12	ND@1	ND@1	ND@1	ND@3	ND	2.3	ND@20	ND@10	ND@100	NA
	9/19/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/21/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/29/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/25/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/16/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/11/14	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/9/14	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
MW-5	7/25/05	NI	NI	NI	NI	NI	NI	NI	NI	NA	NA
	1/25/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	NA	NA
	7/11/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	NA	NA
	1/9/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	NA	NA
	6/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	11/30/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	2/14/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	5/23/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	8/7/08	ND@1	ND@1	ND@1	ND@3	ND	7	ND@20	ND@10	ND@100	ND@0.5
	12/3/08	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	ND@0.5
	2/12/09	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	ND@0.5
	5/12/09	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	ND@0.5
	8/19/09	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	NA
	2/26/10	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	NA
	5/13/10	ND@1	ND@1	ND@1	ND@3	ND	6	ND@20	ND@10	ND@100	NA
	8/17/10	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	11/28/10	ND@1	ND@1	ND@1	ND@3	ND	6	ND@20	ND@10	ND@100	NA
	2/2/11	ND@1	ND@1	ND@1	ND@3	ND	7	ND@20	ND@10	ND@100	NA
	6/28/11	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	9/29/11	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	12/20/11	ND@1	ND@1	ND@1	ND@3	ND	2.4	ND@20	ND@10	ND@100	NA
	3/8/12	ND@1	ND@1	ND@1	ND@3	ND	1.2	ND@20	ND@10	ND@100	NA
	6/8/12	ND@1	ND@1	ND@1	ND@3	ND	2.0	ND@20	ND@10	ND@100	NA
	9/19/12	ND@1	ND@1	ND@1	ND@3	ND	1.4	ND@20	ND@10	ND@100	NA
	12/21/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/29/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/25/13	ND@1	ND@1	ND@1	ND@3	ND	1.1	ND@20	ND@10	ND@100	NA
	12/16/13	ND@1	ND@1	ND@1	ND@3	ND	1.6	ND@20	ND@10	ND@100	NA
	3/11/14	ND@1	ND@1	ND@1	ND@3	ND	1.3	ND@20	ND@10	ND@100	NA
	6/9/14	ND@1	ND@1	ND@1	ND@3	ND	3.4	ND@20	ND@10	ND@100	NA
MW-6	12/3/08	ND@100	ND@100	ND@100	ND@300	ND	**20,000**	ND@2000	ND@1000	**9,600**	ND@0.5
	2/12/09	ND@10	ND@10	ND@10	ND@30	ND	**15,000**	70	550	**2,800**	ND@0.5
	5/12/09	ND@1	ND@1	ND@1	ND@3	ND	**18,000**	470	640	**2,700**	ND@0.5
	8/19/09	ND@1	ND@1	ND@1	ND@3	ND	**17,000**	810	450	**3,300**	NA
	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	**17,000**	1,500	370	**33,000**	NA
	2/26/10	ND@1	ND@1	ND@1	ND@3	ND	**14,000**	3,600	230	**16,000**	NA
	5/13/10	ND@1	ND@1	ND@1	ND@3	ND	**12,000**	3,400	180	**15,000**	NA
	6/11/10	ND@1	ND@1	ND@1	ND@3	ND	**11,000**	4,500	230	**14,000**	NA
	8/17/10	ND@1	ND@1	ND@1	ND@3	ND	**14,000**	1,300	250	**19,000**	NA
	11/28/10	ND@1	ND@1	ND@1	ND@3	ND	**11,000**	2,500	200	**12,000**	NA
	2/2/11	ND@1	ND@1	ND@1	ND@3	ND	**9,300**	1,500	180	**14,000**	NA
	5/26/11	ND@1	ND@1	ND@1	ND@3	ND	**6,700**	400	100	**8,600**	NA
	6/28/11	ND@1	ND@1	ND@1	ND@3	ND	**7,900**	910	90	**8,400**	NA
	9/29/11	ND@1	ND@1	ND@1	ND@3	ND	**8,600**	ND@2000	ND@1000	**4,400**	NA
	12/20/11	ND@1	ND@1	ND@1	ND@3	ND	**6,500**	460	76	**5,100**	NA
	3/8/12	ND@1	ND@1	ND@1	ND@3	ND	**3,200**	210	ND@50	**4,200**	NA
	6/8/12	ND@5	ND@5	ND@5	ND@15	ND	**2,600**	150	ND@50	**3,200**	NA
	9/19/12	ND@1	ND@1	ND@1	ND@3	ND	**2,200**	100	23	**2,300**	NA
	12/21/12	ND@1	ND@1	ND@1	ND@3	ND	**1,900**	58	21	**1,700**	NA
	3/29/13	ND@1	ND@1	ND@1	ND@3	ND	**890**	ND@100	ND@50	**910**	NA
	6/5/13	ND@1	ND@1	ND@1	ND@3	ND	**1,100**	32	12	**1,000**	NA

Table 2: Groundwater Analytical Results
7-Eleven Store No. 32785
Hampstead, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
	9/25/13	ND@1	ND@1	ND@1	ND@3	ND	**1,100**	26	12	**690**	NA
	12/16/13	ND@1	ND@1	ND@1	ND@3	ND	**1,900**	ND@100	ND@50	**2,500**	NA
	3/11/14	ND@1	ND@1	ND@1	ND@3	ND	**1,100**	ND@100	ND@50	**1,900**	NA
	6/9/14	ND@1	ND@1	ND@1	ND@3	ND	**720**	ND@100	ND@50	**720**	NA
MW-7	12/3/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	2/12/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	5/12/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	8/19/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	2/26/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	5/13/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	8/17/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	11/28/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	2/2/11	ND@1	ND@1	ND@1	ND@3	ND	**160**	ND@20	ND@10	ND@100	NA
	6/28/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/8/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/8/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/19/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/21/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/29/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/13	ND@1	ND@1	ND@1	ND@3	ND	4.8	ND@20	ND@10	ND@100	NA
	9/25/13	ND@1	ND@1	ND@1	ND@3	ND	19	ND@20	ND@10	ND@100	NA
	12/16/13	ND@1	ND@1	ND@1	ND@3	ND	1.2	ND@20	ND@10	ND@100	NA
	3/11/14	ND@1	ND@1	ND@1	ND@3	ND	15	ND@20	ND@10	ND@100	NA
	6/9/14	ND@1	ND@1	ND@1	ND@3	ND	2.5	ND@20	ND@10	ND@100	NA
MW-8	12/3/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	2/12/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	5/12/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	8/19/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	2/26/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	5/13/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	8/17/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	11/28/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	2/2/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/28/11	ND@1	ND@1	ND@1	ND@3	ND	**38**	ND@20	ND@10	ND@100	NA
	9/29/11	ND@1	ND@1	ND@1	ND@3	ND	**66**	ND@20	ND@10	ND@100	NA
	12/20/11	ND@1	ND@1	ND@1	ND@3	ND	**69**	ND@20	ND@10	ND@100	NA
	3/8/12	ND@1	ND@1	ND@1	ND@3	ND	**200**	ND@20	ND@10	**290**	NA
	6/8/12	ND@1	ND@1	ND@1	ND@3	ND	**420**	ND@20	12	**570**	NA
	9/19/12	ND@1	ND@1	ND@1	ND@3	ND	**500**	54	17	**580**	NA
	12/21/12	ND@1	ND@1	ND@1	ND@3	ND	**940**	110	38	**1,000**	NA
	3/29/13	ND@1	ND@1	ND@1	ND@3	ND	**1,100**	150	55	**1,000**	NA
	6/5/13	ND@1	ND@1	ND@1	ND@3	ND	**1,200**	180	50	**1,200**	NA
	9/25/13	ND@1	ND@1	ND@1	ND@3	ND	**1,200**	150	48	**1,000**	NA
	12/16/13	ND@1	ND@1	ND@1	ND@3	ND	**530**	ND@20	ND@10	**600**	NA
	3/11/14	ND@1	ND@1	ND@1	ND@3	ND	**1,000**	ND@20	ND@10	**890**	NA
	6/9/14	ND@1	ND@1	ND@1	ND@3	ND	**420**	ND@20	ND@10	**350**	NA
MW-9	6/11/10	ND@1	ND@1	ND@1	ND@3	ND	18	ND@20	ND@10	ND@100	NA
	8/17/10	ND@1	ND@1	ND@1	ND@3	ND	**32**	ND@20	ND@10	ND@100	NA
	11/28/10	ND@1	ND@1	ND@1	ND@3	ND	**40**	ND@20	ND@10	ND@100	NA
	2/2/11	ND@1	ND@1	ND@1	ND@3	ND	**130**	ND@20	ND@10	**140**	NA
	6/28/11	ND@1	ND@1	ND@1	ND@3	ND	**340**	ND@20	ND@10	**350**	NA
	9/29/11	ND@1	ND@1	ND@1	ND@3	ND	**520**	ND@20	ND@10	**340**	NA
	12/20/11	ND@5	ND@5	ND@5	ND@15	ND	**440**	ND@100	ND@50	**390**	NA
	3/8/12	ND@5	ND@5	ND@5	ND@15	ND	**240**	30	ND@10	**390**	NA
	6/8/12	ND@1	ND@1	ND@1	ND@3	ND	**290**	34	ND@10	**380**	NA
	9/19/12	ND@1	ND@1	ND@1	ND@3	ND	**820**	190	34	**920**	NA
	12/21/12	ND@1	ND@1	ND@1	ND@3	ND	**360**	52	14	**360**	NA
	3/29/13	ND@1	ND@1	ND@1	ND@3	ND	**280**	35	12	**330**	NA
	6/5/13	ND@1	ND@1	ND@1	ND@3	ND	**490**	83	21	**540**	NA
	9/25/13	ND@1	ND@1	ND@1	ND@3	ND	**1,200**	220	51	**980**	NA
	12/16/13	ND@1	ND@1	ND@1	ND@3	ND	**240**	ND@20	ND@10	**290**	NA
	3/11/14	ND@1	ND@1	ND@1	ND@3	ND	**3,500**	840	140	**3,800**	NA
	6/9/14	ND@1	ND@1	ND@1	ND@3	ND	**760**	ND@20	21	**660**	NA
MW-10	6/11/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	8/17/10	10	3	ND@1	ND@3	13	ND@1	ND@20	ND@10	ND@100	NA
	11/28/10	12	2	ND@1	ND@3	14	ND@1	ND@20	ND@10	ND@100	NA
	2/2/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/28/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/29/11	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	12/20/11	ND@1	ND@1	ND@1	ND@3	ND	16	ND@20	ND@10	ND@100	NA
	3/8/12	ND@1	ND@1	ND@1	ND@3	ND	10	ND@20	ND@10	ND@100	NA
	6/8/12	ND@1	ND@1	ND@1	ND@3	ND	**38**	ND@20	ND@10	ND@100	NA
	9/19/12	ND@1	ND@1	ND@1	ND@3	ND	**170**	ND@20	ND@10	**190**	NA
	12/21/12	ND@1	ND@1	ND@1	ND@3	ND	**97**	ND@20	ND@10	ND@100	NA
	3/29/13	ND@1	ND@1	ND@1	ND@3	ND	**230**	22	ND@10	**290**	NA
	6/5/13	ND@1	ND@1	ND@1	ND@3	ND	**88**	ND@20	ND@10	ND@100	NA
	9/25/13	ND@1	ND@1	ND@1	ND@3	ND	**200**	ND@20	ND@10	**1,200**	NA
	12/16/13	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	3/11/14	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/9/14	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
INJ-1	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	**23,000**	3,600	290	**44,000**	NA
	2/26/10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
INJ-2	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	**8,900**	ND@20	140	**17,000**	NA
	2/26/10	ND@1	ND@1	ND@1	ND@3	ND	**26,000**	5,200	170	**29,000**	NA

Table 2: Groundwater Analytical Results
7-Eleven Store No. 32785
Hampstead, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	TPH-DRO (mg/L)
INJ-3	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	**660**	ND@20	25	**880**	NA
	2/26/10	ND@1	ND@1	ND@1	ND@3	ND	**330**	88	ND@10	**330**	NA
INJ-4	11/4/09	ND@1	ND@1	ND@1	ND@3	ND	**360**	ND@20	ND@10	**480**	NA
	2/26/10	ND@1	ND@1	ND@1	ND@3	ND	**110**	24	ND@10	**110**	NA
7-11 Potable Well	7/1/05	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@5	ND@5	NA	NA
	1/25/06	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@5	ND@5	NA	NA
	7/11/06	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@5	ND@5	NA	NA
	1/9/07	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@10	ND@10	NA	NA
	6/14/07	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@0.5	ND@0.5	ND@100	ND@0.5
	11/30/07	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@0.5	ND@0.5	NA	NA
	5/23/08	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@0.5	ND@0.5	ND@100	ND@0.5
	8/7/08	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	NA	NA
	12/3/08	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	NA	NA
	5/12/09	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	NA	NA
	3/4/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	NA	NA
	8/17/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	0.8	ND@20	ND@5	NA	NA
	1/4/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	1.6	ND@20	ND@5	NA	NA
	1/25/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	2	ND@20	ND@5	NA	NA
	6/28/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	1.6	ND@20	ND@5	NA	NA
	2/17/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	NA	NA
	6/26/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	1.7	ND@10	ND@0.5	NA	NA
	9/19/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	NA	NA
	9/25/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	NA	NA
	3/11/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	NA	NA
	6/9/14	NOT SAMPLED - MDE APPROVED CHANGE TO ANNUAL									
MDE CLEANUP STD		**5**	**1,000**	**700**	**10,000**	**--**	**20**	**--**	**--**	**47**	**47**

BTEX - Total Benzene, Toluene, Ethylbenzene and Xylenes
MTBE - Methyl Tert-Butyl Ether
TBA - Tert-Butyl Alcohol
TAME - Tert-Amyl Methyl Ether
µg/L - micrograms-per-liter
Bold - indicates level above the MDE Cleanup Standard

ND@x - not detected above laboratory detection level of x
ND - not detected
NI - not installed
NA - not analyzed
NS - inaccessible
E - estimated result; exceeds calibration range

Table 3: 124 Hanover Pike Sampling Results
7-Eleven Store No. 32785
Hampstead, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	Diisopropyl Ether
124 Hanover Pike - Influent	4/1/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**3,100**	480	73	**2,100**	16
	4/15/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**2,500**	300 E	60	**2,000**	13
	6/1/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**1,600**	340	46	**1,600**	12
	6/8/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**1,500**	380	66	**1,400**	13
	6/17/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**920**	41	21	**840**	9
	6/22/10	ND@5	ND@5	ND@5	ND@15	BDL	**1,500**	ND@200	ND@50	NA	ND@50
	6/29/10	ND@5	ND@5	ND@5	ND@15	BDL	**900**	88	19	NA	8
	7/6/10	ND@5	ND@5	ND@5	ND@15	BDL	**860**	97	23	NA	10
	7/13/10	ND@5	ND@5	ND@5	ND@15	BDL	**750**	190	24	NA	8
	7/20/10	ND@5	ND@5	ND@5	ND@15	BDL	**770**	130	21	NA	7
	7/27/10	ND@5	ND@5	ND@5	ND@15	BDL	**1,300**	280	33	NA	11
	7/27/10	ND@5	ND@5	ND@5	ND@15	BDL	**1,300**	280	33	NA	11
	8/10/10	ND@5	ND@5	ND@5	ND@15	BDL	**480**	ND@200	ND@50	NA	ND@50
	8/24/10	ND@5	ND@5	ND@5	ND@15	BDL	**1,700**	230	42	NA	10
	8/27/10	--	--	--	--	--	--	--	--	--	--
	9/9/10	ND@5	ND@5	ND@5	ND@15	BDL	**820**	79	24	NA	8
	9/21/10	ND@5	ND@5	ND@5	ND@15	BDL	**750**	52	15	NA	8
	10/5/10	ND@5	ND@5	ND@5	ND@15	BDL	**590**	ND@50	6	NA	9
	10/18/10	ND@5	ND@5	ND@5	ND@15	BDL	**1,400**	65	34	NA	11
	11/2/10	ND@5	ND@5	ND@5	ND@15	BDL	**1,700**	230	43	NA	12
	11/16/10	ND@5	ND@5	ND@5	ND@15	BDL	**1,200**	180	32	NA	10
	11/30/10	ND@5	ND@5	ND@5	ND@15	BDL	**1,800**	310	50	NA	13
	12/14/10	ND@5	ND@5	ND@5	ND@15	BDL	**1,500**	220	42	NA	13
	12/28/10	ND@5	ND@5	ND@5	ND@15	BDL	**1,600**	330	46	NA	13
	1/11/11	ND@5	ND@5	ND@5	ND@15	BDL	**820**	530	41	NA	13
	1/25/11	ND@5	ND@5	ND@5	ND@15	BDL	**1,700**	ND@400	ND@100	NA	ND@100
	2/8/11	ND@5	ND@5	ND@5	ND@15	BDL	**1,700**	190	45	NA	13
	3/1/11	ND@5	ND@5	ND@5	ND@15	BDL	**1,300**	78	36	NA	13
	3/15/11	ND@5	ND@5	ND@5	ND@15	BDL	**980**	53	24	NA	10
	4/12/11	ND@5	ND@5	ND@5	ND@15	BDL	**1,400**	120	39	NA	12
	5/11/11	ND@5	ND@5	ND@5	ND@15	BDL	**1,900**	180	46	NA	13
	6/14/11	ND@5	ND@5	ND@5	ND@15	BDL	**1,700**	120	42	NA	14
	7/12/11	ND@5	ND@5	ND@5	ND@15	BDL	**1,200**	ND@20	25	NA	11
	8/16/11	ND@5	ND@5	ND@5	ND@15	BDL	**870**	ND@20	18	NA	8
	9/12/11	ND@5	ND@5	ND@5	ND@15	BDL	**1,400**	68	33	NA	13
	10/14/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**1,700**	130	47	NA	14
	11/8/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**2,000**	150	47	NA	14
	12/20/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**1,500**	90	39	NA	12
	1/18/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**1,200**	100	32	NA	12
	2/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**1,100**	65	27	NA	10
	3/8/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**1,100**	53	25	NA	9.8
	4/20/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**1,200**	88	28	NA	10
	5/22/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**670**	ND@20	13	NA	8.2
	6/26/12	ND@25	ND@25	ND@25	ND@25	BDL	**1,400**	ND@25	31	NA	ND@25
	7/17/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**1,000**	67	23	NA	9.8
	8/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**290**	ND@20	ND@5	NA	5.7
	9/19/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**1,100**	67	22	NA	9.7
	10/25/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**730**	23	12	NA	8.7
	12/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**460**	ND@20	1/8/00	NA	1/7/00
	1/22/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**450**	ND@20	ND@5	NA	ND@5
	2/26/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**330**	ND@20	ND@5	NA	ND@5
	4/17/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**260**	ND@20	ND@5	NA	6
	6/28/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**170**	ND@20	ND@5	NA	6
	8/30/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**130**	ND@20	ND@5	NA	6
	10/28/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**220**	22	ND@5	NA	7
	12/16/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**56**	ND@20	ND@5	NA	6
	1/13/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	7.2	ND@20	ND@5	NA	ND@5
	2/18/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	**32**	ND@20	ND@5	NA	ND@5
	5/3/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	6.2	ND@20	ND@5	NA	ND@5
	6/24/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	0.54	ND@20	ND@5	NA	ND@5
GAC - 1	6/1/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/8/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/17/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/22/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/29/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	7/6/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	47	ND@5	ND@100	ND@5
	7/13/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	31	ND@5	ND@100	ND@5
	7/20/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	22	ND@5	ND@100	ND@5
	7/27/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/10/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/24/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	9/9/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	2.1	ND@20	ND@5	ND@100	ND@5
	9/21/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/5/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/18/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	11/2/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	11/16/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	11/30/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/14/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/28/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/11/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	33	ND@5	ND@100	ND@5
	1/25/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	62	ND@5	ND@100	ND@5
	2/8/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	61	ND@5	ND@100	ND@5
	3/1/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5

Table 3: 124 Hanover Pike Sampling Results
7-Eleven Store No. 32785
Hampstead, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	Diisopropyl Ether
	3/15/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	4/12/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	5/11/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	48	ND@5	ND@100	ND@5
	6/14/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	170	ND@5	ND@100	ND@5
	7/12/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/16/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	9/12/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	25	ND@5	ND@100	ND@5
	10/14/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	41	ND@5	ND@100	ND@5
	11/8/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/20/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	37	ND@5	ND@100	ND@5
	1/18/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	84	ND@5	ND@100	ND@5
	2/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	96	ND@5	ND@100	ND@5
	3/8/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	4/20/12	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@0.5	ND@20	ND@5	ND@100	ND@5
	5/22/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/26/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	120	ND@0.5	ND@100	ND@5
	7/17/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	9/19/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/25/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/22/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	2/26/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	4/17/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/28/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/30/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/28/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/16/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	1.7	ND@20	ND@5	ND@100	ND@5
	1/13/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	1.4	ND@20	ND@5	ND@100	ND@5
	2/18/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	4.3	ND@20	ND@5	ND@100	ND@5
	5/3/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	1.5	ND@20	ND@5	ND@100	ND@5
	6/24/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	0.77	ND@20	ND@5	ND@100	ND@5
GAC - 2	6/1/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/8/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/17/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/22/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/29/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	7/6/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	7/13/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	7/20/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	7/27/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/10/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/24/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	9/9/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	9/21/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/5/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/18/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	11/2/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	11/16/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	11/30/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/14/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/28/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/11/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/25/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	2/8/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	3/1/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	3/15/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	4/12/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	5/11/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/14/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	7/12/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/16/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	9/12/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/14/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	11/8/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/20/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/18/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	2/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	3/8/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	4/20/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	5/22/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/26/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	34	ND@0.5	ND@100	ND@5
	7/17/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	9/19/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/25/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/22/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	2/26/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	4/17/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/28/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/30/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/28/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/16/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/13/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	2/18/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	5/3/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/24/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5

Table 3: 124 Hanover Pike Sampling Results
7-Eleven Store No. 32785
Hampstead, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)	Diisopropyl Ether
Final Effluent	6/1/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/22/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/29/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	7/6/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	7/13/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	7/20/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	7/27/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/10/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/24/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	9/9/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	9/21/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/5/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/18/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	11/2/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	11/16/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	11/30/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/14/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/28/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/11/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/25/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	2/8/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	3/1/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	3/15/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	4/12/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	5/11/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/14/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	7/12/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/16/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	9/12/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/14/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	11/8/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/20/11	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/18/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	2/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	3/8/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	4/20/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	5/22/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/26/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@10	ND@0.5	ND@100	ND@5
	7/17/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	9/19/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/25/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/21/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/22/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	2/26/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	4/17/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/28/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	8/30/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	10/28/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	12/16/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	1/13/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	2/18/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	5/3/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
	6/24/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	BDL	ND@0.5	ND@20	ND@5	ND@100	ND@5
MDE CLEANUP STD		**5**	**1,000**	**700**	**10,000**	**--**	**20**	--	--	**47**	--

BTEX - Total Benzene, Toluene, Ethylbenzene and Xylenes
MTBE - Methyl Tert-Butyl Ether
TBA - Tert-Butyl Alcohol
TAME - Tert-Amyl Methyl Ether
µg/L - micrograms-per-liter
ND@x - not detected above laboratory detection level of x

ND - not detected
NI - not installed
NA - not analyzed
NS - inaccessible
E - estimated result; exceeds calibration range
Bold - indicates level above the MDE Cleanup Standard

Table 4
Residential Potable Well Sampling Results
7-Eleven Store No. 32785
Hampstead, Maryland

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	TPH-GRO (µg/L)
114 Hanover Pike	6/2/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	ND@100
	11/16/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/26/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	ND@100
	6/28/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	ND@100
	6/24/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	NA
118 Hanover Pike	6/2/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	1.3	ND@20	ND@5	ND@100
	11/16/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	0.9	ND@20	ND@5	ND@100
	6/24/14	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	NA
95 Phillips Drive	6/2/10	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/16/10	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	ND@100
	6/26/12	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	ND@100
	6/28/13	ND@0.5	ND@0.5	ND@0.5	ND@1.5	ND	ND@0.5	ND@20	ND@5	ND@100
MDE CLEANUP STD		**5**	**1,000**	**700**	**10,000**	**--**	**20**	--	--	**47**

BTEX - Total Benzene, Toluene, Ethylbenzene and Xylenes

MTBE - Methyl Tert-Butyl Ether

TBA - Tert-Butyl Alcohol

TAME - Tert-Amyl Methyl Ether

µg/L - micrograms-per-liter

ND@x - not detected above laboratory detection level of x

ND - not detected

NS - inaccessible; could not contact property owner/residents

Bold - indicates level above the MDE Cleanup Standard

Table 5
Groundwater Remediation System Performance Data
7-Eleven Store No. 32785
Hampstead, MD

MW-8					
Date	Pump MW-8 (gallons)	Change from previous (gallons)	Average GPD	Average GPM	Total Gallons Removed (since activation)
10/8/2013	131	**	**	**	131
10/9/2013	477	346	346	0.24	477
10/10/2013	1,940	1,463	1,463	1.02	1,940
10/14/2013	7,922	5,982	1,496	1.04	7,922
10/17/2013	14,983	7,061	2,354	1.63	14,983
10/21/2013	23,351	8,368	2,092	1.45	23,351
10/25/2013	31,526	8,175	2,044	1.42	31,526
10/28/2013	38,184	6,658	2,219	1.54	38,184
11/14/2013	70,341	32,157	1,892	1.31	70,341
11/25/2013	89,282	18,941	1,722	1.20	89,282
12/16/2013	123,263	33,981	1,618	1.12	123,263
12/31/2013	137,828	14,565	971	0.67	137,828
1/13/2014	148,714	10,886	837	0.58	148,714
1/28/2014	157,920	9,206	614	0.43	157,920
1/29/2014	159,504	1,584	1,584	1.10	159,504
2/10/2014	178,602	19,098	1,592	1.11	178,602
2/18/2014	191,040	12,438	1,555	1.08	191,040
2/25/2014	201,813	10,773	1,539	1.07	201,813
3/4/2014	212,660	10,847	1,550	1.08	212,660
3/11/2014	222,547	9,887	1,412	0.98	222,547
3/18/2014	231,308	8,761	1,252	0.87	231,308
3/24/2014	238,524	7,216	1,203	0.84	238,524
3/31/2014	246,694	8,170	1,167	0.81	246,694
4/8/2014	255,420	8,726	1,091	0.76	255,420
4/14/2014	262,270	6,850	1,142	0.79	262,270
4/21/2014	270,014	7,744	1,106	0.77	270,014
4/28/2014	279,151	9,137	1,305	0.91	279,151
5/6/2014	290,495	11,344	1,418	0.98	290,495
5/7/2014	291,653	1,158	1,158	0.80	291,653
5/8/2014	293,177	1,524	1,524	1.06	293,177
5/12/2014	298,580	5,403	1,351	0.94	298,580
5/15/2014	302,212	3,632	1,211	0.84	302,212
5/16/2014	303,575	1,363	1,363	0.95	303,575
5/21/2014	309,961	6,386	1,277	0.89	309,961
5/23/2014	312,090	2,129	1,065	0.74	312,090
5/27/2014	317,206	5,116	1,279	0.89	317,206
6/9/2014	332,887	15,681	1,206	0.84	332,887
6/24/2014	351,101	18,214	1,214	0.84	351,101

MW-9					
Date	Pump MW-9 (gallons)	Change from previous (gallons)	Average GPD	Average GPM	Total Gallons Removed (since activation)
10/8/2013	114	**	**	**	114
10/9/2013	398	284	284	0.20	398
10/10/2013	398	0	0	0.00	398
10/14/2013	398	0	0	0.00	398
10/17/2013	1,792	1,394	465	0.32	1,792
10/21/2013	4,409	2,617	654	0.45	4,409
10/25/2013	6,860	2,451	613	0.43	6,860
10/28/2013	8,762	1,902	634	0.44	8,762
11/14/2013	14,917	6,155	362	0.25	14,917
11/25/2013	17,618	2,701	246	0.17	17,618
12/16/2013	23,147	5,529	263	0.18	23,147
12/31/2013	26,235	3,088	206	0.14	26,235
1/13/2014	27,393	1,158	89	0.06	27,393
1/28/2014	27,393	0	0	0.00	27,393
1/29/2014	27,393	0	0	0.00	27,393
2/10/2014	27,393	0	0	0.00	27,393
2/18/2014	27,393	0	0	0.00	27,393
2/25/2014	27,393	0	0	0.00	27,393
3/4/2014	27,393	0	0	0.00	27,393
3/11/2014	27,393	0	0	0.00	27,393
3/18/2014	27,393	0	0	0.00	27,393
3/24/2014	27,393	0	0	0.00	27,393
3/31/2014	27,393	0	0	0.00	27,393
4/8/2014	27,393	0	0	0.00	27,393
4/14/2014	27,393	0	0	0.00	27,393
4/21/2014	27,393	0	0	0.00	27,393
4/28/2014	27,393	0	0	0.00	27,393
5/6/2014	27,393	0	0	0.00	27,393
5/7/2014	28,010	617	617	0.43	28,010
5/8/2014	28,774	764	764	0.53	28,774
5/12/2014	31,800	3,026	757	0.53	31,800
5/15/2014	33,025	1,225	408	0.28	33,025
5/16/2014	33,645	620	620	0.43	33,645
5/21/2014	34,231	586	117	0.08	34,231
5/23/2014	35,110	879	440	0.31	35,110
5/27/2014	37,187	2,077	519	0.36	37,187
6/9/2014	43,314	6,127	471	0.33	43,314
6/24/2014	50,260	6,946	463	0.32	50,260

MW-10					
Date	Pump MW-10 (gallons)	Change from previous (gallons)	Average GPD	Average GPM	Total Gallons Removed (since activation)
10/8/2013	183	**	**	**	183
10/9/2013	1,673	1,490	1,490	1.03	1,673
10/10/2013	3,600	1,927	1,927	1.34	3,600
10/14/2013	11,540	7,940	1,985	1.38	11,540
10/17/2013	21,140	9,600	3,200	2.22	21,140
10/21/2013	32,540	11,400	2,850	1.98	32,540
10/25/2013	47,980	15,440	3,860	2.68	47,980
10/28/2013	60,680	12,700	4,233	2.94	60,680
11/14/2013	126,225	65,545	3,856	2.68	126,225
11/25/2013	180,720	54,495	4,954	3.44	180,720
12/16/2013	285,260	104,540	4,978	3.46	285,260
12/31/2013	332,092	46,832	3,122	2.17	332,092
1/13/2014	369,070	36,978	2,844	1.98	369,070
1/28/2014	401,120	32,050	2,137	1.48	401,120
1/29/2014	406,695	5,575	5,575	3.87	406,695
2/10/2014	462,080	55,385	4,615	3.21	462,080
2/18/2014	503,535	41,455	5,182	3.60	503,535
2/25/2014	540,925	37,390	5,341	3.71	540,925
3/4/2014	579,263	38,338	5,477	3.80	579,263
3/11/2014	614,575	35,312	5,045	3.50	614,575
3/18/2014	652,500	37,925	5,418	3.76	652,500
3/24/2014	684,480	31,980	5,330	3.70	684,480
3/31/2014	721,586	37,106	5,301	3.68	721,586
4/8/2014	762,533	40,947	5,118	3.55	762,533
4/14/2014	795,757	33,224	5,537	3.85	795,757
4/21/2014	833,580	37,823	5,403	3.75	833,580
4/28/2014	870,358	36,778	5,254	3.65	870,358
5/6/2014	912,349	41,991	5,249	3.65	912,349
5/7/2014	914,776	2,427	2,427	1.69	914,776
5/8/2014	918,471	3,695	3,695	2.57	918,471
5/12/2014	936,670	18,199	4,550	3.16	936,670
5/15/2014	948,992	12,322	4,107	2.85	948,992
5/16/2014	953,973	4,981	4,981	3.46	953,973
5/21/2014	975,498	21,525	4,305	2.99	975,498
5/23/2014	982,944	7,446	3,723	2.59	982,944
5/27/2014	1,000,000	17,056	4,264	2.96	1,000,000
6/9/2014	1,055,974	55,974	4,306	2.99	1,055,974
6/24/2014	1,121,024	65,050	4,337	3.01	1,121,024

** = data not available due to system startup on October 8, 2013
GPD - gallons-per-day
GPM- gallons-per-minute

Flow restriction issues resulted in the inoperability of the pump in MW-9 from 1/28/14 through 5/6/14

Table 6
Summary of Treatment System Analytical Results
7-Eleven Store No. 32785
Hampstead, MD

	Air Stripper Influent									Air Stripper Effluent									GAC 1 Effluent									GAC 2 Effluent								
Date	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylenes**	**Total BTEX**	**MTBE**	**Tert-Butanol**	**TAME**	**TPH-GRO**	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylenes**	**Total BTEX**	**MTBE**	**Tert-Butanol**	**TAME**	**TPH-GRO**	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylenes**	**Total BTEX**	**MTBE**	**Tert-Butanol**	**TAME**	**TPH-GRO**	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylenes**	**Total BTEX**	**MTBE**	**Tert-Butanol**	**TAME**	**TPH-GRO**
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
10/17/13	ND@1	ND@1	ND@1	ND@3	ND	530	20	12	370	ND@1	ND@1	ND@1	ND@3	ND	1.2	30	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
10/28/13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
11/14/13	ND@1	ND@1	ND@1	ND@3	ND	390	22	ND@10	260	ND@1	ND@1	ND@1	ND@3	ND	2.0	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NS	NS	NS	NS	NS	NS	NS	NS	NS
11/25/13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
12/16/13	ND@1	ND@1	ND@1	ND@3	ND	140	ND@20	ND@10	160	ND@1	ND@1	ND@1	ND@3	ND	1.7	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
1/13/14	ND@1	ND@1	ND@1	ND@3	ND	230	ND@20	ND@10	230	ND@1	ND@1	ND@1	ND@3	ND	3.6	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
2/10/14	ND@1	ND@1	ND@1	ND@3	ND	8.8	ND@20	ND@10	120	ND@1	ND@1	ND@1	ND@3	ND	2.7	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NS	NS	NS	NS	NS	NS	NS	NS	NS
2/25/14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
3/11/14	ND@1	ND@1	ND@1	ND@3	ND	230	ND@20	ND@10	210	ND@1	ND@1	ND@1	ND@3	ND	2.4	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
3/24/14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
4/8/14	ND@1	ND@1	ND@1	ND@3	ND	240	ND@20	ND@10	170	ND@1	ND@1	ND@1	ND@3	ND	1.6	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
4/21/14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
5/7/14	ND@1	ND@1	ND@1	ND@3	ND	180	25	ND@10	260	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
5/20/14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
6/9/14	ND@1	ND@1	ND@1	ND@3	ND	180	ND@20	ND@10	180	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100
6/24/14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100

ug/L = Micrograms-per-liter

TAME - Tert-amyl methyl ether

BTEX - Benzene, toluene, ethylbenzene, total xylenes

ND@x - not detected above laboratory detection limit of "x"

TPH-GRO - total petroleum hydrocarbons-gasoline range organics

MTBE - methyl-tert-butyl ether

NS - not sampled

ATTACHMENT A

Groundwater Laboratory Report – Monitoring Wells

Analytical Report for

AECOM

Certificate of Analysis No.: 14061004

Project Manager: John Canzeri
Project Name : 7-11 Store 32785
Project Location: Hampstead, MD
Project ID : 60144916

June 17, 2014

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

June 17, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14061004**
Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID.: 60144916

Dear John Canzeri :

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 **14061004**.

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 July 15, 2014. 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

Dan Prucnal
Laboratory Manager

Sample Summary
Client Name: AECOM
Project Name: 7-11 Store 32785

Work Order Number(s): 14061004

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/10/2014 at 12:00 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14061004-001	MW 1	GROUND WATER	06/09/14 14:15
14061004-002	MW 2	GROUND WATER	06/09/14 15:30
14061004-003	MW 3	GROUND WATER	06/09/14 15:15
14061004-004	MW 4	GROUND WATER	06/09/14 14:50
14061004-005	MW 5	GROUND WATER	06/09/14 14:00
14061004-006	MW 6	GROUND WATER	06/09/14 16:12
14061004-007	MW 7	GROUND WATER	06/09/14 13:30
14061004-008	MW 8	GROUND WATER	06/09/14 17:10
14061004-009	MW 9	GROUND WATER	06/09/14 17:20
14061004-010	MW 10	GROUND WATER	06/09/14 17:30

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 1 **Date/Time Sampled: 06/09/2014 14:15** **PSS Sample ID: 14061004-001**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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	06/10/14	06/10/14 13:15	1035

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 1 **Date/Time Sampled: 06/09/2014 14:15** **PSS Sample ID: 14061004-001**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Chloromethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Vinyl Chloride	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
tert-Butyl alcohol	ND	ug/L	20		1	06/12/14	06/12/14 23:47	1011
Bromomethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Chloroethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Acetone	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
Cyclohexane	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	06/12/14	06/12/14 23:47	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Methylene Chloride	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Methyl-t-butyl ether	**1.0**	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
2-Butanone (MEK)	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Bromochloromethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Chloroform	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Benzene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Methyl Acetate	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
Methylcyclohexane	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
Trichloroethene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Carbon Disulfide	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
Bromodichloromethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 1 **Date/Time Sampled: 06/09/2014 14:15** **PSS Sample ID: 14061004-001**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	06/12/14	06/12/14 23:47	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Toluene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
2-Hexanone	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Dibromochloromethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
Diisopropyl ether	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/12/14	06/12/14 23:47	1011
Bromoform	ND	ug/L	5.0		1	06/12/14	06/12/14 23:47	1011
Tetrachloroethene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Chlorobenzene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Ethylbenzene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
m,p-Xylenes	ND	ug/L	2.0		1	06/12/14	06/12/14 23:47	1011
Styrene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
o-Xylene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Isopropylbenzene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	06/12/14	06/12/14 23:47	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
Naphthalene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/12/14 23:47	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004

AECOM, Columbia, MD

June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 2 **Date/Time Sampled: 06/09/2014 15:30** **PSS Sample ID: 14061004-002**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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	06/10/14	06/10/14 13:40	1035

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 2 **Date/Time Sampled: 06/09/2014 15:30** **PSS Sample ID: 14061004-002**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Chloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Vinyl Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
tert-Butyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 02:08	1011
Bromomethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Chloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Acetone	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
Cyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	06/12/14	06/13/14 02:08	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Methylene Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Methyl-t-butyl ether	**11**	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
2-Butanone (MEK)	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Bromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Chloroform	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Benzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Methyl Acetate	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
Methylcyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
Trichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Carbon Disulfide	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
Bromodichloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 2 **Date/Time Sampled: 06/09/2014 15:30** **PSS Sample ID: 14061004-002**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	06/12/14	06/13/14 02:08	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Toluene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
2-Hexanone	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Dibromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
Diisopropyl ether	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 02:08	1011
Bromoform	ND	ug/L	5.0		1	06/12/14	06/13/14 02:08	1011
Tetrachloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Chlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Ethylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
m,p-Xylenes	ND	ug/L	2.0		1	06/12/14	06/13/14 02:08	1011
Styrene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
o-Xylene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Isopropylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	06/12/14	06/13/14 02:08	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
Naphthalene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:08	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004

AECOM, Columbia, MD

June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 3 **Date/Time Sampled: 06/09/2014 15:15** **PSS Sample ID: 14061004-003**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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	06/10/14	06/10/14 14:06	1035

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 3 **Date/Time Sampled: 06/09/2014 15:15** **PSS Sample ID: 14061004-003**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Chloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Vinyl Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
tert-Butyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 02:43	1011
Bromomethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Chloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Acetone	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
Cyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	06/12/14	06/13/14 02:43	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Methylene Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
2-Butanone (MEK)	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Bromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Chloroform	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Benzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Methyl Acetate	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
Methylcyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
Trichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Carbon Disulfide	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
Bromodichloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 3 **Date/Time Sampled: 06/09/2014 15:15** **PSS Sample ID: 14061004-003**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	06/12/14	06/13/14 02:43	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Toluene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
2-Hexanone	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Dibromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
Diisopropyl ether	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 02:43	1011
Bromoform	ND	ug/L	5.0		1	06/12/14	06/13/14 02:43	1011
Tetrachloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Chlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Ethylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
m,p-Xylenes	ND	ug/L	2.0		1	06/12/14	06/13/14 02:43	1011
Styrene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
o-Xylene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Isopropylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	06/12/14	06/13/14 02:43	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
Naphthalene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 02:43	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004

AECOM, Columbia, MD

June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 4 **Date/Time Sampled: 06/09/2014 14:50** **PSS Sample ID: 14061004-004**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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	06/10/14	06/10/14 14:31	1035

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 4 **Date/Time Sampled: 06/09/2014 14:50** **PSS Sample ID: 14061004-004**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Chloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Vinyl Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
tert-Butyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 03:18	1011
Bromomethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Chloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Acetone	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
Cyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	06/12/14	06/13/14 03:18	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Methylene Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
2-Butanone (MEK)	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Bromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Chloroform	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Benzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Methyl Acetate	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
Methylcyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
Trichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Carbon Disulfide	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
Bromodichloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 4 **Date/Time Sampled: 06/09/2014 14:50** **PSS Sample ID: 14061004-004**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	06/12/14	06/13/14 03:18	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Toluene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
2-Hexanone	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Dibromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
Diisopropyl ether	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 03:18	1011
Bromoform	ND	ug/L	5.0		1	06/12/14	06/13/14 03:18	1011
Tetrachloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Chlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Ethylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
m,p-Xylenes	ND	ug/L	2.0		1	06/12/14	06/13/14 03:18	1011
Styrene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
o-Xylene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Isopropylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	06/12/14	06/13/14 03:18	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
Naphthalene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:18	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 5 **Date/Time Sampled: 06/09/2014 14:00** **PSS Sample ID: 14061004-005**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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	06/10/14	06/10/14 14:57	1035

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 5 **Date/Time Sampled: 06/09/2014 14:00** **PSS Sample ID: 14061004-005**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Chloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Vinyl Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
tert-Butyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 03:54	1011
Bromomethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Chloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Acetone	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
Cyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	06/12/14	06/13/14 03:54	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Methylene Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Methyl-t-butyl ether	**3.4**	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
2-Butanone (MEK)	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Bromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Chloroform	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Benzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Methyl Acetate	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
Methylcyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
Trichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Carbon Disulfide	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
Bromodichloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 5 **Date/Time Sampled: 06/09/2014 14:00** **PSS Sample ID: 14061004-005**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	06/12/14	06/13/14 03:54	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Toluene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
2-Hexanone	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Dibromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
Diisopropyl ether	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 03:54	1011
Bromoform	ND	ug/L	5.0		1	06/12/14	06/13/14 03:54	1011
Tetrachloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Chlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Ethylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
m,p-Xylenes	ND	ug/L	2.0		1	06/12/14	06/13/14 03:54	1011
Styrene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
o-Xylene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Isopropylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	06/12/14	06/13/14 03:54	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
Naphthalene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 03:54	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 6 **Date/Time Sampled: 06/09/2014 16:12** **PSS Sample ID: 14061004-006**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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)	**720**	ug/L	100		1	06/10/14	06/10/14 15:22	1035

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 6 **Date/Time Sampled: 06/09/2014 16:12** **PSS Sample ID: 14061004-006**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Chloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Vinyl Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
tert-Butyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 05:39	1011
Bromomethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Chloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Acetone	**210**	ug/L	100		10	06/12/14	06/13/14 17:49	1011
Cyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 05:39	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	06/12/14	06/13/14 05:39	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Methylene Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Methyl-t-butyl ether	**720**	ug/L	10		10	06/12/14	06/13/14 17:49	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
2-Butanone (MEK)	**450**	ug/L	100		10	06/12/14	06/13/14 17:49	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Bromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Chloroform	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Benzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Methyl Acetate	ND	ug/L	10		1	06/12/14	06/13/14 05:39	1011
Methylcyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 05:39	1011
Trichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Carbon Disulfide	ND	ug/L	10		1	06/12/14	06/13/14 05:39	1011
Bromodichloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 6 **Date/Time Sampled: 06/09/2014 16:12** **PSS Sample ID: 14061004-006**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	06/12/14	06/13/14 05:39	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Toluene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
2-Hexanone	ND	ug/L	10		1	06/12/14	06/13/14 05:39	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Dibromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 05:39	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 05:39	1011
Diisopropyl ether	ND	ug/L	10		1	06/12/14	06/13/14 05:39	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/12/14	06/13/14 05:39	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 05:39	1011
Bromoform	ND	ug/L	5.0		1	06/12/14	06/13/14 05:39	1011
Tetrachloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Chlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Ethylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
m,p-Xylenes	ND	ug/L	2.0		1	06/12/14	06/13/14 05:39	1011
Styrene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
o-Xylene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Isopropylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	06/12/14	06/13/14 05:39	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
Naphthalene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:39	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 7 **Date/Time Sampled: 06/09/2014 13:30** **PSS Sample ID: 14061004-007**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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	06/10/14	06/10/14 15:47	1035

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 7 **Date/Time Sampled: 06/09/2014 13:30** **PSS Sample ID: 14061004-007**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Chloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Vinyl Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
tert-Butyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 04:29	1011
Bromomethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Chloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Acetone	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
Cyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	06/12/14	06/13/14 04:29	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Methylene Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Methyl-t-butyl ether	**2.5**	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
2-Butanone (MEK)	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Bromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Chloroform	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Benzene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Methyl Acetate	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
Methylcyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
Trichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Carbon Disulfide	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
Bromodichloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 7 **Date/Time Sampled: 06/09/2014 13:30** **PSS Sample ID: 14061004-007**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	06/12/14	06/13/14 04:29	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Toluene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
2-Hexanone	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Dibromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
Diisopropyl ether	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 04:29	1011
Bromoform	ND	ug/L	5.0		1	06/12/14	06/13/14 04:29	1011
Tetrachloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Chlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Ethylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
m,p-Xylenes	ND	ug/L	2.0		1	06/12/14	06/13/14 04:29	1011
Styrene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
o-Xylene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Isopropylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	06/12/14	06/13/14 04:29	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
Naphthalene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 04:29	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004

AECOM, Columbia, MD

June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 8 **Date/Time Sampled: 06/09/2014 17:10** **PSS Sample ID: 14061004-008**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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)	**350**	ug/L	100		1	06/10/14	06/11/14 07:49	1035

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 8 **Date/Time Sampled: 06/09/2014 17:10** **PSS Sample ID: 14061004-008**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Chloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Vinyl Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
tert-Butyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 06:14	1011
Bromomethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Chloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Acetone	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
Cyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	06/12/14	06/13/14 06:14	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Methylene Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Methyl-t-butyl ether	**420**	ug/L	10		10	06/12/14	06/13/14 18:24	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
2-Butanone (MEK)	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Bromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Chloroform	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Benzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Methyl Acetate	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
Methylcyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
Trichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Carbon Disulfide	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
Bromodichloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 8 **Date/Time Sampled: 06/09/2014 17:10** **PSS Sample ID: 14061004-008**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	06/12/14	06/13/14 06:14	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Toluene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
2-Hexanone	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Dibromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
Diisopropyl ether	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 06:14	1011
Bromoform	ND	ug/L	5.0		1	06/12/14	06/13/14 06:14	1011
Tetrachloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Chlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Ethylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
m,p-Xylenes	ND	ug/L	2.0		1	06/12/14	06/13/14 06:14	1011
Styrene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
o-Xylene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Isopropylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	06/12/14	06/13/14 06:14	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
Naphthalene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:14	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004

AECOM, Columbia, MD

June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 9 **Date/Time Sampled: 06/09/2014 17:20** **PSS Sample ID: 14061004-009**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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)	**660**	ug/L	100		1	06/10/14	06/11/14 08:14	1035

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 9 **Date/Time Sampled: 06/09/2014 17:20** **PSS Sample ID: 14061004-009**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Chloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Vinyl Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
tert-Butyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 06:50	1011
Bromomethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Chloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Acetone	ND	ug/L	10		1	06/12/14	06/13/14 06:50	1011
Cyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 06:50	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	06/12/14	06/13/14 06:50	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Methylene Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Methyl-t-butyl ether	**760**	ug/L	10		10	06/12/14	06/13/14 18:59	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
2-Butanone (MEK)	ND	ug/L	10		1	06/12/14	06/13/14 06:50	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Bromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Chloroform	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Benzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Methyl Acetate	ND	ug/L	10		1	06/12/14	06/13/14 06:50	1011
Methylcyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 06:50	1011
Trichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Carbon Disulfide	ND	ug/L	10		1	06/12/14	06/13/14 06:50	1011
Bromodichloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 9 **Date/Time Sampled: 06/09/2014 17:20** **PSS Sample ID: 14061004-009**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	06/12/14	06/13/14 06:50	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Toluene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
2-Hexanone	ND	ug/L	10		1	06/12/14	06/13/14 06:50	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Dibromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 06:50	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 06:50	1011
Diisopropyl ether	ND	ug/L	10		1	06/12/14	06/13/14 06:50	1011
tert-Amyl methyl ether	**21**	ug/L	10		1	06/12/14	06/13/14 06:50	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 06:50	1011
Bromoform	ND	ug/L	5.0		1	06/12/14	06/13/14 06:50	1011
Tetrachloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Chlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Ethylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
m,p-Xylenes	ND	ug/L	2.0		1	06/12/14	06/13/14 06:50	1011
Styrene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
o-Xylene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Isopropylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	06/12/14	06/13/14 06:50	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
Naphthalene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 06:50	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 10 **Date/Time Sampled: 06/09/2014 17:30** **PSS Sample ID: 14061004-010**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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	06/10/14	06/11/14 08:39	1035

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 10 **Date/Time Sampled: 06/09/2014 17:30** **PSS Sample ID: 14061004-010**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates | Analytical Method: SW-846 8260 B | Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Dichlorodifluoromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Chloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Vinyl Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
tert-Butyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 05:04	1011
Bromomethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Chloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Acetone	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
Cyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
Trichlorofluoromethane	ND	ug/L	5.0		1	06/12/14	06/13/14 05:04	1011
1,1-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Methylene Chloride	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Methyl-t-butyl ether	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,1-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
2-Butanone (MEK)	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Bromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Chloroform	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,1,1-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,2-Dichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Carbon Tetrachloride	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Benzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,2-Dichloropropane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Methyl Acetate	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
Methylcyclohexane	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
Trichloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Carbon Disulfide	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
Bromodichloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061004
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: MW 10 **Date/Time Sampled: 06/09/2014 17:30** **PSS Sample ID: 14061004-010**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

TCL Volatiles plus Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
4-Methyl-2-Pentanone	ND	ug/L	5.0		1	06/12/14	06/13/14 05:04	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Toluene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
2-Hexanone	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Dibromochloromethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
Diisopropyl ether	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/12/14	06/13/14 05:04	1011
Bromoform	ND	ug/L	5.0		1	06/12/14	06/13/14 05:04	1011
Tetrachloroethene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Chlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Ethylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
m,p-Xylenes	ND	ug/L	2.0		1	06/12/14	06/13/14 05:04	1011
Styrene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
o-Xylene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Isopropylbenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	06/12/14	06/13/14 05:04	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
Naphthalene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/12/14	06/13/14 05:04	1011

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14061004
Project ID: 60144916

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.

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): 14061004
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8015C	MW 1	Initial	14061004-001	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/10/2014 13:15
	MW 2	Initial	14061004-002	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/10/2014 13:40
	MW 3	Initial	14061004-003	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/10/2014 14:06
	MW 4	Initial	14061004-004	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/10/2014 14:31
	MW 5	Initial	14061004-005	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/10/2014 14:57
	MW 6	Initial	14061004-006	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/10/2014 15:22
	MW 7	Initial	14061004-007	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/10/2014 15:47
	MW 8	Initial	14061004-008	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/11/2014 07:49
	MW 9	Initial	14061004-009	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/11/2014 08:14
	MW 10	Initial	14061004-010	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/11/2014 08:39
	50766-2-BKS	BKS	50766-2-BKS	1035	W	50766	114546	--------	06/10/2014 10:06	06/10/2014 11:54
	50766-2-BLK	BLK	50766-2-BLK	1035	W	50766	114546	--------	06/10/2014 10:06	06/10/2014 11:29
	MW 1 S	MS	14061004-001 S	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/11/2014 09:04
	MW 1 SD	MSD	14061004-001 SD	1035	W	50766	114546	06/09/2014	06/10/2014 10:06	06/11/2014 09:30
SW-846 8260 B	MW 1	Initial	14061004-001	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/12/2014 23:47
	MW 2	Initial	14061004-002	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/13/2014 02:08
	MW 3	Initial	14061004-003	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/13/2014 02:43
	MW 4	Initial	14061004-004	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/13/2014 03:18
	MW 5	Initial	14061004-005	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/13/2014 03:54
	MW 6	Initial	14061004-006	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/13/2014 05:39
	MW 7	Initial	14061004-007	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/13/2014 04:29
	MW 8	Initial	14061004-008	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/13/2014 06:14
	MW 9	Initial	14061004-009	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/13/2014 06:50
	MW 10	Initial	14061004-010	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/13/2014 05:04
	50778-1-BKS	BKS	50778-1-BKS	1011	W	50778	114567	--------	06/12/2014 13:00	06/12/2014 22:02
	50778-1-BLK	BLK	50778-1-BLK	1011	W	50778	114567	--------	06/12/2014 13:00	06/12/2014 23:12
	MW 1 S	MS	14061004-001 S	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/13/2014 00:23
	MW 1 SD	MSD	14061004-001 SD	1011	W	50778	114567	06/09/2014	06/12/2014 13:00	06/13/2014 00:58
	50796-1-BKS	BKS	50796-1-BKS	1011	W	50796	114596	--------	06/13/2014 13:00	06/13/2014 10:43

Analytical Data Package Information Summary

Work Order(s): 14061004
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8260 B	50796-1-BLK	BLK	50796-1-BLK	1011	W	50796	114596	--------	06/13/2014 13:00	06/13/2014 11:52
	GW-6-10-14 S	MS	14061114-001 S	1011	W	50796	114596	06/10/2014	06/13/2014 13:00	06/13/2014 16:04
	GW-6-10-14 SD	MSD	14061114-001 SD	1011	W	50796	114596	06/10/2014	06/13/2014 13:00	06/13/2014 16:39
	MW 6	Reanalysis	14061004-006	1011	W	50778	114596	06/09/2014	06/12/2014 13:00	06/13/2014 17:49
	MW 8	Reanalysis	14061004-008	1011	W	50778	114596	06/09/2014	06/12/2014 13:00	06/13/2014 18:24
	MW 9	Reanalysis	14061004-009	1011	W	50778	114596	06/09/2014	06/12/2014 13:00	06/13/2014 18:59

PHASE SEPARATION SCIENCE, INC.

QC Summary 14061004

AECOM
7-11 Store 32785

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114546 Matrix: Ground Water Date Prep: 06/10/2014
PSS Sample ID: 14061004-001

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	84		65-111	%	06/10/14 13:15

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/2014
PSS Sample ID: 14061004-001

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	107		84-110	%	06/12/14 23:47
Toluene-D8	105		94-109	%	06/12/14 23:47
4-Bromofluorobenzene	104		81-133	%	06/12/14 23:47

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114546 Matrix: Ground Water Date Prep: 06/10/2014
PSS Sample ID: 14061004-002

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	80		65-111	%	06/10/14 13:40

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/2014
PSS Sample ID: 14061004-002

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	106		84-110	%	06/13/14 02:08
Toluene-D8	105		94-109	%	06/13/14 02:08
4-Bromofluorobenzene	104		81-133	%	06/13/14 02:08

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114546 Matrix: Ground Water Date Prep: 06/10/2014
PSS Sample ID: 14061004-003

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	84		65-111	%	06/10/14 14:06

PHASE SEPARATION SCIENCE, INC.

QC Summary 14061004

AECOM
7-11 Store 32785

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/2014
PSS Sample ID: 14061004-003

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	105		84-110	%	06/13/14 02:43
Toluene-D8	105		94-109	%	06/13/14 02:43
4-Bromofluorobenzene	104		81-133	%	06/13/14 02:43

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114546 Matrix: Ground Water Date Prep: 06/10/2014
PSS Sample ID: 14061004-004

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	82		65-111	%	06/10/14 14:31

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/2014
PSS Sample ID: 14061004-004

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	109		84-110	%	06/13/14 03:18
Toluene-D8	107		94-109	%	06/13/14 03:18
4-Bromofluorobenzene	103		81-133	%	06/13/14 03:18

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114546 Matrix: Ground Water Date Prep: 06/10/2014
PSS Sample ID: 14061004-005

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	67		65-111	%	06/10/14 14:57

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/2014
PSS Sample ID: 14061004-005

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	109		84-110	%	06/13/14 03:54
Toluene-D8	107		94-109	%	06/13/14 03:54
4-Bromofluorobenzene	103		81-133	%	06/13/14 03:54

PHASE SEPARATION SCIENCE, INC.

QC Summary 14061004

AECOM
7-11 Store 32785

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114546 Matrix: Ground Water Date Prep: 06/10/2014
PSS Sample ID: 14061004-006

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	82		65-111	%	06/10/14 15:22

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/2014
PSS Sample ID: 14061004-006

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	109		84-110	%	06/13/14 05:39
Toluene-D8	105		94-109	%	06/13/14 05:39
4-Bromofluorobenzene	100		81-133	%	06/13/14 05:39

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114546 Matrix: Ground Water Date Prep: 06/10/2014
PSS Sample ID: 14061004-007

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	84		65-111	%	06/10/14 15:47

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/2014
PSS Sample ID: 14061004-007

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	110		84-110	%	06/13/14 04:29
Toluene-D8	107		94-109	%	06/13/14 04:29
4-Bromofluorobenzene	103		81-133	%	06/13/14 04:29

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114546 Matrix: Ground Water Date Prep: 06/10/2014
PSS Sample ID: 14061004-008

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	80		65-111	%	06/11/14 07:49

PHASE SEPARATION SCIENCE, INC.

QC Summary 14061004

AECOM
7-11 Store 32785

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/2014
PSS Sample ID: 14061004-008

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	107		84-110	%	06/13/14 06:14
Toluene-D8	106		94-109	%	06/13/14 06:14
4-Bromofluorobenzene	103		81-133	%	06/13/14 06:14

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114546 Matrix: Ground Water Date Prep: 06/10/2014
PSS Sample ID: 14061004-009

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	84		65-111	%	06/11/14 08:14

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/2014
PSS Sample ID: 14061004-009

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	106		84-110	%	06/13/14 06:50
Toluene-D8	104		94-109	%	06/13/14 06:50
4-Bromofluorobenzene	104		81-133	%	06/13/14 06:50

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114546 Matrix: Ground Water Date Prep: 06/10/2014
PSS Sample ID: 14061004-010

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	84		65-111	%	06/11/14 08:39

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/2014
PSS Sample ID: 14061004-010

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	108		84-110	%	06/13/14 05:04
Toluene-D8	106		94-109	%	06/13/14 05:04
4-Bromofluorobenzene	102		81-133	%	06/13/14 05:04

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 14061004

AECOM

7-11 Store 32785

Analytical Method: SW-846 8015C Prep Method: SW5030B

Seq Number: 114546 Matrix: Water Date Prep: 06/10/14

MB Sample Id: 50766-2-BLK LCS Sample Id: 50766-2-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
TPH-GRO (Gasoline Range Organics	<100	5000	3815	76	61-138	ug/L	06/10/14 11:54	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	79		101		65-111	%	06/10/14 11:54

Analytical Method: SW-846 8015C Prep Method: SW5030B

Seq Number: 114546 Matrix: Ground Water Date Prep: 06/10/14

Parent Sample Id: 14061004-001 MS Sample Id: 14061004-001 S MSD Sample Id: 14061004-001 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 Organics	<100	5000	4422	88	4176	84	58-136	6	25	ug/L	06/11/14 09:04	

Surrogate	MS Result	MS Flag	MSD Result	MSD Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	89		106		65-111	%	06/11/14 09:04

PHASE SEPARATION SCIENCE, INC.

QC Summary 14061004

AECOM

7-11 Store 32785

Analytical Method: SW-846 8260 B Prep Method: SW5030B

Seq Number: 114567 Matrix: Water Date Prep: 06/12/14

MB Sample Id: 50778-1-BLK LCS Sample Id: 50778-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Dichlorodifluoromethane	<1.000	50.00	43.39	87	54-139	ug/L	06/12/14 22:02	
Chloromethane	<1.000	50.00	46.21	92	62-131	ug/L	06/12/14 22:02	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<1.000	50.00	44.61	89	56-126	ug/L	06/12/14 22:02	
Vinyl Chloride	<1.000	50.00	50.01	100	64-132	ug/L	06/12/14 22:02	
tert-Butyl alcohol	<20.00	50.00	46.22	92	15-150	ug/L	06/12/14 22:02	
Bromomethane	<1.000	50.00	46.47	93	40-147	ug/L	06/12/14 22:02	
Chloroethane	<1.000	50.00	46.27	93	59-132	ug/L	06/12/14 22:02	
Acetone	<10.00	50.00	56.74	113	53-146	ug/L	06/12/14 22:02	
Cyclohexane	<10.00	50.00	49.60	99	46-150	ug/L	06/12/14 22:02	
Trichlorofluoromethane	<5.000	50.00	47.62	95	45-130	ug/L	06/12/14 22:02	
1,1-Dichloroethene	<1.000	50.00	46.97	94	59-123	ug/L	06/12/14 22:02	
Methylene Chloride	<1.000	50.00	45.91	92	61-126	ug/L	06/12/14 22:02	
trans-1,2-Dichloroethene	<1.000	50.00	47.78	96	58-134	ug/L	06/12/14 22:02	
Methyl-t-butyl ether	<1.000	50.00	50.69	101	30-168	ug/L	06/12/14 22:02	
1,1-Dichloroethane	<1.000	50.00	47.49	95	51-136	ug/L	06/12/14 22:02	
2-Butanone (MEK)	<10.00	50.00	46.00	92	56-133	ug/L	06/12/14 22:02	
cis-1,2-Dichloroethene	<1.000	50.00	50.14	100	77-119	ug/L	06/12/14 22:02	
Bromochloromethane	<1.000	50.00	52.33	105	71-122	ug/L	06/12/14 22:02	
Chloroform	<1.000	50.00	48.32	97	71-118	ug/L	06/12/14 22:02	
1,1,1-Trichloroethane	<1.000	50.00	48.52	97	66-133	ug/L	06/12/14 22:02	
1,2-Dichloroethane	<1.000	50.00	48.74	97	64-130	ug/L	06/12/14 22:02	
Carbon Tetrachloride	<1.000	50.00	50.51	101	74-127	ug/L	06/12/14 22:02	
Benzene	<1.000	50.00	50.15	100	77-122	ug/L	06/12/14 22:02	
1,2-Dichloropropane	<1.000	50.00	48.47	97	75-125	ug/L	06/12/14 22:02	
Methyl Acetate	<10.00	50.00	49.65	99	47-145	ug/L	06/12/14 22:02	
Methylcyclohexane	<10.00	50.00	47.64	95	61-155	ug/L	06/12/14 22:02	
Trichloroethene	<1.000	50.00	48.21	96	72-127	ug/L	06/12/14 22:02	
Carbon Disulfide	<10.00	50.00	48.64	97	62-134	ug/L	06/12/14 22:02	
Bromodichloromethane	<1.000	50.00	51.33	103	76-122	ug/L	06/12/14 22:02	
cis-1,3-Dichloropropene	<1.000	50.00	45.61	91	74-123	ug/L	06/12/14 22:02	
4-Methyl-2-Pentanone	<5.000	50.00	53.16	106	45-145	ug/L	06/12/14 22:02	
trans-1,3-Dichloropropene	<1.000	50.00	45.91	92	73-116	ug/L	06/12/14 22:02	
1,1,2-Trichloroethane	<1.000	50.00	48.94	98	72-128	ug/L	06/12/14 22:02	
Toluene	<1.000	50.00	50.06	100	77-123	ug/L	06/12/14 22:02	
2-Hexanone	<10.00	50.00	51.22	102	56-134	ug/L	06/12/14 22:02	
1,2-Dibromoethane (EDB)	<1.000	50.00	44.74	89	78-121	ug/L	06/12/14 22:02	
Dibromochloromethane	<1.000	50.00	44.06	88	75-114	ug/L	06/12/14 22:02	
tert-Amyl ethyl ether	<10.00	50.00	41.65	83	60-121	ug/L	06/12/14 22:02	
tert-Butyl ethyl ether	<10.00	50.00	43.42	87	62-137	ug/L	06/12/14 22:02	
Diisopropyl ether	<10.00	50.00	46.45	93	48-146	ug/L	06/12/14 22:02	
tert-Amyl methyl ether	<10.00	50.00	45.75	92	61-129	ug/L	06/12/14 22:02	
tert-Amyl alcohol	<20.00	50.00	57.28	115	27-139	ug/L	06/12/14 22:02	
Bromoform	<5.000	50.00	43.85	88	69-115	ug/L	06/12/14 22:02	
Tetrachloroethene	<1.000	50.00	49.70	99	78-113	ug/L	06/12/14 22:02	
Chlorobenzene	<1.000	50.00	44.60	89	76-116	ug/L	06/12/14 22:02	
Ethylbenzene	<1.000	50.00	45.30	91	79-122	ug/L	06/12/14 22:02	
m,p-Xylenes	<2.000	100	87.50	88	78-119	ug/L	06/12/14 22:02	
Styrene	<1.000	50.00	43.64	87	73-118	ug/L	06/12/14 22:02	
1,1,2,2-Tetrachloroethane	<1.000	50.00	40.36	81	71-126	ug/L	06/12/14 22:02	
o-Xylene	<1.000	50.00	43.84	88	79-123	ug/L	06/12/14 22:02	
Isopropylbenzene	<1.000	50.00	41.49	83	80-128	ug/L	06/12/14 22:02	

PHASE SEPARATION SCIENCE, INC.

QC Summary 14061004

AECOM

7-11 Store 32785

Analytical Method: SW-846 8260 B Prep Method: SW5030B

Seq Number: 114567 Matrix: Water Date Prep: 06/12/14

MB Sample Id: 50778-1-BLK LCS Sample Id: 50778-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
1,3-Dichlorobenzene	<1.000	50.00	44.60	89	80-122	ug/L	06/12/14 22:02	
1,4-Dichlorobenzene	<1.000	50.00	42.14	84	77-118	ug/L	06/12/14 22:02	
1,2-Dichlorobenzene	<1.000	50.00	48.57	97	80-122	ug/L	06/12/14 22:02	
1,2-Dibromo-3-Chloropropane	<10.00	50.00	44.95	90	59-135	ug/L	06/12/14 22:02	
1,2,4-Trichlorobenzene	<1.000	50.00	43.67	87	72-143	ug/L	06/12/14 22:02	
Naphthalene	<1.000	50.00	45.15	90	46-154	ug/L	06/12/14 22:02	
1,2,3-Trichlorobenzene	<1.000	50.00	43.29	87	66-140	ug/L	06/12/14 22:02	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	106		105		84-110	%	06/12/14 22:02
Toluene-D8	106		105		94-109	%	06/12/14 22:02
4-Bromofluorobenzene	102		95		81-133	%	06/12/14 22:02

Analytical Method: SW-846 8260 B Prep Method: SW5030B

Seq Number: 114596 Matrix: Water Date Prep: 06/13/14

MB Sample Id: 50796-1-BLK LCS Sample Id: 50796-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Acetone	<10.00	50.00	48.91	98	53-146	ug/L	06/13/14 10:43	
Methyl-t-butyl ether	<1.000	50.00	47.64	95	30-168	ug/L	06/13/14 10:43	
2-Butanone (MEK)	<10.00	50.00	38.16	76	56-133	ug/L	06/13/14 10:43	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	100		101		84-110	%	06/13/14 10:43
Toluene-D8	99		100		94-109	%	06/13/14 10:43
4-Bromofluorobenzene	102		87		81-133	%	06/13/14 10:43

PHASE SEPARATION SCIENCE, INC.

QC Summary 14061004

AECOM

7-11 Store 32785

Analytical Method: SW-846 8260 B Prep Method: SW5030B

Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/14

Parent Sample Id: 14061004-001 MS Sample Id: 14061004-001 S MSD Sample Id: 14061004-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Dichlorodifluoromethane	<1.000	50.00	42.67	85	43.85	88	47-159	3	25	ug/L	06/13/14 00:23	
Chloromethane	<1.000	50.00	43.01	86	44.17	88	59-144	3	25	ug/L	06/13/14 00:23	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<1.000	50.00	44.50	89	47.10	94	47-139	6	25	ug/L	06/13/14 00:23	
Vinyl Chloride	<1.000	50.00	50.14	100	49.51	99	60-146	1	25	ug/L	06/13/14 00:23	
tert-Butyl alcohol	<20.00	50.00	39.14	78	40.90	82	1-183	4	25	ug/L	06/13/14 00:23	
Bromomethane	<1.000	50.00	43.22	86	43.31	87	29-154	0	25	ug/L	06/13/14 00:23	
Chloroethane	<1.000	50.00	43.15	86	44.27	89	40-150	3	25	ug/L	06/13/14 00:23	
Acetone	<10.00	50.00	51.96	104	59.13	118	41-161	13	25	ug/L	06/13/14 00:23	
Cyclohexane	<10.00	50.00	50.15	100	50.85	102	34-161	1	25	ug/L	06/13/14 00:23	
Trichlorofluoromethane	<5.000	50.00	44.63	89	49.56	99	37-147	10	25	ug/L	06/13/14 00:23	
1,1-Dichloroethene	<1.000	50.00	43.74	87	45.65	91	50-136	4	25	ug/L	06/13/14 00:23	
Methylene Chloride	<1.000	50.00	43.37	87	42.20	84	56-137	3	25	ug/L	06/13/14 00:23	
trans-1,2-Dichloroethene	<1.000	50.00	45.44	91	43.90	88	54-144	3	25	ug/L	06/13/14 00:23	
Methyl-t-butyl ether	1.020	50.00	45.61	89	46.06	90	22-182	1	25	ug/L	06/13/14 00:23	
1,1-Dichloroethane	<1.000	50.00	45.27	91	43.63	87	44-152	4	25	ug/L	06/13/14 00:23	
2-Butanone (MEK)	<10.00	50.00	40.64	81	40.83	82	47-140	0	25	ug/L	06/13/14 00:23	
cis-1,2-Dichloroethene	<1.000	50.00	46.69	93	45.62	91	76-127	2	25	ug/L	06/13/14 00:23	
Bromochloromethane	<1.000	50.00	47.45	95	46.17	92	67-130	3	25	ug/L	06/13/14 00:23	
Chloroform	<1.000	50.00	45.68	91	43.26	87	67-130	5	25	ug/L	06/13/14 00:23	
1,1,1-Trichloroethane	<1.000	50.00	46.86	94	45.79	92	70-138	2	25	ug/L	06/13/14 00:23	
1,2-Dichloroethane	<1.000	50.00	45.27	91	44.13	88	60-142	3	25	ug/L	06/13/14 00:23	
Carbon Tetrachloride	<1.000	50.00	50.32	101	48.68	97	74-136	3	25	ug/L	06/13/14 00:23	
Benzene	<1.000	50.00	48.02	96	45.73	91	75-132	5	25	ug/L	06/13/14 00:23	
1,2-Dichloropropane	<1.000	50.00	46.06	92	44.17	88	70-139	4	25	ug/L	06/13/14 00:23	
Methyl Acetate	<10.00	50.00	39.50	79	41.48	83	37-143	5	25	ug/L	06/13/14 00:23	
Methylcyclohexane	<10.00	50.00	48.50	97	49.28	99	55-148	2	25	ug/L	06/13/14 00:23	
Trichloroethene	<1.000	50.00	45.86	92	44.15	88	67-139	4	25	ug/L	06/13/14 00:23	
Carbon Disulfide	<10.00	50.00	47.21	94	46.38	93	59-146	2	25	ug/L	06/13/14 00:23	
Bromodichloromethane	<1.000	50.00	48.71	97	45.79	92	69-134	6	25	ug/L	06/13/14 00:23	
cis-1,3-Dichloropropene	<1.000	50.00	41.41	83	40.33	81	64-127	3	25	ug/L	06/13/14 00:23	
4-Methyl-2-Pentanone	<5.000	50.00	43.61	87	41.11	82	44-133	6	25	ug/L	06/13/14 00:23	
trans-1,3-Dichloropropene	<1.000	50.00	41.64	83	39.82	80	62-123	4	25	ug/L	06/13/14 00:23	
1,1,2-Trichloroethane	<1.000	50.00	45.29	91	44.66	89	65-143	1	25	ug/L	06/13/14 00:23	
Toluene	<1.000	50.00	47.31	95	45.62	91	74-132	4	25	ug/L	06/13/14 00:23	
2-Hexanone	<10.00	50.00	45.86	92	45.95	92	50-130	0	25	ug/L	06/13/14 00:23	
1,2-Dibromoethane (EDB)	<1.000	50.00	41.21	82	40.38	81	72-126	2	25	ug/L	06/13/14 00:23	
Dibromochloromethane	<1.000	50.00	40.52	81	39.02	78	73-114	4	25	ug/L	06/13/14 00:23	
tert-Amyl ethyl ether	<10.00	50.00	36.81	74	36.32	73	48-129	1	25	ug/L	06/13/14 00:23	
tert-Butyl ethyl ether	<10.00	50.00	38.66	77	37.88	76	55-141	2	25	ug/L	06/13/14 00:23	
Diisopropyl ether	<10.00	50.00	41.85	84	41.33	83	49-150	1	25	ug/L	06/13/14 00:23	
tert-Amyl methyl ether	<10.00	50.00	40.96	82	40.59	81	50-139	1	25	ug/L	06/13/14 00:23	
tert-Amyl alcohol	<20.00	50.00	47.94	96	41.14	82	5-149	15	25	ug/L	06/13/14 00:23	
Bromoform	<5.000	50.00	39.97	80	38.66	77	65-115	3	25	ug/L	06/13/14 00:23	
Tetrachloroethene	<1.000	50.00	48.42	97	46.77	94	69-126	3	25	ug/L	06/13/14 00:23	
Chlorobenzene	<1.000	50.00	41.94	84	39.58	79	78-115	6	25	ug/L	06/13/14 00:23	
Ethylbenzene	<1.000	50.00	42.85	86	40.54	81	74-129	6	25	ug/L	06/13/14 00:23	
m,p-Xylenes	<2.000	100	83.09	83	79.02	79	78-119	5	25	ug/L	06/13/14 00:23	
Styrene	<1.000	50.00	40.36	81	37.83	76	67-121	6	25	ug/L	06/13/14 00:23	
1,1,2,2-Tetrachloroethane	<1.000	50.00	37.09	74	36.34	73	68-127	2	25	ug/L	06/13/14 00:23	
o-Xylene	<1.000	50.00	40.52	81	38.79	78	80-123	4	25	ug/L	06/13/14 00:23	X
Isopropylbenzene	<1.000	50.00	38.60	77	37.45	75	72-130	3	25	ug/L	06/13/14 00:23	

PHASE SEPARATION SCIENCE, INC.

QC Summary 14061004

AECOM

7-11 Store 32785

Analytical Method: SW-846 8260 B Prep Method: SW5030B

Seq Number: 114567 Matrix: Ground Water Date Prep: 06/12/14

Parent Sample Id: 14061004-001 MS Sample Id: 14061004-001 S MSD Sample Id: 14061004-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
1,3-Dichlorobenzene	<1.000	50.00	40.67	81	39.84	80	73-117	2	25	ug/L	06/13/14 00:23	
1,4-Dichlorobenzene	<1.000	50.00	39.20	78	37.41	75	72-111	5	25	ug/L	06/13/14 00:23	
1,2-Dichlorobenzene	<1.000	50.00	44.88	90	39.78	80	73-117	12	25	ug/L	06/13/14 00:23	
1,2-Dibromo-3-Chloropropane	<10.00	50.00	39.72	79	40.47	81	45-125	2	25	ug/L	06/13/14 00:23	
1,2,4-Trichlorobenzene	<1.000	50.00	37.90	76	36.24	72	31-135	4	25	ug/L	06/13/14 00:23	
Naphthalene	<1.000	50.00	34.52	69	36.26	73	7-137	5	25	ug/L	06/13/14 00:23	
1,2,3-Trichlorobenzene	<1.000	50.00	38.39	77	36.93	74	9-139	4	25	ug/L	06/13/14 00:23	

Surrogate	MS Result	MS Flag	MSD Result	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	106		106		84-110	%	06/13/14 00:23
Toluene-D8	106		106		94-109	%	06/13/14 00:23
4-Bromofluorobenzene	93		96		81-133	%	06/13/14 00:23

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: AECOM *OFFICE LOC. Columbia MD

*PROJECT MGR: J. Cenzeri *PHONE NO.: (240) 565-6516

EMAIL: FAX NO.: ( )

*PROJECT NAME: 7-11 Store 32785 PROJECT NO.: 60NN4916

SITE LOCATION: Hampstead, MD P.O. NO.: 45314 ACM

SAMPLER(S): N. Barrett DW CERT NO.:

PSS Work Order #: 14061004 PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used: HNO3 / HCl	Analysis/ Method Required (3) * : FULL VOCs 8260 + OXY / TPH-GRO 8015	REMARKS
	MW 1	6/9/14	1415	GW	6	G		✓ ✓	
	MW 2		1530		6				
	MW 3		1515		6				
	MW 4		1450		6				
	MW 5		1400		6				
	MW 6		1612		6				
	MW 7		1330		6				
	MW 8		1710		6				
	MW 9		1720		6				
	MW 10		1730		6				

(5)

Relinquished By:	Date	Time	Received By:
(1)	6/9/14	18:27	Parsons
(2) Parsons	6/10/14	12:00	
(3)			
(4)			

(4)

*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day ☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA ☑ QC SUMM ☐ CLP LIKE ☐ OTHER ☐

Special Instructions:

DW COMPLIANCE? YES ☐

EDD FORMAT TYPE: AECOM

STATE RESULTS REPORTED TO: MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER ☐

# of Coolers: 1

Custody Seal: ABS

Ice Present: Pres Temp: 5°C

Shipping Carrier: Client

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14061004	**Received By**	Jacob Prucnal
Client Name	AECOM	**Date Received**	06/10/2014 12:00:00 PM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	07/15/2014	**Logged In By**	Jacob Prucnal

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	5
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Nick Barrett
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 10

Total No. of Containers Received 60

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: 06/10/2014

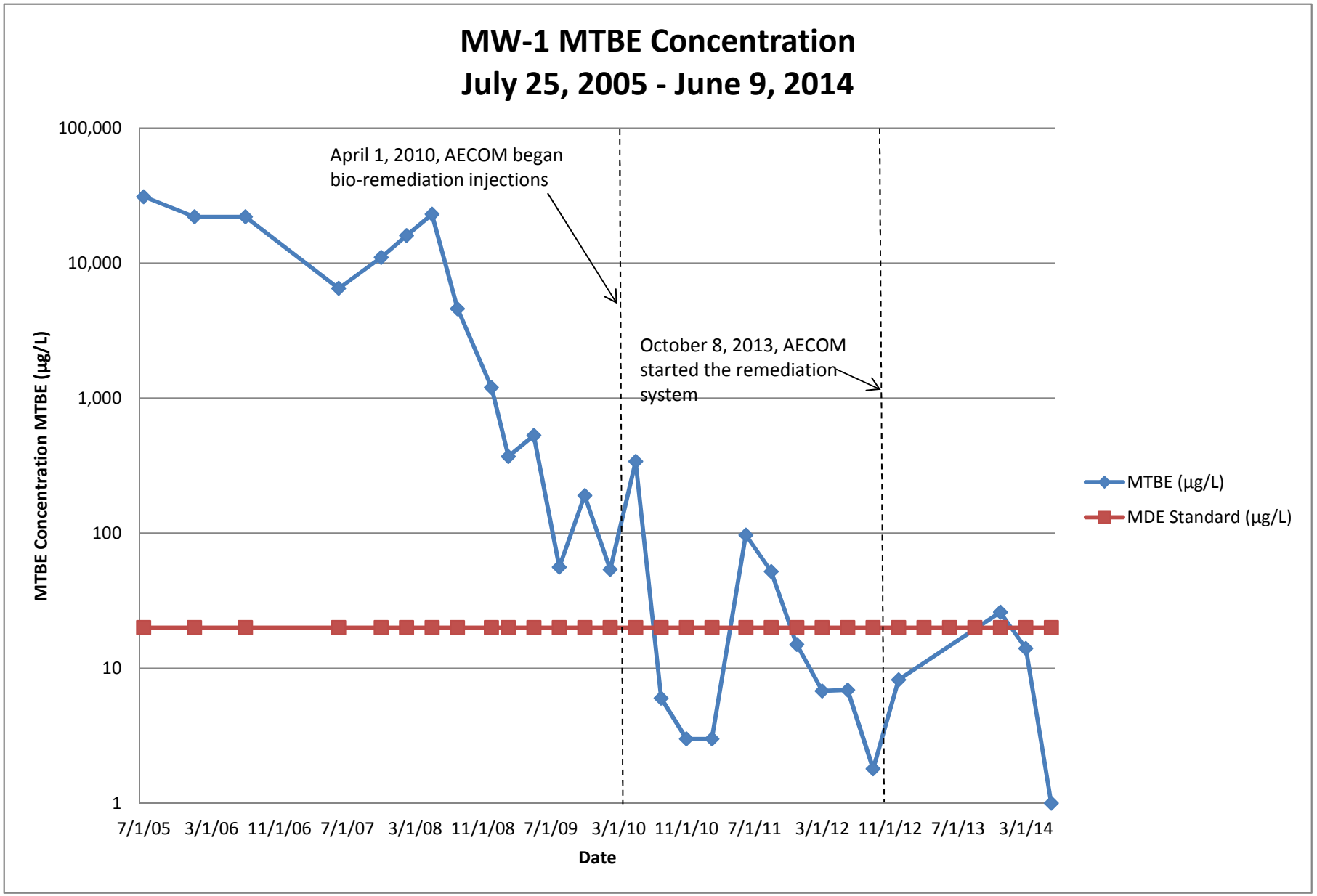
Jacob Prucnal

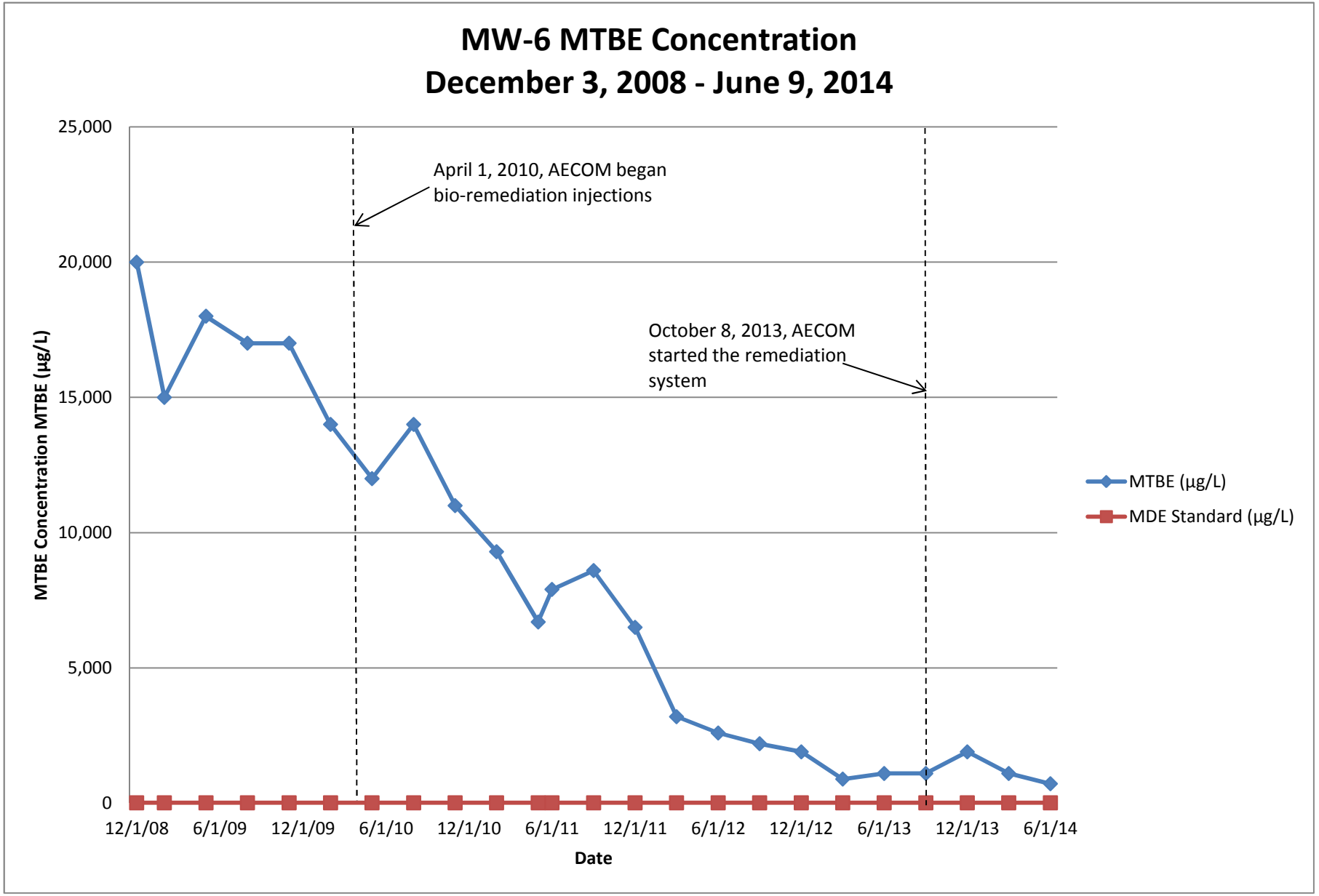
PM Review and Approval: Amy Friedlander — Date: 06/10/2014

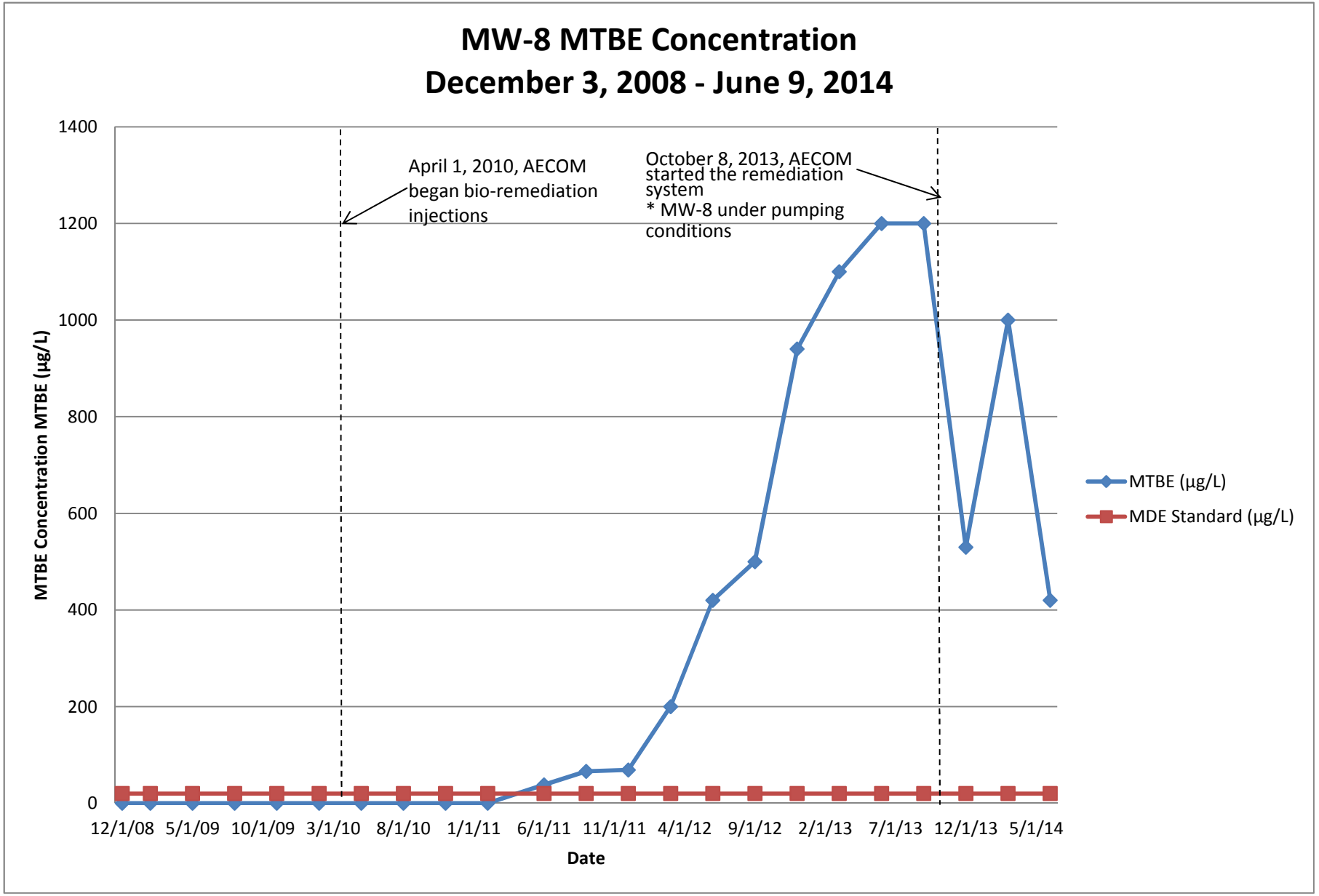
Amy Friedlander

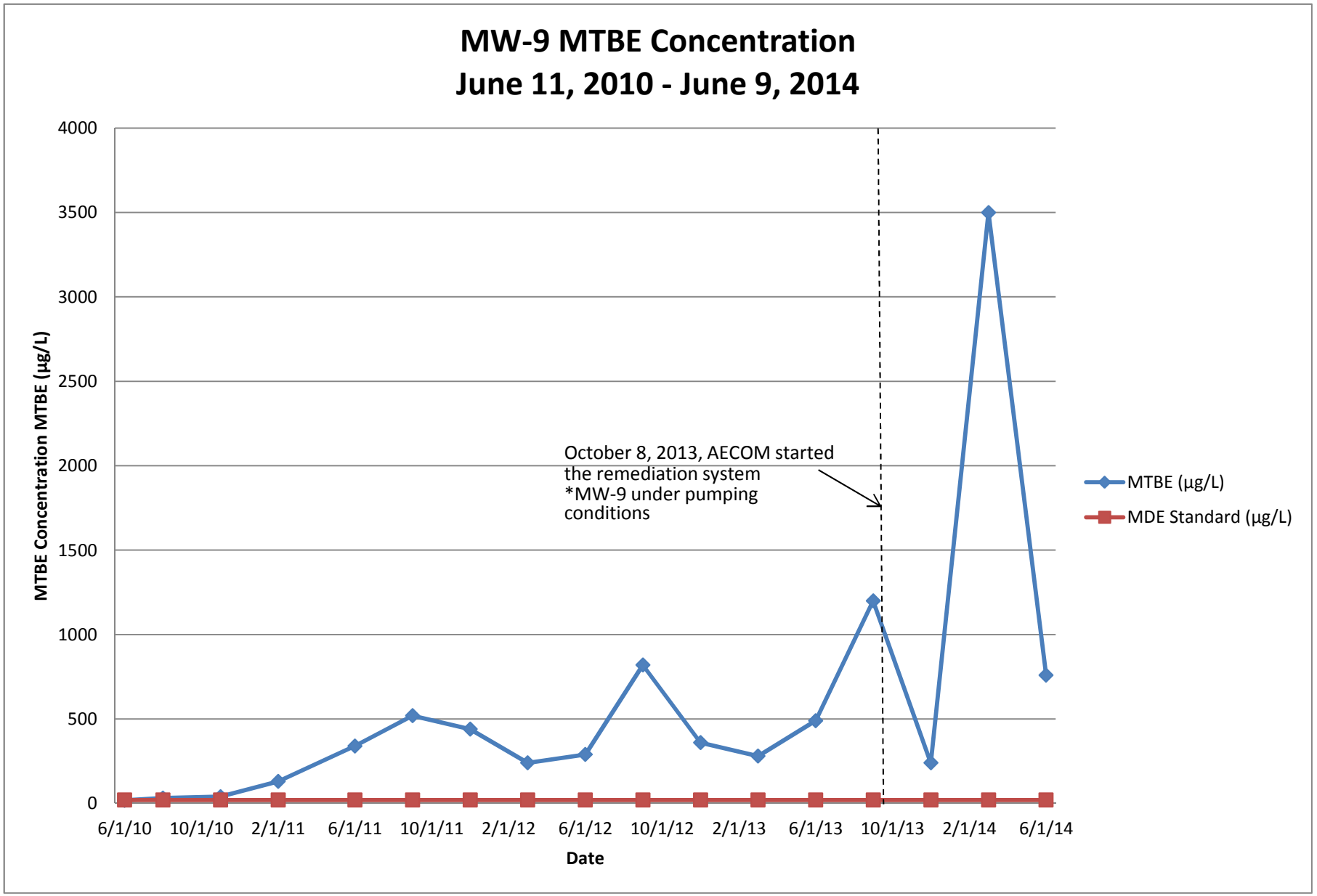
ATTACHMENT B

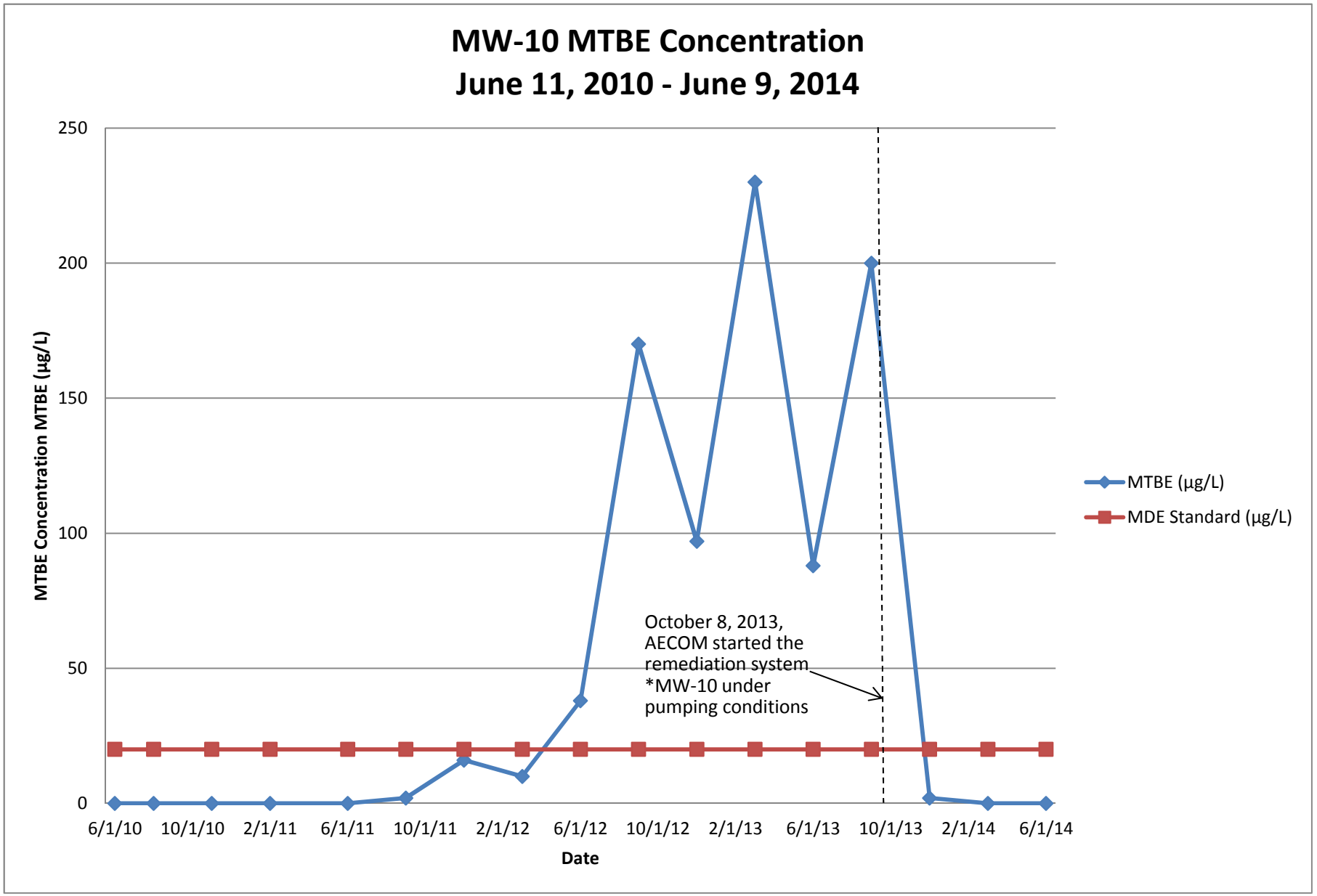
MTBE Concentration Graphs-Over-Time


MW-1 MTBE Concentration
July 25, 2005 - June 9, 2014
MTBE Concentration MTBE (µg/L)
100,000
10,000
1,000
100
10
1
April 1, 2010, AECOM began bio-remediation injections
October 8, 2013, AECOM started the remediation system
7/1/05
3/1/06
11/1/06
7/1/07
3/1/08
11/1/08
7/1/09
3/1/10
11/1/10
7/1/11
3/1/12
11/1/12
7/1/13
3/1/14
Date
MTBE (µg/L)
MDE Standard (µg/L)


MW-6 MTBE Concentration
December 3, 2008 - June 9, 2014
25,000
20,000
15,000
10,000
5,000
0
MTBE Concentration MTBE (µg/L)
April 1, 2010, AECOM began bio-remediation injections
October 8, 2013, AECOM started the remediation system
12/1/08
6/1/09
12/1/09
6/1/10
12/1/10
6/1/11
12/1/11
6/1/12
12/1/12
6/1/13
12/1/13
6/1/14
Date
MTBE (µg/L)
MDE Standard (µg/L)


MW-8 MTBE Concentration
December 3, 2008 - June 9, 2014
MTBE Concentration MTBE (µg/L)
1400
1200
1000
800
600
400
200
0
April 1, 2010, AECOM began bio-remediation injections
October 8, 2013, AECOM started the remediation system
* MW-8 under pumping conditions
12/1/08
5/1/09
10/1/09
3/1/10
8/1/10
1/1/11
6/1/11
11/1/11
4/1/12
9/1/12
2/1/13
7/1/13
12/1/13
5/1/14
Date
MTBE (µg/L)
MDE Standard (µg/L)


MW-9 MTBE Concentration
June 11, 2010 - June 9, 2014
MTBE Concentration MTBE (µg/L)
4000
3500
3000
2500
2000
1500
1000
500
0
6/1/10
10/1/10
2/1/11
6/1/11
10/1/11
2/1/12
6/1/12
10/1/12
2/1/13
6/1/13
10/1/13
2/1/14
6/1/14
Date
October 8, 2013, AECOM started the remediation system *MW-9 under pumping conditions
MTBE (µg/L)
MDE Standard (µg/L)


MW-10 MTBE Concentration
June 11, 2010 - June 9, 2014
MTBE Concentration MTBE (µg/L)
250
200
150
100
50
0
6/1/10
10/1/10
2/1/11
6/1/11
10/1/11
2/1/12
6/1/12
10/1/12
2/1/13
6/1/13
10/1/13
2/1/14
6/1/14
Date
October 8, 2013,
AECOM started the
remediation system
*MW-10 under
pumping conditions
MTBE (µg/L)
MDE Standard (µg/L)

ATTACHMENT C

Residential Treatment and Non-Treatment Potable Well Lab Reports

Analytical Report for

AECOM

Certificate of Analysis No.: 14062510

Project Manager: John Canzeri
Project Name : 7-11 Store 32785
Project Location: Hampstead, MD
Project ID : 60144916

July 2, 2014

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

July 2, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14062510**
Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID.: 60144916

Dear John Canzeri :

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 **14062510**.

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 July 30, 2014. 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: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14062510

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/25/2014 at 10:30 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14062510-001	118 Hanover	GROUND WATER	06/24/14 16:20

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062510
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 118 Hanover **Date/Time Sampled: 06/24/2014 16:20** **PSS Sample ID: 14062510-001**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates Analytical Method: EPA 524.2 Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Bromobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Bromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Bromodichloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Bromoform	ND	ug/L	5.0		1	06/26/14	06/27/14 05:06	1014
Bromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
tert-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
sec-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
n-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Carbon Tetrachloride	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Chlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Chloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Chloroform	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Chloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
2-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
4-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,2-Dibromo-3-Chloropropane	ND	ug/L	5.0		1	06/26/14	06/27/14 05:06	1014
Dibromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,2-Dibromoethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Dibromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,2-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,3-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,4-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Dichlorodifluoromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,1-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,2-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
cis-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
trans-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,1-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062510
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 118 Hanover **Date/Time Sampled: 06/24/2014 16:20** **PSS Sample ID: 14062510-001**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates Analytical Method: EPA 524.2 Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,3-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
2,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,1-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
cis-1,3-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Ethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Isopropylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
4-Isopropyltoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Methylene Chloride	ND	ug/L	5.0		1	06/26/14	06/27/14 05:06	1014
Methyl-t-butyl ether	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Naphthalene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
n-Propylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Styrene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Diisopropyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 05:06	1014
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Tetrachloroethylene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Toluene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/26/14	06/27/14 05:06	1014
1,2,4-Trichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,1,1-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,1,2-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Trichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,2,3-Trichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,2,4-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
1,3,5-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
Vinyl Chloride	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
o-Xylene	ND	ug/L	0.50		1	06/26/14	06/27/14 05:06	1014
m,p-Xylenes	ND	ug/L	1.0		1	06/26/14	06/27/14 05:06	1014
tert-Butyl ethyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 05:06	1014
tert-Butyl alcohol	ND	ug/L	20		1	06/26/14	06/27/14 05:06	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062510

AECOM, Columbia, MD

July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 118 Hanover **Date/Time Sampled: 06/24/2014 16:20** **PSS Sample ID: 14062510-001**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates — Analytical Method: EPA 524.2 — Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Amyl methyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 05:06	1014

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14062510
Project ID: 60144916

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.

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): 14062510
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
EPA 524.2	118 Hanover	Initial	14062510-001	1014	W	51015	114931	06/24/2014	06/26/2014 10:02	06/27/2014 05:06
	51015-1-BKS	BKS	51015-1-BKS	1014	W	51015	114931	--------	06/26/2014 10:02	06/26/2014 23:03
	51015-1-BLK	BLK	51015-1-BLK	1014	W	51015	114931	--------	06/26/2014 10:02	06/27/2014 01:04
	51015-1-BSD	BSD	51015-1-BSD	1014	W	51015	114931	--------	06/26/2014 10:02	06/26/2014 23:43

PHASE SEPARATION SCIENCE, INC.

QC Summary 14062510

AECOM
7-11 Store 32785

Analytical Method: EPA 524.2 Prep Method: E524.2PREP
Seq Number: 114931 Matrix: Ground Water Date Prep: 06/26/2014
PSS Sample ID: 14062510-001

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	99		83-115	%	06/27/14 05:06
Dibromofluoromethane	102		89-106	%	06/27/14 05:06
Toluene-D8	103		94-109	%	06/27/14 05:06

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 14062510

AECOM

7-11 Store 32785

Analytical Method: EPA 524.2 Prep Method: E524.2PREP

Seq Number: 114931 Matrix: Water Date Prep: 06/26/14

MB Sample Id: 51015-1-BLK LCS Sample Id: 51015-1-BKS LCSD Sample Id: 51015-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.5000	10.00	9.580	96	10.05	101	70-130	5	30	ug/L	06/26/14 23:03	
Bromobenzene	<0.5000	10.00	9.370	94	9.930	99	70-130	6	30	ug/L	06/26/14 23:03	
Bromochloromethane	<0.5000	10.00	9.670	97	9.980	100	70-130	3	30	ug/L	06/26/14 23:03	
Bromodichloromethane	<0.5000	10.00	9.540	95	9.920	99	70-130	4	30	ug/L	06/26/14 23:03	
Bromoform	<5.000	20.00	18.23	91	19.40	97	70-130	6	30	ug/L	06/26/14 23:03	
Bromomethane	<0.5000	10.00	9.730	97	10.08	101	70-130	4	30	ug/L	06/26/14 23:03	
tert-Butylbenzene	<0.5000	10.00	9.620	96	10.26	103	70-130	6	30	ug/L	06/26/14 23:03	
sec-Butylbenzene	<0.5000	10.00	9.690	97	10.42	104	70-130	7	30	ug/L	06/26/14 23:03	
n-Butylbenzene	<0.5000	10.00	9.670	97	10.41	104	70-130	7	30	ug/L	06/26/14 23:03	
Carbon Tetrachloride	<0.5000	10.00	10.25	103	10.54	105	70-130	3	30	ug/L	06/26/14 23:03	
Chlorobenzene	<0.5000	10.00	9.250	93	9.800	98	70-130	6	30	ug/L	06/26/14 23:03	
Chloroethane	<0.5000	10.00	9.650	97	10.19	102	70-130	5	30	ug/L	06/26/14 23:03	
Chloroform	<0.5000	10.00	9.480	95	9.840	98	70-130	4	30	ug/L	06/26/14 23:03	
Chloromethane	<0.5000	10.00	9.620	96	10.14	101	70-130	5	30	ug/L	06/26/14 23:03	
2-Chlorotoluene	<0.5000	10.00	9.370	94	10.02	100	70-130	7	30	ug/L	06/26/14 23:03	
4-Chlorotoluene	<0.5000	10.00	9.470	95	10.18	102	70-130	7	30	ug/L	06/26/14 23:03	
1,2-Dibromo-3-Chloropropane	<5.000	50.00	45.56	91	50.08	100	70-130	9	30	ug/L	06/26/14 23:03	
Dibromochloromethane	<0.5000	10.00	9.150	92	9.640	96	70-130	5	30	ug/L	06/26/14 23:03	
1,2-Dibromoethane	<0.5000	10.00	9.010	90	9.580	96	70-130	6	30	ug/L	06/26/14 23:03	
Dibromomethane	<0.5000	10.00	9.520	95	9.850	99	70-130	3	30	ug/L	06/26/14 23:03	
1,2-Dichlorobenzene	<0.5000	10.00	9.460	95	10.13	101	70-130	7	30	ug/L	06/26/14 23:03	
1,3-Dichlorobenzene	<0.5000	10.00	9.370	94	10.10	101	70-130	7	30	ug/L	06/26/14 23:03	
1,4-Dichlorobenzene	<0.5000	10.00	9.420	94	10.13	101	70-130	7	30	ug/L	06/26/14 23:03	
Dichlorodifluoromethane	<0.5000	10.00	9.670	97	10.44	104	70-130	8	30	ug/L	06/26/14 23:03	
1,1-Dichloroethane	<0.5000	10.00	9.590	96	9.930	99	70-130	3	30	ug/L	06/26/14 23:03	
1,2-Dichloroethane	<0.5000	10.00	9.850	99	10.05	101	70-130	2	30	ug/L	06/26/14 23:03	
cis-1,2-Dichloroethene	<0.5000	10.00	9.490	95	9.890	99	70-130	4	30	ug/L	06/26/14 23:03	
trans-1,2-Dichloroethene	<0.5000	10.00	9.540	95	9.730	97	70-130	2	30	ug/L	06/26/14 23:03	
1,1-Dichloroethene	<0.5000	10.00	9.660	97	10.09	101	70-130	4	30	ug/L	06/26/14 23:03	
1,2-Dichloropropane	<0.5000	10.00	9.530	95	10.02	100	70-130	5	30	ug/L	06/26/14 23:03	
1,3-Dichloropropane	<0.5000	10.00	9.280	93	9.700	97	70-130	4	30	ug/L	06/26/14 23:03	
2,2-Dichloropropane	<0.5000	10.00	8.650	87	8.980	90	70-130	4	30	ug/L	06/26/14 23:03	
1,1-Dichloropropene	<0.5000	10.00	9.570	96	10.10	101	70-130	5	30	ug/L	06/26/14 23:03	
cis-1,3-Dichloropropene	<0.5000	10.00	9.170	92	9.730	97	70-130	6	30	ug/L	06/26/14 23:03	
Ethylbenzene	<0.5000	10.00	9.430	94	10.06	101	70-130	6	30	ug/L	06/26/14 23:03	
Isopropylbenzene	<0.5000	10.00	9.490	95	10.18	102	70-130	7	30	ug/L	06/26/14 23:03	
4-Isopropyltoluene	<0.5000	10.00	9.510	95	10.30	103	70-130	8	30	ug/L	06/26/14 23:03	
Methylene Chloride	<5.000	10.00	9.390	94	9.720	97	70-130	3	30	ug/L	06/26/14 23:03	
Methyl-t-butyl ether	<0.5000	10.00	9.470	95	9.820	98	70-130	4	30	ug/L	06/26/14 23:03	
Naphthalene	<0.5000	10.00	9.410	94	10.14	101	70-130	7	30	ug/L	06/26/14 23:03	
n-Propylbenzene	<0.5000	10.00	9.590	96	10.35	104	70-130	8	30	ug/L	06/26/14 23:03	
Styrene	<0.5000	10.00	9.300	93	10.11	101	70-130	8	30	ug/L	06/26/14 23:03	
1,1,1,2-Tetrachloroethane	<0.5000	10.00	9.160	92	9.690	97	70-130	6	30	ug/L	06/26/14 23:03	
Diisopropyl ether	<5.000	40.00	38.65	97	38.54	96	70-130	0	30	ug/L	06/26/14 23:03	
1,1,2,2-Tetrachloroethane	<0.5000	10.00	9.160	92	9.910	99	70-130	8	30	ug/L	06/26/14 23:03	
Tetrachloroethylene	<0.5000	10.00	9.460	95	10.03	100	70-130	6	30	ug/L	06/26/14 23:03	
Toluene	<0.5000	10.00	9.350	94	10.01	100	70-130	7	30	ug/L	06/26/14 23:03	
1,2,3-Trichlorobenzene	<1.000	10.00	9.490	95	10.26	103	70-130	8	30	ug/L	06/26/14 23:03	
1,2,4-Trichlorobenzene	<0.5000	10.00	9.310	93	9.940	99	70-130	7	30	ug/L	06/26/14 23:03	
1,1,1-Trichloroethane	<0.5000	10.00	9.560	96	10.07	101	70-130	5	30	ug/L	06/26/14 23:03	
1,1,2-Trichloroethane	<0.5000	10.00	9.450	95	9.990	100	70-130	6	30	ug/L	06/26/14 23:03	

PHASE SEPARATION SCIENCE, INC.

QC Summary 14062510

AECOM

7-11 Store 32785

Analytical Method: EPA 524.2 Prep Method: E524.2PREP

Seq Number: 114931 Matrix: Water Date Prep: 06/26/14

MB Sample Id: 51015-1-BLK LCS Sample Id: 51015-1-BKS LCSD Sample Id: 51015-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Trichloroethene	<0.5000	10.00	9.630	96	10.23	102	70-130	6	30	ug/L	06/26/14 23:03	
1,2,3-Trichloropropane	<0.5000	10.00	8.770	88	9.310	93	70-130	6	30	ug/L	06/26/14 23:03	
1,2,4-Trimethylbenzene	<0.5000	10.00	9.430	94	10.18	102	70-130	8	30	ug/L	06/26/14 23:03	
1,3,5-Trimethylbenzene	<0.5000	10.00	9.490	95	10.23	102	70-130	8	30	ug/L	06/26/14 23:03	
Vinyl Chloride	<0.5000	10.00	10.09	101	10.41	104	70-130	3	30	ug/L	06/26/14 23:03	
o-Xylene	<0.5000	10.00	9.490	95	10.02	100	70-130	5	30	ug/L	06/26/14 23:03	
m,p-Xylenes	<1.000	20.00	18.62	93	20.00	100	70-130	7	30	ug/L	06/26/14 23:03	
tert-Butyl ethyl ether	<5.000	40.00	38.17	95	37.90	95	68-126	1	30	ug/L	06/26/14 23:03	
tert-Butyl alcohol	<20.00	80.00	74.39	93	75.34	94	54-122	1	30	ug/L	06/26/14 23:03	
tert-Amyl methyl ether	<5.000	40.00	38.33	96	37.95	95	67-124	1	30	ug/L	06/26/14 23:03	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	LCSD Result	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	98		99		99		83-115	%	06/26/14 23:03
Dibromofluoromethane	103		100		98		89-106	%	06/26/14 23:03
Toluene-D8	102		99		100		94-109	%	06/26/14 23:03

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

5

(1)

*CLIENT: AECOM *OFFICE LOC. Columbia, MD

*PROJECT MGR: J. Canzeri *PHONE NO.: (240) 5656516

EMAIL: FAX NO.: ( )

*PROJECT NAME: 7-11 store 32785 PROJECT NO. 60144916

SITE LOCATION: Hampstead, MD P.O. NO.: 45814ACM

SAMPLER(S): Mike Parsons DW CERT NO.:

PSS Work Order #: 1604621410 PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used: HCl	Analysis/ Method Required (3): * 524.2 TOX	REMARKS
	118 Hanover	6/24/14	1620	GW	3	G		✓	

(5)

Relinquished By: (1)	Date	Time	Received By:
M2C (Parsons)	6/25/14	10:30	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day ☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA ☑ QC SUMM ☐ CLP LIKE ☐ OTHER

# of Coolers: 1

Custody Seal: ABS

Ice Present: Yes Temp: 5°C

Shipping Carrier: client

Special Instructions:

DW COMPLIANCE? YES ☐

EDD FORMAT TYPE: AECOM

STATE RESULTS REPORTED TO:
MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14062510	**Received By**	Simon Crisp
Client Name	AECOM	**Date Received**	06/25/2014 10:30:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	07/30/2014	**Logged In By**	Lynn Jackson

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	5
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Mike Parsons
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 1

Total No. of Containers Received 3

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: L Jackson — Date: 06/25/2014

Lynn Jackson

PM Review and Approval: Amy Friedlander — Date: 06/25/2014

Amy Friedlander

Analytical Report for

AECOM

Certificate of Analysis No.: 14062511

Project Manager: John Canzeri
Project Name : 7-11 Store 32785
Project Location: Hampstead MD
Project ID : 60144916

July 2, 2014

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

July 2, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14062511**
Project Name: 7-11 Store 32785
Project Location: Hampstead MD
Project ID.: 60144916

Dear John Canzeri :

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 **14062511**.

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 July 30, 2014. 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: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14062511

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/25/2014 at 10:30 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14062511-001	114 Hanover	GROUND WATER	06/24/14 12:22

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062511
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead MD
Project ID: 60144916

Sample ID: 114 Hanover **Date/Time Sampled: 06/24/2014 12:22** **PSS Sample ID: 14062511-001**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates Analytical Method: EPA 524.2 Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Bromobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Bromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Bromodichloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Bromoform	ND	ug/L	5.0		1	06/26/14	06/27/14 02:25	1014
Bromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
tert-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
sec-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
n-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Carbon Tetrachloride	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Chlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Chloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Chloroform	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Chloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
2-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
4-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,2-Dibromo-3-Chloropropane	ND	ug/L	5.0		1	06/26/14	06/27/14 02:25	1014
Dibromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,2-Dibromoethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Dibromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,2-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,3-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,4-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Dichlorodifluoromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,1-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,2-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
cis-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
trans-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,1-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062511
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead MD
Project ID: 60144916

Sample ID: 114 Hanover **Date/Time Sampled: 06/24/2014 12:22** **PSS Sample ID: 14062511-001**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates Analytical Method: EPA 524.2 Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,3-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
2,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,1-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
cis-1,3-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Ethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Isopropylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
4-Isopropyltoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Methylene Chloride	ND	ug/L	5.0		1	06/26/14	06/27/14 02:25	1014
Methyl-t-butyl ether	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Naphthalene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
n-Propylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Styrene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Diisopropyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 02:25	1014
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Tetrachloroethylene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Toluene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/26/14	06/27/14 02:25	1014
1,2,4-Trichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,1,1-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,1,2-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Trichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,2,3-Trichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,2,4-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
1,3,5-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
Vinyl Chloride	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
o-Xylene	ND	ug/L	0.50		1	06/26/14	06/27/14 02:25	1014
m,p-Xylenes	ND	ug/L	1.0		1	06/26/14	06/27/14 02:25	1014
tert-Butyl ethyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 02:25	1014
tert-Butyl alcohol	ND	ug/L	20		1	06/26/14	06/27/14 02:25	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062511

AECOM, Columbia, MD

July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead MD
Project ID: 60144916

Sample ID: 114 Hanover **Date/Time Sampled: 06/24/2014 12:22** **PSS Sample ID: 14062511-001**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates — Analytical Method: EPA 524.2 — Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Amyl methyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 02:25	1014

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14062511
Project ID: 60144916

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.

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): 14062511
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
EPA 524.2	114 Hanover	Initial	14062511-001	1014	W	51015	114931	06/24/2014	06/26/2014 10:02	06/27/2014 02:25
	51015-1-BKS	BKS	51015-1-BKS	1014	W	51015	114931	--------	06/26/2014 10:02	06/26/2014 23:03
	51015-1-BLK	BLK	51015-1-BLK	1014	W	51015	114931	--------	06/26/2014 10:02	06/27/2014 01:04
	51015-1-BSD	BSD	51015-1-BSD	1014	W	51015	114931	--------	06/26/2014 10:02	06/26/2014 23:43

PHASE SEPARATION SCIENCE, INC.

QC Summary 14062511

AECOM
7-11 Store 32785

Analytical Method: EPA 524.2 Prep Method: E524.2PREP
Seq Number: 114931 Matrix: Ground Water Date Prep: 06/26/2014
PSS Sample ID: 14062511-001

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	99		83-115	%	06/27/14 02:25
Dibromofluoromethane	102		89-106	%	06/27/14 02:25
Toluene-D8	102		94-109	%	06/27/14 02:25

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 14062511

AECOM

7-11 Store 32785

Analytical Method: EPA 524.2 Prep Method: E524.2PREP

Seq Number: 114931 Matrix: Water Date Prep: 06/26/14

MB Sample Id: 51015-1-BLK LCS Sample Id: 51015-1-BKS LCSD Sample Id: 51015-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.5000	10.00	9.580	96	10.05	101	70-130	5	30	ug/L	06/26/14 23:03	
Bromobenzene	<0.5000	10.00	9.370	94	9.930	99	70-130	6	30	ug/L	06/26/14 23:03	
Bromochloromethane	<0.5000	10.00	9.670	97	9.980	100	70-130	3	30	ug/L	06/26/14 23:03	
Bromodichloromethane	<0.5000	10.00	9.540	95	9.920	99	70-130	4	30	ug/L	06/26/14 23:03	
Bromoform	<5.000	20.00	18.23	91	19.40	97	70-130	6	30	ug/L	06/26/14 23:03	
Bromomethane	<0.5000	10.00	9.730	97	10.08	101	70-130	4	30	ug/L	06/26/14 23:03	
tert-Butylbenzene	<0.5000	10.00	9.620	96	10.26	103	70-130	6	30	ug/L	06/26/14 23:03	
sec-Butylbenzene	<0.5000	10.00	9.690	97	10.42	104	70-130	7	30	ug/L	06/26/14 23:03	
n-Butylbenzene	<0.5000	10.00	9.670	97	10.41	104	70-130	7	30	ug/L	06/26/14 23:03	
Carbon Tetrachloride	<0.5000	10.00	10.25	103	10.54	105	70-130	3	30	ug/L	06/26/14 23:03	
Chlorobenzene	<0.5000	10.00	9.250	93	9.800	98	70-130	6	30	ug/L	06/26/14 23:03	
Chloroethane	<0.5000	10.00	9.650	97	10.19	102	70-130	5	30	ug/L	06/26/14 23:03	
Chloroform	<0.5000	10.00	9.480	95	9.840	98	70-130	4	30	ug/L	06/26/14 23:03	
Chloromethane	<0.5000	10.00	9.620	96	10.14	101	70-130	5	30	ug/L	06/26/14 23:03	
2-Chlorotoluene	<0.5000	10.00	9.370	94	10.02	100	70-130	7	30	ug/L	06/26/14 23:03	
4-Chlorotoluene	<0.5000	10.00	9.470	95	10.18	102	70-130	7	30	ug/L	06/26/14 23:03	
1,2-Dibromo-3-Chloropropane	<5.000	50.00	45.56	91	50.08	100	70-130	9	30	ug/L	06/26/14 23:03	
Dibromochloromethane	<0.5000	10.00	9.150	92	9.640	96	70-130	5	30	ug/L	06/26/14 23:03	
1,2-Dibromoethane	<0.5000	10.00	9.010	90	9.580	96	70-130	6	30	ug/L	06/26/14 23:03	
Dibromomethane	<0.5000	10.00	9.520	95	9.850	99	70-130	3	30	ug/L	06/26/14 23:03	
1,2-Dichlorobenzene	<0.5000	10.00	9.460	95	10.13	101	70-130	7	30	ug/L	06/26/14 23:03	
1,3-Dichlorobenzene	<0.5000	10.00	9.370	94	10.10	101	70-130	7	30	ug/L	06/26/14 23:03	
1,4-Dichlorobenzene	<0.5000	10.00	9.420	94	10.13	101	70-130	7	30	ug/L	06/26/14 23:03	
Dichlorodifluoromethane	<0.5000	10.00	9.670	97	10.44	104	70-130	8	30	ug/L	06/26/14 23:03	
1,1-Dichloroethane	<0.5000	10.00	9.590	96	9.930	99	70-130	3	30	ug/L	06/26/14 23:03	
1,2-Dichloroethane	<0.5000	10.00	9.850	99	10.05	101	70-130	2	30	ug/L	06/26/14 23:03	
cis-1,2-Dichloroethene	<0.5000	10.00	9.490	95	9.890	99	70-130	4	30	ug/L	06/26/14 23:03	
trans-1,2-Dichloroethene	<0.5000	10.00	9.540	95	9.730	97	70-130	2	30	ug/L	06/26/14 23:03	
1,1-Dichloroethene	<0.5000	10.00	9.660	97	10.09	101	70-130	4	30	ug/L	06/26/14 23:03	
1,2-Dichloropropane	<0.5000	10.00	9.530	95	10.02	100	70-130	5	30	ug/L	06/26/14 23:03	
1,3-Dichloropropane	<0.5000	10.00	9.280	93	9.700	97	70-130	4	30	ug/L	06/26/14 23:03	
2,2-Dichloropropane	<0.5000	10.00	8.650	87	8.980	90	70-130	4	30	ug/L	06/26/14 23:03	
1,1-Dichloropropene	<0.5000	10.00	9.570	96	10.10	101	70-130	5	30	ug/L	06/26/14 23:03	
cis-1,3-Dichloropropene	<0.5000	10.00	9.170	92	9.730	97	70-130	6	30	ug/L	06/26/14 23:03	
Ethylbenzene	<0.5000	10.00	9.430	94	10.06	101	70-130	6	30	ug/L	06/26/14 23:03	
Isopropylbenzene	<0.5000	10.00	9.490	95	10.18	102	70-130	7	30	ug/L	06/26/14 23:03	
4-Isopropyltoluene	<0.5000	10.00	9.510	95	10.30	103	70-130	8	30	ug/L	06/26/14 23:03	
Methylene Chloride	<5.000	10.00	9.390	94	9.720	97	70-130	3	30	ug/L	06/26/14 23:03	
Methyl-t-butyl ether	<0.5000	10.00	9.470	95	9.820	98	70-130	4	30	ug/L	06/26/14 23:03	
Naphthalene	<0.5000	10.00	9.410	94	10.14	101	70-130	7	30	ug/L	06/26/14 23:03	
n-Propylbenzene	<0.5000	10.00	9.590	96	10.35	104	70-130	8	30	ug/L	06/26/14 23:03	
Styrene	<0.5000	10.00	9.300	93	10.11	101	70-130	8	30	ug/L	06/26/14 23:03	
1,1,1,2-Tetrachloroethane	<0.5000	10.00	9.160	92	9.690	97	70-130	6	30	ug/L	06/26/14 23:03	
Diisopropyl ether	<5.000	40.00	38.65	97	38.54	96	70-130	0	30	ug/L	06/26/14 23:03	
1,1,2,2-Tetrachloroethane	<0.5000	10.00	9.160	92	9.910	99	70-130	8	30	ug/L	06/26/14 23:03	
Tetrachloroethylene	<0.5000	10.00	9.460	95	10.03	100	70-130	6	30	ug/L	06/26/14 23:03	
Toluene	<0.5000	10.00	9.350	94	10.01	100	70-130	7	30	ug/L	06/26/14 23:03	
1,2,3-Trichlorobenzene	<1.000	10.00	9.490	95	10.26	103	70-130	8	30	ug/L	06/26/14 23:03	
1,2,4-Trichlorobenzene	<0.5000	10.00	9.310	93	9.940	99	70-130	7	30	ug/L	06/26/14 23:03	
1,1,1-Trichloroethane	<0.5000	10.00	9.560	96	10.07	101	70-130	5	30	ug/L	06/26/14 23:03	
1,1,2-Trichloroethane	<0.5000	10.00	9.450	95	9.990	100	70-130	6	30	ug/L	06/26/14 23:03	

PHASE SEPARATION SCIENCE, INC.

QC Summary 14062511

AECOM

7-11 Store 32785

Analytical Method: EPA 524.2 Prep Method: E524.2PREP

Seq Number: 114931 Matrix: Water Date Prep: 06/26/14

MB Sample Id: 51015-1-BLK LCS Sample Id: 51015-1-BKS LCSD Sample Id: 51015-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Trichloroethene	<0.5000	10.00	9.630	96	10.23	102	70-130	6	30	ug/L	06/26/14 23:03	
1,2,3-Trichloropropane	<0.5000	10.00	8.770	88	9.310	93	70-130	6	30	ug/L	06/26/14 23:03	
1,2,4-Trimethylbenzene	<0.5000	10.00	9.430	94	10.18	102	70-130	8	30	ug/L	06/26/14 23:03	
1,3,5-Trimethylbenzene	<0.5000	10.00	9.490	95	10.23	102	70-130	8	30	ug/L	06/26/14 23:03	
Vinyl Chloride	<0.5000	10.00	10.09	101	10.41	104	70-130	3	30	ug/L	06/26/14 23:03	
o-Xylene	<0.5000	10.00	9.490	95	10.02	100	70-130	5	30	ug/L	06/26/14 23:03	
m,p-Xylenes	<1.000	20.00	18.62	93	20.00	100	70-130	7	30	ug/L	06/26/14 23:03	
tert-Butyl ethyl ether	<5.000	40.00	38.17	95	37.90	95	68-126	1	30	ug/L	06/26/14 23:03	
tert-Butyl alcohol	<20.00	80.00	74.39	93	75.34	94	54-122	1	30	ug/L	06/26/14 23:03	
tert-Amyl methyl ether	<5.000	40.00	38.33	96	37.95	95	67-124	1	30	ug/L	06/26/14 23:03	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	LCSD Result	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	98		99		99		83-115	%	06/26/14 23:03
Dibromofluoromethane	103		100		98		89-106	%	06/26/14 23:03
Toluene-D8	102		99		100		94-109	%	06/26/14 23:03

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

5

1

*CLIENT: AECOM *OFFICE LOC. Columbia, MD

*PROJECT MGR: J. Carizes *PHONE NO.: (240) 5265516

EMAIL: FAX NO.: ( )

*PROJECT NAME: 7-11 Store 32785 PROJECT NO. 60144916

SITE LOCATION: Hampstead MD P.O. NO.: 45514ACM

SAMPLER(S): M. Parsons DW CERT NO.:

PSS Work Order #: 1406211

PAGE 1 OF 1

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

2

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE (C = COMP, G = GRAB)	Preservatives Used: HCl	Analysis/Method Required (3) * 524.2 + DW	REMARKS
	114 Hanover	6/24/14	1222	GW	3	G		✓	

5

Relinquished By: (1)	Date	Time	Received By:
MDK (Parsons)	6/25/14	10:30	Sim X
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

4

*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA ☑ QC SUMM ☐ CLP LIKE ☐ OTHER ____

# of Coolers: 1

Custody Seal: ABS

Ice Present: Yes Temp: 5°C

Shipping Carrier: Client

Special Instructions:

DW COMPLIANCE? YES ☐

EDD FORMAT TYPE: AECOM

STATE RESULTS REPORTED TO:
MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER ____

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14062511	**Received By**	Simon Crisp
Client Name	AECOM	**Date Received**	06/25/2014 10:30:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	07/30/2014	**Logged In By**	Lynn Jackson

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	5
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Mike Parsons
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 1 Total No. of Containers Received 3

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: L Jackson Date: 06/25/2014

Lynn Jackson

PM Review and Approval: Amy Friedlander Date: 06/25/2014

Amy Friedlander

Analytical Report for

AECOM

Certificate of Analysis No.: 14050501

Project Manager: John Canzeri

Project Name : 7-11 Store 32785

Project Location: Hampstead, MD

Project ID : 60144916

May 12, 2014

Phase Separation Science, Inc.

6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

May 12, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14050501**
Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID.: 60144916

Dear John Canzeri :

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 **14050501**.

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 June 9, 2014. 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: AECOM
Project Name: 7-11 Store 32785

Work Order Number(s): 14050501

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 05/05/2014 at 08:25 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14050501-001	124 Hanover INF	GROUND WATER	05/03/14 09:34
14050501-002	124 Hanover GAC1	GROUND WATER	05/03/14 09:31
14050501-003	124 Hanover GAC2	GROUND WATER	05/03/14 09:28
14050501-004	124 Hanover FINAL	GROUND WATER	05/03/14 09:25

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover INF **Date/Time Sampled: 05/03/2014 09:34** **PSS Sample ID: 14050501-001**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Bromobenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Bromochloromethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Bromodichloromethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Bromoform	ND	ug/L	5.0		1	05/07/14	05/07/14 13:08	1014
Bromomethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
tert-Butylbenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
sec-Butylbenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
n-Butylbenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Carbon Tetrachloride	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Chlorobenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Chloroethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Chloroform	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Chloromethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
2-Chlorotoluene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
4-Chlorotoluene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,2-Dibromo-3-Chloropropane	ND	ug/L	5.0		1	05/07/14	05/07/14 13:08	1014
Dibromochloromethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,2-Dibromoethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Dibromomethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,2-Dichlorobenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,3-Dichlorobenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,4-Dichlorobenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Dichlorodifluoromethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,1-Dichloroethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,2-Dichloroethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
cis-1,2-Dichloroethene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
trans-1,2-Dichloroethene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,1-Dichloroethene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,2-Dichloropropane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover INF **Date/Time Sampled: 05/03/2014 09:34** **PSS Sample ID: 14050501-001**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,3-Dichloropropane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
2,2-Dichloropropane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,1-Dichloropropene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
cis-1,3-Dichloropropene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Ethylbenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Isopropylbenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
4-Isopropyltoluene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Methylene Chloride	ND	ug/L	5.0		1	05/07/14	05/07/14 13:08	1014
Methyl-t-butyl ether	**6.2**	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Naphthalene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
n-Propylbenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Styrene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Diisopropyl ether	ND	ug/L	5.0		1	05/07/14	05/07/14 13:08	1014
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Tetrachloroethylene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Toluene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	05/07/14	05/07/14 13:08	1014
1,2,4-Trichlorobenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,1,1-Trichloroethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,1,2-Trichloroethane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Trichloroethene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,2,3-Trichloropropane	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,2,4-Trimethylbenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
1,3,5-Trimethylbenzene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
Vinyl Chloride	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
o-Xylene	ND	ug/L	0.50		1	05/07/14	05/07/14 13:08	1014
m,p-Xylenes	ND	ug/L	1.0		1	05/07/14	05/07/14 13:08	1014
tert-Butyl ethyl ether	ND	ug/L	5.0		1	05/07/14	05/07/14 13:08	1014
tert-Butyl alcohol	ND	ug/L	20		1	05/07/14	05/07/14 13:08	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover INF **Date/Time Sampled: 05/03/2014 09:34** **PSS Sample ID: 14050501-001**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates — Analytical Method: EPA 524.2 — Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Amyl methyl ether	ND	ug/L	5.0		1	05/07/14	05/07/14 13:08	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC1 **Date/Time Sampled: 05/03/2014 09:31** **PSS Sample ID: 14050501-002**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Bromobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Bromochloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Bromodichloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Bromoform	ND	ug/L	5.0		1	05/06/14	05/06/14 19:21	1014
Bromomethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
tert-Butylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
sec-Butylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
n-Butylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Carbon Tetrachloride	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Chlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Chloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Chloroform	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Chloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
2-Chlorotoluene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
4-Chlorotoluene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,2-Dibromo-3-Chloropropane	ND	ug/L	5.0		1	05/06/14	05/06/14 19:21	1014
Dibromochloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,2-Dibromoethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Dibromomethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,2-Dichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,3-Dichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,4-Dichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Dichlorodifluoromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,1-Dichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,2-Dichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
cis-1,2-Dichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
trans-1,2-Dichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,1-Dichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,2-Dichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC1 **Date/Time Sampled: 05/03/2014 09:31** **PSS Sample ID: 14050501-002**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,3-Dichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
2,2-Dichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,1-Dichloropropene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
cis-1,3-Dichloropropene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Ethylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Isopropylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
4-Isopropyltoluene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Methylene Chloride	ND	ug/L	5.0		1	05/06/14	05/06/14 19:21	1014
Methyl-t-butyl ether	**1.5**	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Naphthalene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
n-Propylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Styrene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Diisopropyl ether	ND	ug/L	5.0		1	05/06/14	05/06/14 19:21	1014
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Tetrachloroethylene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Toluene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	05/06/14	05/06/14 19:21	1014
1,2,4-Trichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,1,1-Trichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,1,2-Trichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Trichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,2,3-Trichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,2,4-Trimethylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
1,3,5-Trimethylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
Vinyl Chloride	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
o-Xylene	ND	ug/L	0.50		1	05/06/14	05/06/14 19:21	1014
m,p-Xylenes	ND	ug/L	1.0		1	05/06/14	05/06/14 19:21	1014
tert-Butyl ethyl ether	ND	ug/L	5.0		1	05/06/14	05/06/14 19:21	1014
tert-Butyl alcohol	ND	ug/L	20		1	05/06/14	05/06/14 19:21	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC1 **Date/Time Sampled: 05/03/2014 09:31** **PSS Sample ID: 14050501-002**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates — Analytical Method: EPA 524.2 — Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Amyl methyl ether	ND	ug/L	5.0		1	05/06/14	05/06/14 19:21	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC2 **Date/Time Sampled: 05/03/2014 09:28** **PSS Sample ID: 14050501-003**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Bromobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Bromochloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Bromodichloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Bromoform	ND	ug/L	5.0		1	05/06/14	05/06/14 18:41	1014
Bromomethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
tert-Butylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
sec-Butylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
n-Butylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Carbon Tetrachloride	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Chlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Chloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Chloroform	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Chloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
2-Chlorotoluene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
4-Chlorotoluene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,2-Dibromo-3-Chloropropane	ND	ug/L	5.0		1	05/06/14	05/06/14 18:41	1014
Dibromochloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,2-Dibromoethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Dibromomethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,2-Dichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,3-Dichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,4-Dichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Dichlorodifluoromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,1-Dichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,2-Dichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
cis-1,2-Dichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
trans-1,2-Dichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,1-Dichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,2-Dichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC2 **Date/Time Sampled: 05/03/2014 09:28** **PSS Sample ID: 14050501-003**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,3-Dichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
2,2-Dichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,1-Dichloropropene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
cis-1,3-Dichloropropene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Ethylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Isopropylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
4-Isopropyltoluene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Methylene Chloride	ND	ug/L	5.0		1	05/06/14	05/06/14 18:41	1014
Methyl-t-butyl ether	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Naphthalene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
n-Propylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Styrene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Diisopropyl ether	ND	ug/L	5.0		1	05/06/14	05/06/14 18:41	1014
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Tetrachloroethylene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Toluene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	05/06/14	05/06/14 18:41	1014
1,2,4-Trichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,1,1-Trichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,1,2-Trichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Trichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,2,3-Trichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,2,4-Trimethylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
1,3,5-Trimethylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
Vinyl Chloride	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
o-Xylene	ND	ug/L	0.50		1	05/06/14	05/06/14 18:41	1014
m,p-Xylenes	ND	ug/L	1.0		1	05/06/14	05/06/14 18:41	1014
tert-Butyl ethyl ether	ND	ug/L	5.0		1	05/06/14	05/06/14 18:41	1014
tert-Butyl alcohol	ND	ug/L	20		1	05/06/14	05/06/14 18:41	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC2 **Date/Time Sampled: 05/03/2014 09:28** **PSS Sample ID: 14050501-003**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates — Analytical Method: EPA 524.2 — Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Amyl methyl ether	ND	ug/L	5.0		1	05/06/14	05/06/14 18:41	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover FINAL **Date/Time Sampled: 05/03/2014 09:25** **PSS Sample ID: 14050501-004**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Bromobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Bromochloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Bromodichloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Bromoform	ND	ug/L	5.0		1	05/06/14	05/06/14 13:58	1014
Bromomethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
tert-Butylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
sec-Butylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
n-Butylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Carbon Tetrachloride	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Chlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Chloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Chloroform	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Chloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
2-Chlorotoluene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
4-Chlorotoluene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,2-Dibromo-3-Chloropropane	ND	ug/L	5.0		1	05/06/14	05/06/14 13:58	1014
Dibromochloromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,2-Dibromoethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Dibromomethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,2-Dichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,3-Dichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,4-Dichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Dichlorodifluoromethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,1-Dichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,2-Dichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
cis-1,2-Dichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
trans-1,2-Dichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,1-Dichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,2-Dichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover FINAL **Date/Time Sampled: 05/03/2014 09:25** **PSS Sample ID: 14050501-004**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,3-Dichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
2,2-Dichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,1-Dichloropropene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
cis-1,3-Dichloropropene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Ethylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Isopropylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
4-Isopropyltoluene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Methylene Chloride	ND	ug/L	5.0		1	05/06/14	05/06/14 13:58	1014
Methyl-t-butyl ether	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Naphthalene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
n-Propylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Styrene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Diisopropyl ether	ND	ug/L	5.0		1	05/06/14	05/06/14 13:58	1014
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Tetrachloroethylene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Toluene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	05/06/14	05/06/14 13:58	1014
1,2,4-Trichlorobenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,1,1-Trichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,1,2-Trichloroethane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Trichloroethene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,2,3-Trichloropropane	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,2,4-Trimethylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
1,3,5-Trimethylbenzene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
Vinyl Chloride	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
o-Xylene	ND	ug/L	0.50		1	05/06/14	05/06/14 13:58	1014
m,p-Xylenes	ND	ug/L	1.0		1	05/06/14	05/06/14 13:58	1014
tert-Butyl ethyl ether	ND	ug/L	5.0		1	05/06/14	05/06/14 13:58	1014
tert-Butyl alcohol	ND	ug/L	20		1	05/06/14	05/06/14 13:58	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050501
AECOM, Columbia, MD
May 12, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover FINAL **Date/Time Sampled: 05/03/2014 09:25** **PSS Sample ID: 14050501-004**
Matrix: GROUND WATER **Date/Time Received: 05/05/2014 08:25**

VOC In Drinking Water plus Oxygenates — Analytical Method: EPA 524.2 — Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Amyl methyl ether	ND	ug/L	5.0		1	05/06/14	05/06/14 13:58	1014

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14050501
Project ID: 60144916

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.

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): 14050501
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
EPA 524.2	124 Hanover INF	Initial	14050501-001	1014	W	50304	113671	05/03/2014	05/07/2014 00:00	05/07/2014 13:08
	50304-1-BKS	BKS	50304-1-BKS	1014	W	50304	113671	--------	05/07/2014 00:00	05/07/2014 10:26
	50304-1-BLK	BLK	50304-1-BLK	1014	W	50304	113671	--------	05/07/2014 00:00	05/07/2014 12:27
	50304-1-BSD	BSD	50304-1-BSD	1014	W	50304	113671	--------	05/07/2014 00:00	05/07/2014 11:06
	124 Hanover GAC1	Initial	14050501-002	1014	W	50329	113724	05/03/2014	05/06/2014 00:00	05/06/2014 19:21
	124 Hanover GAC2	Initial	14050501-003	1014	W	50329	113724	05/03/2014	05/06/2014 00:00	05/06/2014 18:41
	124 Hanover FINAL	Initial	14050501-004	1014	W	50329	113724	05/03/2014	05/06/2014 00:00	05/06/2014 13:58
	50329-1-BKS	BKS	50329-1-BKS	1014	W	50329	113724	--------	05/06/2014 00:00	05/06/2014 11:16
	50329-1-BLK	BLK	50329-1-BLK	1014	W	50329	113724	--------	05/06/2014 00:00	05/06/2014 13:17
	50329-1-BSD	BSD	50329-1-BSD	1014	W	50329	113724	--------	05/06/2014 00:00	05/06/2014 11:56

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/12/2014

Work Order #: 14050501 **Project ID:** 60144916

Lab Batch #: 113671 **Sample:** 50304-1-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/07/2014 10:26

VOC In Drinking Water plus Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
4-Bromofluorobenzene	10.6	10.00	106	83-115	
Dibromofluoromethane	10.2	10.00	102	89-106	
Toluene-D8	10.3	10.00	103	94-109	

Lab Batch #: 113671 **Sample:** 50304-1-BSD / BSD **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/07/2014 11:06

VOC In Drinking Water plus Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
4-Bromofluorobenzene	10.5	10.00	105	83-115	
Dibromofluoromethane	10.2	10.00	102	89-106	
Toluene-D8	10.3	10.00	103	94-109	

Lab Batch #: 113671 **Sample:** 50304-1-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/07/2014 12:27

VOC In Drinking Water plus Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
4-Bromofluorobenzene	10.9	10.00	109	83-115	
Dibromofluoromethane	10.5	10.00	105	89-106	
Toluene-D8	10.4	10.00	104	94-109	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/12/2014

Work Order #: 14050501 **Project ID:** 60144916

Lab Batch #: 113671 **Sample:** 14050501-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/07/2014 13:08

VOC In Drinking Water plus Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
4-Bromofluorobenzene	11.0	10.00	108	83-115	
Dibromofluoromethane	10.0	10.00	105	89-106	
Toluene-D8	10.0	10.00	105	94-109	

Lab Batch #: 113724 **Sample:** 50329-1-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/06/2014 11:16

VOC In Drinking Water plus Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
4-Bromofluorobenzene	10.6	10.00	106	83-115	
Dibromofluoromethane	10.1	10.00	101	89-106	
Toluene-D8	10.3	10.00	103	94-109	

Lab Batch #: 113724 **Sample:** 50329-1-BSD / BSD **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/06/2014 11:56

VOC In Drinking Water plus Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
4-Bromofluorobenzene	10.7	10.00	107	83-115	
Dibromofluoromethane	10.4	10.00	104	89-106	
Toluene-D8	10.2	10.00	102	94-109	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/12/2014

Work Order #: 14050501 **Project ID:** 60144916

Lab Batch #: 113724 **Sample:** 50329-1-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/06/2014 13:17

VOC In Drinking Water plus Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
4-Bromofluorobenzene	10.7	10.00	107	83-115	
Dibromofluoromethane	10.5	10.00	105	89-106	
Toluene-D8	10.5	10.00	105	94-109	

Lab Batch #: 113724 **Sample:** 14050501-004 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/06/2014 13:58

VOC In Drinking Water plus Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
4-Bromofluorobenzene	11.0	10.00	108	83-115	
Dibromofluoromethane	10.0	10.00	105	89-106	
Toluene-D8	10.0	10.00	105	94-109	

Lab Batch #: 113724 **Sample:** 14050501-003 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/06/2014 18:41

VOC In Drinking Water plus Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
4-Bromofluorobenzene	11.0	10.00	108	83-115	
Dibromofluoromethane	11.0	10.00	105	89-106	
Toluene-D8	10.0	10.00	104	94-109	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/12/2014

Work Order #: 14050501 **Project ID:** 60144916

Lab Batch #: 113724 **Sample:** 14050501-002 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/06/2014 19:21

VOC In Drinking Water plus Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
4-Bromofluorobenzene	11.0	10.00	107	83-115	
Dibromofluoromethane	11.0	10.00	106	89-106	
Toluene-D8	10.0	10.00	103	94-109	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Blank Summary 14050501

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **EPA 524.2** Prep Method: E524.2PREP
Matrix: **WATER**

Sample Id: **50304-1-BLK** Lab Sample Id: **50304-1-BLK**

Date Analyzed: May-07-14 12:27 Analyst: 1014 Date Prep: May-07-14 00:00 Tech: 1014
Seq Number: 113671

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Benzene	71-43-2	ND	0.5000	0.5000	ug/L	U	1
Bromobenzene	108-86-1	ND	0.5000	0.5000	ug/L	U	1
Bromochloromethane	74-97-5	ND	0.5000	0.5000	ug/L	U	1
Bromodichloromethane	75-27-4	ND	0.5000	0.5000	ug/L	U	1
Bromoform	75-25-2	ND	5.000	1.000	ug/L	U	1
Bromomethane	74-83-9	ND	0.5000	0.5000	ug/L	U	1
tert-Butylbenzene	98-06-6	ND	0.5000	0.5000	ug/L	U	1
sec-Butylbenzene	135-98-8	ND	0.5000	0.5000	ug/L	U	1
n-Butylbenzene	104-51-8	ND	0.5000	0.5000	ug/L	U	1
Carbon Tetrachloride	56-23-5	ND	0.5000	0.5000	ug/L	U	1
Chlorobenzene	108-90-7	ND	0.5000	0.5000	ug/L	U	1
Chloroethane	75-00-3	ND	0.5000	0.5000	ug/L	U	1
Chloroform	67-66-3	ND	0.5000	0.5000	ug/L	U	1
Chloromethane	74-87-3	ND	0.5000	0.5000	ug/L	U	1
2-Chlorotoluene	95-49-8	ND	0.5000	0.5000	ug/L	U	1
4-Chlorotoluene	106-43-4	ND	0.5000	0.5000	ug/L	U	1
1,2-Dibromo-3-Chloropropane	96-12-8	ND	5.000	5.000	ug/L	U	1
Dibromochloromethane	124-48-1	ND	0.5000	0.5000	ug/L	U	1
1,2-Dibromoethane	106-93-4	ND	0.5000	0.5000	ug/L	U	1
Dibromomethane	74-95-3	ND	0.5000	0.5000	ug/L	U	1
1,2-Dichlorobenzene	95-50-1	ND	0.5000	0.5000	ug/L	U	1
1,3-Dichlorobenzene	541-73-1	ND	0.5000	0.5000	ug/L	U	1
1,4-Dichlorobenzene	106-46-7	ND	0.5000	0.5000	ug/L	U	1
Dichlorodifluoromethane	75-71-8	ND	0.5000	0.5000	ug/L	U	1
1,1-Dichloroethane	75-34-3	ND	0.5000	0.5000	ug/L	U	1
1,2-Dichloroethane	107-06-2	ND	0.5000	0.5000	ug/L	U	1
cis-1,2-Dichloroethene	156-59-2	ND	0.5000	0.5000	ug/L	U	1
trans-1,2-Dichloroethene	156-60-5	ND	0.5000	0.5000	ug/L	U	1
1,1-Dichloroethene	75-35-4	ND	0.5000	0.5000	ug/L	U	1
1,2-Dichloropropane	78-87-5	ND	0.5000	0.5000	ug/L	U	1
1,3-Dichloropropane	142-28-9	ND	0.5000	0.5000	ug/L	U	1
2,2-Dichloropropane	594-20-7	ND	0.5000	0.5000	ug/L	U	1
1,1-Dichloropropene	563-58-6	ND	0.5000	0.5000	ug/L	U	1
cis-1,3-Dichloropropene	10061-01-5	ND	0.5000	0.5000	ug/L	U	1
Ethylbenzene	100-41-4	ND	0.5000	0.5000	ug/L	U	1
Isopropylbenzene	98-82-8	ND	0.5000	0.5000	ug/L	U	1
4-Isopropyltoluene	99-87-6	ND	0.5000	0.5000	ug/L	U	1
Methylene Chloride	75-09-2	ND	5.000	5.000	ug/L	U	1
Methyl-t-butyl ether	1634-04-4	ND	0.5000	0.5000	ug/L	U	1
Naphthalene	91-20-3	ND	0.5000	0.5000	ug/L	U	1
n-Propylbenzene	103-65-1	ND	0.5000	0.5000	ug/L	U	1

Blank Summary 14050501

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **EPA 524.2** Prep Method: E524.2PREP
Matrix: **WATER**

Sample Id: **50304-1-BLK** Lab Sample Id: **50304-1-BLK**

Date Analyzed: May-07-14 12:27 Analyst: 1014 Seq Number: 113671 Date Prep: May-07-14 00:00 Tech: 1014

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Styrene	100-42-5	ND	0.5000	0.5000	ug/L	U	1
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.5000	0.5000	ug/L	U	1
Diisopropyl ether	108-20-3	ND	5.000	5.000	ug/L	U	1
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5000	0.5000	ug/L	U	1
Tetrachloroethylene	127-18-4	ND	0.5000	0.5000	ug/L	U	1
Toluene	108-88-3	ND	0.5000	0.5000	ug/L	U	1
1,2,3-Trichlorobenzene	87-61-6	ND	1.000	1.000	ug/L	U	1
1,2,4-Trichlorobenzene	120-82-1	ND	0.5000	0.5000	ug/L	U	1
1,1,1-Trichloroethane	71-55-6	ND	0.5000	0.5000	ug/L	U	1
1,1,2-Trichloroethane	79-00-5	ND	0.5000	0.5000	ug/L	U	1
Trichloroethene	79-01-6	ND	0.5000	0.5000	ug/L	U	1
1,2,3-Trichloropropane	96-18-4	ND	0.5000	0.5000	ug/L	U	1
1,2,4-Trimethylbenzene	95-63-6	ND	0.5000	0.5000	ug/L	U	1
1,3,5-Trimethylbenzene	108-67-8	ND	0.5000	0.5000	ug/L	U	1
Vinyl Chloride	75-01-4	ND	0.5000	0.5000	ug/L	U	1
o-Xylene	95-47-6	ND	0.5000	0.5000	ug/L	U	1
m,p-Xylenes	108-38-3	ND	1.000	1.000	ug/L	U	1
tert-Butyl ethyl ether	637-92-3	ND	5.000	5.000	ug/L	U	1
tert-Butyl alcohol	75-65-0	ND	20.00	20.00	ug/L	U	1
tert-Amyl methyl ether	994-05-8	ND	5.000	5.000	ug/L	U	1

Blank Summary 14050501

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **EPA 524.2** Prep Method: E524.2PREP
Matrix: **WATER**

Sample Id: **50329-1-BLK** Lab Sample Id: **50329-1-BLK**

Date Analyzed: May-06-14 13:17 Analyst: 1014 Date Prep: May-06-14 00:00 Tech: 1014
Seq Number: 113724

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Benzene	71-43-2	ND	0.5000	0.5000	ug/L	U	1
Bromobenzene	108-86-1	ND	0.5000	0.5000	ug/L	U	1
Bromochloromethane	74-97-5	ND	0.5000	0.5000	ug/L	U	1
Bromodichloromethane	75-27-4	ND	0.5000	0.5000	ug/L	U	1
Bromoform	75-25-2	ND	5.000	1.000	ug/L	U	1
Bromomethane	74-83-9	ND	0.5000	0.5000	ug/L	U	1
tert-Butylbenzene	98-06-6	ND	0.5000	0.5000	ug/L	U	1
sec-Butylbenzene	135-98-8	ND	0.5000	0.5000	ug/L	U	1
n-Butylbenzene	104-51-8	ND	0.5000	0.5000	ug/L	U	1
Carbon Tetrachloride	56-23-5	ND	0.5000	0.5000	ug/L	U	1
Chlorobenzene	108-90-7	ND	0.5000	0.5000	ug/L	U	1
Chloroethane	75-00-3	ND	0.5000	0.5000	ug/L	U	1
Chloroform	67-66-3	ND	0.5000	0.5000	ug/L	U	1
Chloromethane	74-87-3	ND	0.5000	0.5000	ug/L	U	1
2-Chlorotoluene	95-49-8	ND	0.5000	0.5000	ug/L	U	1
4-Chlorotoluene	106-43-4	ND	0.5000	0.5000	ug/L	U	1
1,2-Dibromo-3-Chloropropane	96-12-8	ND	5.000	5.000	ug/L	U	1
Dibromochloromethane	124-48-1	ND	0.5000	0.5000	ug/L	U	1
1,2-Dibromoethane	106-93-4	ND	0.5000	0.5000	ug/L	U	1
Dibromomethane	74-95-3	ND	0.5000	0.5000	ug/L	U	1
1,2-Dichlorobenzene	95-50-1	ND	0.5000	0.5000	ug/L	U	1
1,3-Dichlorobenzene	541-73-1	ND	0.5000	0.5000	ug/L	U	1
1,4-Dichlorobenzene	106-46-7	ND	0.5000	0.5000	ug/L	U	1
Dichlorodifluoromethane	75-71-8	ND	0.5000	0.5000	ug/L	U	1
1,1-Dichloroethane	75-34-3	ND	0.5000	0.5000	ug/L	U	1
1,2-Dichloroethane	107-06-2	ND	0.5000	0.5000	ug/L	U	1
cis-1,2-Dichloroethene	156-59-2	ND	0.5000	0.5000	ug/L	U	1
trans-1,2-Dichloroethene	156-60-5	ND	0.5000	0.5000	ug/L	U	1
1,1-Dichloroethene	75-35-4	ND	0.5000	0.5000	ug/L	U	1
1,2-Dichloropropane	78-87-5	ND	0.5000	0.5000	ug/L	U	1
1,3-Dichloropropane	142-28-9	ND	0.5000	0.5000	ug/L	U	1
2,2-Dichloropropane	594-20-7	ND	0.5000	0.5000	ug/L	U	1
1,1-Dichloropropene	563-58-6	ND	0.5000	0.5000	ug/L	U	1
cis-1,3-Dichloropropene	10061-01-5	ND	0.5000	0.5000	ug/L	U	1
Ethylbenzene	100-41-4	ND	0.5000	0.5000	ug/L	U	1
Isopropylbenzene	98-82-8	ND	0.5000	0.5000	ug/L	U	1
4-Isopropyltoluene	99-87-6	ND	0.5000	0.5000	ug/L	U	1
Methylene Chloride	75-09-2	ND	5.000	5.000	ug/L	U	1
Methyl-t-butyl ether	1634-04-4	ND	0.5000	0.5000	ug/L	U	1
Naphthalene	91-20-3	ND	0.5000	0.5000	ug/L	U	1
n-Propylbenzene	103-65-1	ND	0.5000	0.5000	ug/L	U	1

Blank Summary 14050501

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **EPA 524.2** Prep Method: E524.2PREP
Matrix: **WATER**

Sample Id: **50329-1-BLK** Lab Sample Id: **50329-1-BLK**

Date Analyzed: May-06-14 13:17 Analyst: 1014 Seq Number: 113724 Date Prep: May-06-14 00:00 Tech: 1014

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Styrene	100-42-5	ND	0.5000	0.5000	ug/L	U	1
1,1,1,2-Tetrachloroethane	630-20-6	ND	0.5000	0.5000	ug/L	U	1
Diisopropyl ether	108-20-3	ND	5.000	5.000	ug/L	U	1
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5000	0.5000	ug/L	U	1
Tetrachloroethylene	127-18-4	ND	0.5000	0.5000	ug/L	U	1
Toluene	108-88-3	ND	0.5000	0.5000	ug/L	U	1
1,2,3-Trichlorobenzene	87-61-6	ND	1.000	1.000	ug/L	U	1
1,2,4-Trichlorobenzene	120-82-1	ND	0.5000	0.5000	ug/L	U	1
1,1,1-Trichloroethane	71-55-6	ND	0.5000	0.5000	ug/L	U	1
1,1,2-Trichloroethane	79-00-5	ND	0.5000	0.5000	ug/L	U	1
Trichloroethene	79-01-6	ND	0.5000	0.5000	ug/L	U	1
1,2,3-Trichloropropane	96-18-4	ND	0.5000	0.5000	ug/L	U	1
1,2,4-Trimethylbenzene	95-63-6	ND	0.5000	0.5000	ug/L	U	1
1,3,5-Trimethylbenzene	108-67-8	ND	0.5000	0.5000	ug/L	U	1
Vinyl Chloride	75-01-4	ND	0.5000	0.5000	ug/L	U	1
o-Xylene	95-47-6	ND	0.5000	0.5000	ug/L	U	1
m,p-Xylenes	108-38-3	ND	1.000	1.000	ug/L	U	1
tert-Butyl ethyl ether	637-92-3	ND	5.000	5.000	ug/L	U	1
tert-Butyl alcohol	75-65-0	ND	20.00	20.00	ug/L	U	1
tert-Amyl methyl ether	994-05-8	ND	5.000	5.000	ug/L	U	1

LCS/LCSD Recoveries

Project Name: 7-11 Store 32785

Work Order #: 14050501 **Project ID:** 60144916

Prep Batch #: 50304 **Date Prepared:** 05/07/2014 00:00 **Sample:** 50304-1-BKS **Analyst:** 1014

Lab Batch ID: 113671 **Date Analyzed:** 05/07/2014 10:26 **Method:** E524.2PREP / E524.2 **Matrix:** Water

Units: ug/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

VOC In Drinking Water plus Oxygenates Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.5000	10.00	9.940	99	10.00	10.52	105	6	70-130	30	
Bromobenzene	<0.5000	10.00	10.91	109	10.00	11.57	116	6	70-130	30	
Bromochloromethane	<0.5000	10.00	10.20	102	10.00	10.82	108	6	70-130	30	
Bromodichloromethane	<0.5000	10.00	9.350	94	10.00	9.990	100	7	70-130	30	
Bromoform	<5.000	20.00	20.14	101	20.00	21.47	107	6	70-130	30	
Bromomethane	<0.5000	10.00	10.87	109	10.00	11.48	115	5	70-130	30	
tert-Butylbenzene	<0.5000	10.00	11.30	113	10.00	11.90	119	5	70-130	30	
sec-Butylbenzene	<0.5000	10.00	10.98	110	10.00	11.62	116	6	70-130	30	
n-Butylbenzene	<0.5000	10.00	10.62	106	10.00	11.28	113	6	70-130	30	
Carbon Tetrachloride	<0.5000	10.00	10.23	102	10.00	10.86	109	6	70-130	30	
Chlorobenzene	<0.5000	10.00	10.42	104	10.00	11.04	110	6	70-130	30	
Chloroethane	<0.5000	10.00	9.170	92	10.00	9.830	98	7	70-130	30	
Chloroform	<0.5000	10.00	9.730	97	10.00	10.28	103	5	70-130	30	
Chloromethane	<0.5000	10.00	9.120	91	10.00	9.780	98	7	70-130	30	
2-Chlorotoluene	<0.5000	10.00	10.40	104	10.00	10.75	108	3	70-130	30	
4-Chlorotoluene	<0.5000	10.00	10.02	100	10.00	10.78	108	7	70-130	30	
1,2-Dibromo-3-Chloropropane	<5.000	50.00	45.03	90	50.00	47.66	95	6	70-130	30	
Dibromochloromethane	<0.5000	10.00	9.700	97	10.00	10.47	105	8	70-130	30	
1,2-Dibromoethane	<0.5000	10.00	9.690	97	10.00	10.45	105	8	70-130	30	
Dibromomethane	<0.5000	10.00	9.620	96	10.00	10.41	104	8	70-130	30	

Relative Percent Difference RPD = 200*|(D-G)/(D+G)|
Laboratory Control Sample (LCS) Percent Recovery [D] = 100*(C)/[B]
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = 100*(F)/[E]

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

LCS/LCSD Recoveries

Project Name: 7-11 Store 32785

Work Order #: 14050501 **Project ID:** 60144916

Prep Batch #: 50304 **Date Prepared:** 05/07/2014 00:00 **Sample:** 50304-1-BKS **Analyst:** 1014

Lab Batch ID: 113671 **Date Analyzed:** 05/07/2014 10:26 **Method:** E524.2PREP / E524.2 **Matrix:** Water

Units: ug/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

VOC In Drinking Water plus Oxygenates Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1,2-Dichlorobenzene	<0.5000	10.00	11.13	111	10.00	11.84	118	6	70-130	30	
1,3-Dichlorobenzene	<0.5000	10.00	11.07	111	10.00	11.79	118	6	70-130	30	
1,4-Dichlorobenzene	<0.5000	10.00	11.20	112	10.00	11.90	119	6	70-130	30	
Dichlorodifluoromethane	<0.5000	10.00	10.96	110	10.00	11.72	117	7	70-130	30	
1,1-Dichloroethane	<0.5000	10.00	10.20	102	10.00	10.70	107	5	70-130	30	
1,2-Dichloroethane	<0.5000	10.00	9.360	94	10.00	10.40	104	11	70-130	30	
cis-1,2-Dichloroethene	<0.5000	10.00	10.02	100	10.00	10.56	106	5	70-130	30	
trans-1,2-Dichloroethene	<0.5000	10.00	10.33	103	10.00	10.82	108	5	70-130	30	
1,1-Dichloroethene	<0.5000	10.00	9.600	96	10.00	10.31	103	7	70-130	30	
1,2-Dichloropropane	<0.5000	10.00	9.820	98	10.00	10.30	103	5	70-130	30	
1,3-Dichloropropane	<0.5000	10.00	9.520	95	10.00	10.13	101	6	70-130	30	
2,2-Dichloropropane	<0.5000	10.00	9.160	92	10.00	9.810	98	7	70-130	30	
1,1-Dichloropropene	<0.5000	10.00	10.01	100	10.00	10.56	106	5	70-130	30	
cis-1,3-Dichloropropene	<0.5000	10.00	9.300	93	10.00	10.09	101	8	70-130	30	
Ethylbenzene	<0.5000	10.00	10.33	103	10.00	10.77	108	4	70-130	30	
Isopropylbenzene	<0.5000	10.00	10.75	108	10.00	11.31	113	5	70-130	30	
4-Isopropyltoluene	<0.5000	10.00	11.45	115	10.00	12.02	120	5	70-130	30	
Methylene Chloride	<5.000	10.00	9.580	96	10.00	10.18	102	6	70-130	30	
Methyl-t-butyl ether	<0.5000	10.00	9.170	92	10.00	10.01	100	9	70-130	30	
Naphthalene	<0.5000	10.00	10.16	102	10.00	10.82	108	6	70-130	30	

Relative Percent Difference RPD = 200*|(D-G)/(D+G)|
Laboratory Control Sample (LCS) Percent Recovery [D] = 100*(C)/[B]
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = 100*(F)/[E]

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

LCS/LCSD Recoveries

Project Name: 7-11 Store 32785

Work Order #: 14050501 **Project ID:** 60144916

Prep Batch #: 50304 **Date Prepared:** 05/07/2014 00:00 **Sample:** 50304-1-BKS **Analyst:** 1014

Lab Batch ID: 113671 **Date Analyzed:** 05/07/2014 10:26 **Method:** E524.2PREP / E524.2 **Matrix:** Water

Units: ug/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

VOC In Drinking Water plus Oxygenates Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
n-Propylbenzene	<0.5000	10.00	10.49	105	10.00	11.11	111	6	70-130	30	
Styrene	<0.5000	10.00	10.38	104	10.00	11.06	111	6	70-130	30	
Diisopropyl ether	<5.000	40.00	37.44	94	40.00	37.78	94	1	70-130	30	
1,1,1,2-Tetrachloroethane	<0.5000	10.00	10.19	102	10.00	10.81	108	6	70-130	30	
1,1,2,2-Tetrachloroethane	<0.5000	10.00	9.400	94	10.00	10.02	100	6	70-130	30	
Tetrachloroethylene	<0.5000	10.00	10.94	109	10.00	11.70	117	7	70-130	30	
Toluene	<0.5000	10.00	10.38	104	10.00	10.91	109	5	70-130	30	
1,2,3-Trichlorobenzene	<1.000	10.00	10.92	109	10.00	11.87	119	8	70-130	30	
1,2,4-Trichlorobenzene	<0.5000	10.00	10.97	110	10.00	12.03	120	9	70-130	30	
1,1,1-Trichloroethane	<0.5000	10.00	10.09	101	10.00	10.68	107	6	70-130	30	
1,1,2-Trichloroethane	<0.5000	10.00	9.470	95	10.00	10.09	101	6	70-130	30	
Trichloroethene	<0.5000	10.00	10.00	100	10.00	10.57	106	6	70-130	30	
1,2,3-Trichloropropane	<0.5000	10.00	9.180	92	10.00	9.670	97	5	70-130	30	
1,2,4-Trimethylbenzene	<0.5000	10.00	10.58	106	10.00	11.26	113	6	70-130	30	
1,3,5-Trimethylbenzene	<0.5000	10.00	10.69	107	10.00	11.23	112	5	70-130	30	
Vinyl Chloride	<0.5000	10.00	10.06	101	10.00	10.57	106	5	70-130	30	
o-Xylene	<0.5000	10.00	10.45	105	10.00	11.07	111	6	70-130	30	
m,p-Xylenes	<1.000	20.00	21.14	106	20.00	22.36	112	6	70-130	30	
tert-Butyl ethyl ether	<5.000	40.00	36.38	91	40.00	36.91	92	1	68-126	30	
tert-Butyl alcohol	<20.00	80.00	62.63	78	80.00	65.29	82	4	54-122	30	

Relative Percent Difference RPD = 200*|(D-G)/(D+G)|
Laboratory Control Sample (LCS) Percent Recovery [D] = 100*(C)/[B]
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = 100*(F)/[E]

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

LCS/LCSD Recoveries

Project Name: 7-11 Store 32785

Work Order #: 14050501 **Project ID:** 60144916

Prep Batch #: 50304 **Date Prepared:** 05/07/2014 00:00 **Sample:** 50304-1-BKS **Analyst:** 1014

Lab Batch ID: 113671 **Date Analyzed:** 05/07/2014 10:26 **Method:** E524.2PREP / E524.2 **Matrix:** Water

Units: ug/L

VOC In Drinking Water plus Oxygenates Analytes	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
tert-Amyl methyl ether	<5.000	40.00	35.58	89	40.00	36.35	91	2	67-124	30	

Relative Percent Difference RPD = 200*|(D-G)/(D+G)|
Laboratory Control Sample (LCS) Percent Recovery [D] = 100*(C)/[B]
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = 100*(F)/[E]

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

LCS/LCSD Recoveries

Project Name: 7-11 Store 32785

Work Order #: 14050501 **Project ID:** 60144916

Prep Batch #: 50329 **Date Prepared:** 05/06/2014 00:00 **Sample:** 50329-1-BKS **Analyst:** 1014

Lab Batch ID: 113724 **Date Analyzed:** 05/06/2014 11:16 **Method:** E524.2PREP / E524.2 **Matrix:** Water

Units: ug/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

VOC In Drinking Water plus Oxygenates Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.5000	10.00	9.370	94	10.00	9.170	92	2	70-130	30	
Bromobenzene	<0.5000	10.00	10.78	108	10.00	10.60	106	2	70-130	30	
Bromochloromethane	<0.5000	10.00	9.830	98	10.00	10.01	100	2	70-130	30	
Bromodichloromethane	<0.5000	10.00	8.810	88	10.00	8.720	87	1	70-130	30	
Bromoform	<5.000	20.00	20.05	100	20.00	19.57	98	2	70-130	30	
Bromomethane	<0.5000	10.00	10.67	107	10.00	10.15	102	5	70-130	30	
tert-Butylbenzene	<0.5000	10.00	10.96	110	10.00	10.59	106	3	70-130	30	
sec-Butylbenzene	<0.5000	10.00	10.71	107	10.00	10.28	103	4	70-130	30	
n-Butylbenzene	<0.5000	10.00	10.38	104	10.00	9.910	99	5	70-130	30	
Carbon Tetrachloride	<0.5000	10.00	9.900	99	10.00	9.410	94	5	70-130	30	
Chlorobenzene	<0.5000	10.00	10.21	102	10.00	10.01	100	2	70-130	30	
Chloroethane	<0.5000	10.00	8.850	89	10.00	8.560	86	3	70-130	30	
Chloroform	<0.5000	10.00	9.050	91	10.00	8.920	89	1	70-130	30	
Chloromethane	<0.5000	10.00	8.760	88	10.00	8.580	86	2	70-130	30	
2-Chlorotoluene	<0.5000	10.00	9.920	99	10.00	9.580	96	3	70-130	30	
4-Chlorotoluene	<0.5000	10.00	9.770	98	10.00	9.470	95	3	70-130	30	
1,2-Dibromo-3-Chloropropane	<5.000	50.00	42.30	85	50.00	42.52	85	1	70-130	30	
Dibromochloromethane	<0.5000	10.00	9.590	96	10.00	9.420	94	2	70-130	30	
1,2-Dibromoethane	<0.5000	10.00	9.410	94	10.00	9.360	94	1	70-130	30	
Dibromomethane	<0.5000	10.00	9.130	91	10.00	8.920	89	2	70-130	30	

Relative Percent Difference RPD = 200*|(D-G)/(D+G)|
Laboratory Control Sample (LCS) Percent Recovery [D] = 100*(C)/[B]
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = 100*(F)/[E]

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

LCS/LCSD Recoveries

Project Name: 7-11 Store 32785

Work Order #: 14050501 **Project ID:** 60144916

Prep Batch #: 50329 **Date Prepared:** 05/06/2014 00:00 **Sample:** 50329-1-BKS **Analyst:** 1014

Lab Batch ID: 113724 **Date Analyzed:** 05/06/2014 11:16 **Method:** E524.2PREP / E524.2 **Matrix:** Water

Units: ug/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

VOC In Drinking Water plus Oxygenates Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
1,2-Dichlorobenzene	<0.5000	10.00	10.92	109	10.00	10.79	108	1	70-130	30	
1,3-Dichlorobenzene	<0.5000	10.00	10.99	110	10.00	10.69	107	3	70-130	30	
1,4-Dichlorobenzene	<0.5000	10.00	11.04	110	10.00	10.91	109	1	70-130	30	
Dichlorodifluoromethane	<0.5000	10.00	10.58	106	10.00	9.850	99	7	70-130	30	
1,1-Dichloroethane	<0.5000	10.00	9.430	94	10.00	9.290	93	1	70-130	30	
1,2-Dichloroethane	<0.5000	10.00	9.000	90	10.00	8.830	88	2	70-130	30	
cis-1,2-Dichloroethene	<0.5000	10.00	9.340	93	10.00	9.200	92	2	70-130	30	
trans-1,2-Dichloroethene	<0.5000	10.00	9.800	98	10.00	9.500	95	3	70-130	30	
1,1-Dichloroethene	<0.5000	10.00	9.320	93	10.00	9.130	91	2	70-130	30	
1,2-Dichloropropane	<0.5000	10.00	9.150	92	10.00	8.950	90	2	70-130	30	
1,3-Dichloropropane	<0.5000	10.00	8.860	89	10.00	8.800	88	1	70-130	30	
2,2-Dichloropropane	<0.5000	10.00	8.890	89	10.00	8.570	86	4	70-130	30	
1,1-Dichloropropene	<0.5000	10.00	9.380	94	10.00	9.160	92	2	70-130	30	
cis-1,3-Dichloropropene	<0.5000	10.00	8.850	89	10.00	8.750	88	1	70-130	30	
Ethylbenzene	<0.5000	10.00	9.950	100	10.00	9.640	96	3	70-130	30	
Isopropylbenzene	<0.5000	10.00	10.39	104	10.00	10.05	101	3	70-130	30	
4-Isopropyltoluene	<0.5000	10.00	11.17	112	10.00	10.80	108	3	70-130	30	
Methylene Chloride	<5.000	10.00	9.530	95	10.00	9.160	92	4	70-130	30	
Methyl-t-butyl ether	<0.5000	10.00	8.690	87	10.00	8.890	89	2	70-130	30	
Naphthalene	<0.5000	10.00	10.25	103	10.00	10.13	101	1	70-130	30	

Relative Percent Difference RPD = 200*|(D-G)/(D+G)|
Laboratory Control Sample (LCS) Percent Recovery [D] = 100*(C)/[B]
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = 100*(F)/[E]

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

LCS/LCSD Recoveries

Project Name: 7-11 Store 32785

Work Order #: 14050501 **Project ID:** 60144916

Prep Batch #: 50329 **Date Prepared:** 05/06/2014 00:00 **Sample:** 50329-1-BKS **Analyst:** 1014

Lab Batch ID: 113724 **Date Analyzed:** 05/06/2014 11:16 **Method:** E524.2PREP / E524.2 **Matrix:** Water

Units: ug/L

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

VOC In Drinking Water plus Oxygenates Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
n-Propylbenzene	<0.5000	10.00	10.16	102	10.00	9.840	98	3	70-130	30	
Styrene	<0.5000	10.00	10.16	102	10.00	9.960	100	2	70-130	30	
Diisopropyl ether	<5.000	40.00	37.37	93	40.00	38.41	96	3	70-130	30	
1,1,1,2-Tetrachloroethane	<0.5000	10.00	10.00	100	10.00	9.910	99	1	70-130	30	
1,1,2,2-Tetrachloroethane	<0.5000	10.00	8.930	89	10.00	8.780	88	2	70-130	30	
Tetrachloroethylene	<0.5000	10.00	10.86	109	10.00	10.58	106	3	70-130	30	
Toluene	<0.5000	10.00	9.990	100	10.00	9.690	97	3	70-130	30	
1,2,3-Trichlorobenzene	<1.000	10.00	11.22	112	10.00	10.92	109	3	70-130	30	
1,2,4-Trichlorobenzene	<0.5000	10.00	11.12	111	10.00	10.87	109	2	70-130	30	
1,1,1-Trichloroethane	<0.5000	10.00	9.600	96	10.00	9.340	93	3	70-130	30	
1,1,2-Trichloroethane	<0.5000	10.00	8.880	89	10.00	8.880	89	0	70-130	30	
Trichloroethene	<0.5000	10.00	9.500	95	10.00	9.320	93	2	70-130	30	
1,2,3-Trichloropropane	<0.5000	10.00	8.700	87	10.00	8.570	86	2	70-130	30	
1,2,4-Trimethylbenzene	<0.5000	10.00	10.31	103	10.00	10.07	101	2	70-130	30	
1,3,5-Trimethylbenzene	<0.5000	10.00	10.32	103	10.00	10.04	100	3	70-130	30	
Vinyl Chloride	<0.5000	10.00	9.650	97	10.00	9.120	91	6	70-130	30	
o-Xylene	<0.5000	10.00	10.09	101	10.00	9.970	100	1	70-130	30	
m,p-Xylenes	<1.000	20.00	20.57	103	20.00	19.89	99	3	70-130	30	
tert-Butyl ethyl ether	<5.000	40.00	36.61	92	40.00	37.65	94	3	68-126	30	
tert-Butyl alcohol	<20.00	80.00	63.41	79	80.00	66.80	84	5	54-122	30	

Relative Percent Difference RPD = 200*|(D-G)/(D+G)|
Laboratory Control Sample (LCS) Percent Recovery [D] = 100*(C)/[B]
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = 100*(F)/[E]

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

LCS/LCSD Recoveries

Project Name: 7-11 Store 32785

Work Order #: 14050501 **Project ID:** 60144916

Prep Batch #: 50329 **Date Prepared:** 05/06/2014 00:00 **Sample:** 50329-1-BKS **Analyst:** 1014

Lab Batch ID: 113724 **Date Analyzed:** 05/06/2014 11:16 **Method:** E524.2PREP / E524.2 **Matrix:** Water

Units: ug/L

VOC In Drinking Water plus Oxygenates Analytes	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
tert-Amyl methyl ether	<5.000	40.00	36.10	90	40.00	37.32	93	3	67-124	30	

Relative Percent Difference RPD = 200*|(D-G)/(D+G)|
Laboratory Control Sample (LCS) Percent Recovery [D] = 100*(C)/[B]
Laboratory Control Sample Duplicate (LCSD) Percent Recovery [G] = 100*(F)/[E]

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD 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: AECOM *OFFICE LOC. Columbia, MD
*PROJECT MGR: J. Canzeri *PHONE NO.: (240) 565 6516
EMAIL: FAX NO.: ( )
*PROJECT NAME: 7-11 Store 32785 PROJECT NO. 60184916
SITE LOCATION: Hampstead, MD P.O. NO.: 45814ACM
SAMPLER(S): M. Parsons DW CERT NO.:

PSS Work Order #: 1405050 PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used: HCl	Analysis/ Method Required (3) * 524.2 + OXY	REMARKS
1	124 Hanover INF	5/3/14	0934	GW	3	G		✓	
2	124 Hanover GAC1	"	0931	"	3	"		✓	
3	124 Hanover GAC2	"	0928	"	3	"		✓	
4	124 Hanover FINAL	"	0925	"	3	"		✓	

(5)

Relinquished By: (1)	Date	Time	Received By:
MP (Parsons)	5/5/14	0825	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

*Requested TAT (One TAT per COC)
☐ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA ☑ QC SUMM ☐ CLP LIKE ☐ OTHER ____

# of Coolers: 1
Custody Seal: N/A
Ice Present: yes Temp: 5°C
Shipping Carrier: client

Special Instructions:

DW COMPLIANCE? YES ☐
EDD FORMAT TYPE: AECOM
STATE RESULTS REPORTED TO: MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER ____

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14050501	**Received By**	Amy Friedlander
Client Name	AECOM	**Date Received**	05/05/2014 08:25:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	06/09/2014	**Logged In By**	Robyn Rhudy

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	5
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Mike Parsons
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 4

Total No. of Containers Received 12

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: Robyn Rhudy — Date: 05/05/2014

PM Review and Approval: Amy Friedlander — Date: 05/05/2014

Analytical Report for

AECOM

Certificate of Analysis No.: 14062509

Project Manager: John Canzeri

Project Name : 7-11 Store 32785

Project Location: Hampstead, MD

Project ID : 60144916

July 2, 2014

Phase Separation Science, Inc.

6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

July 2, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14062509**
Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID.: 60144916

Dear John Canzeri :

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 **14062509**.

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 July 30, 2014. 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: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14062509

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/25/2014 at 10:30 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14062509-001	124 Hanover INF	GROUND WATER	06/24/14 12:03
14062509-002	124 Hanover GAC1	GROUND WATER	06/24/14 11:59
14062509-003	124 Hanover GAC2	GROUND WATER	06/24/14 11:56
14062509-004	124 Hanover FINAL EFF	GROUND WATER	06/24/14 11:53

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover INF **Date/Time Sampled: 06/24/2014 12:03** **PSS Sample ID: 14062509-001**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Bromobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Bromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Bromodichloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Bromoform	ND	ug/L	5.0		1	06/26/14	06/27/14 01:45	1014
Bromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
tert-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
sec-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
n-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Carbon Tetrachloride	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Chlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Chloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Chloroform	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Chloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
2-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
4-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,2-Dibromo-3-Chloropropane	ND	ug/L	5.0		1	06/26/14	06/27/14 01:45	1014
Dibromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,2-Dibromoethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Dibromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,2-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,3-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,4-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Dichlorodifluoromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,1-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,2-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
cis-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
trans-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,1-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover INF **Date/Time Sampled: 06/24/2014 12:03** **PSS Sample ID: 14062509-001**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,3-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
2,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,1-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
cis-1,3-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Ethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Isopropylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
4-Isopropyltoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Methylene Chloride	ND	ug/L	5.0		1	06/26/14	06/27/14 01:45	1014
Methyl-t-butyl ether	**0.54**	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Naphthalene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
n-Propylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Styrene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Diisopropyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 01:45	1014
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Tetrachloroethylene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Toluene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/26/14	06/27/14 01:45	1014
1,2,4-Trichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,1,1-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,1,2-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Trichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,2,3-Trichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,2,4-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
1,3,5-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
Vinyl Chloride	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
o-Xylene	ND	ug/L	0.50		1	06/26/14	06/27/14 01:45	1014
m,p-Xylenes	ND	ug/L	1.0		1	06/26/14	06/27/14 01:45	1014
tert-Butyl ethyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 01:45	1014
tert-Butyl alcohol	ND	ug/L	20		1	06/26/14	06/27/14 01:45	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509

AECOM, Columbia, MD

July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover INF **Date/Time Sampled: 06/24/2014 12:03** **PSS Sample ID: 14062509-001**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates — Analytical Method: EPA 524.2 — Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Amyl methyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 01:45	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC1 **Date/Time Sampled: 06/24/2014 11:59** **PSS Sample ID: 14062509-002**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Bromobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Bromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Bromodichloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Bromoform	ND	ug/L	5.0		1	06/26/14	06/27/14 03:05	1014
Bromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
tert-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
sec-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
n-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Carbon Tetrachloride	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Chlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Chloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Chloroform	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Chloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
2-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
4-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,2-Dibromo-3-Chloropropane	ND	ug/L	5.0		1	06/26/14	06/27/14 03:05	1014
Dibromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,2-Dibromoethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Dibromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,2-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,3-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,4-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Dichlorodifluoromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,1-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,2-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
cis-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
trans-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,1-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC1 **Date/Time Sampled: 06/24/2014 11:59** **PSS Sample ID: 14062509-002**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,3-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
2,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,1-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
cis-1,3-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Ethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Isopropylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
4-Isopropyltoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Methylene Chloride	ND	ug/L	5.0		1	06/26/14	06/27/14 03:05	1014
Methyl-t-butyl ether	**0.77**	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Naphthalene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
n-Propylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Styrene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Diisopropyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 03:05	1014
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Tetrachloroethylene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Toluene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/26/14	06/27/14 03:05	1014
1,2,4-Trichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,1,1-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,1,2-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Trichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,2,3-Trichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,2,4-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
1,3,5-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
Vinyl Chloride	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
o-Xylene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:05	1014
m,p-Xylenes	ND	ug/L	1.0		1	06/26/14	06/27/14 03:05	1014
tert-Butyl ethyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 03:05	1014
tert-Butyl alcohol	ND	ug/L	20		1	06/26/14	06/27/14 03:05	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509

AECOM, Columbia, MD

July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC1 **Date/Time Sampled: 06/24/2014 11:59** **PSS Sample ID: 14062509-002**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates — Analytical Method: EPA 524.2 — Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Amyl methyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 03:05	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC2 **Date/Time Sampled: 06/24/2014 11:56** **PSS Sample ID: 14062509-003**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates | Analytical Method: EPA 524.2 | Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Bromobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Bromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Bromodichloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Bromoform	ND	ug/L	5.0		1	06/26/14	06/27/14 03:46	1014
Bromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
tert-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
sec-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
n-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Carbon Tetrachloride	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Chlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Chloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Chloroform	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Chloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
2-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
4-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,2-Dibromo-3-Chloropropane	ND	ug/L	5.0		1	06/26/14	06/27/14 03:46	1014
Dibromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,2-Dibromoethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Dibromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,2-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,3-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,4-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Dichlorodifluoromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,1-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,2-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
cis-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
trans-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,1-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC2 **Date/Time Sampled: 06/24/2014 11:56** **PSS Sample ID: 14062509-003**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates Analytical Method: EPA 524.2 Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,3-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
2,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,1-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
cis-1,3-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Ethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Isopropylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
4-Isopropyltoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Methylene Chloride	ND	ug/L	5.0		1	06/26/14	06/27/14 03:46	1014
Methyl-t-butyl ether	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Naphthalene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
n-Propylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Styrene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Diisopropyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 03:46	1014
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Tetrachloroethylene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Toluene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/26/14	06/27/14 03:46	1014
1,2,4-Trichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,1,1-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,1,2-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Trichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,2,3-Trichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,2,4-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
1,3,5-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
Vinyl Chloride	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
o-Xylene	ND	ug/L	0.50		1	06/26/14	06/27/14 03:46	1014
m,p-Xylenes	ND	ug/L	1.0		1	06/26/14	06/27/14 03:46	1014
tert-Butyl ethyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 03:46	1014
tert-Butyl alcohol	ND	ug/L	20		1	06/26/14	06/27/14 03:46	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover GAC2 **Date/Time Sampled: 06/24/2014 11:56** **PSS Sample ID: 14062509-003**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates — Analytical Method: EPA 524.2 — Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Amyl methyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 03:46	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover FINAL EFF **Date/Time Sampled: 06/24/2014 11:53** **PSS Sample ID: 14062509-004**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates Analytical Method: EPA 524.2 Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Benzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Bromobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Bromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Bromodichloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Bromoform	ND	ug/L	5.0		1	06/26/14	06/27/14 04:26	1014
Bromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
tert-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
sec-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
n-Butylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Carbon Tetrachloride	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Chlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Chloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Chloroform	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Chloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
2-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
4-Chlorotoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,2-Dibromo-3-Chloropropane	ND	ug/L	5.0		1	06/26/14	06/27/14 04:26	1014
Dibromochloromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,2-Dibromoethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Dibromomethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,2-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,3-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,4-Dichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Dichlorodifluoromethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,1-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,2-Dichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
cis-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
trans-1,2-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,1-Dichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover FINAL EFF **Date/Time Sampled: 06/24/2014 11:53** **PSS Sample ID: 14062509-004**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates Analytical Method: EPA 524.2 Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
1,3-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
2,2-Dichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,1-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
cis-1,3-Dichloropropene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Ethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Isopropylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
4-Isopropyltoluene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Methylene Chloride	ND	ug/L	5.0		1	06/26/14	06/27/14 04:26	1014
Methyl-t-butyl ether	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Naphthalene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
n-Propylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Styrene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Diisopropyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 04:26	1014
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Tetrachloroethylene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Toluene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	06/26/14	06/27/14 04:26	1014
1,2,4-Trichlorobenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,1,1-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,1,2-Trichloroethane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Trichloroethene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,2,3-Trichloropropane	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,2,4-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
1,3,5-Trimethylbenzene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
Vinyl Chloride	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
o-Xylene	ND	ug/L	0.50		1	06/26/14	06/27/14 04:26	1014
m,p-Xylenes	ND	ug/L	1.0		1	06/26/14	06/27/14 04:26	1014
tert-Butyl ethyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 04:26	1014
tert-Butyl alcohol	ND	ug/L	20		1	06/26/14	06/27/14 04:26	1014

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062509
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: 124 Hanover FINAL EFF **Date/Time Sampled: 06/24/2014 11:53** **PSS Sample ID: 14062509-004**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

VOC In Drinking Water plus Oxygenates — Analytical Method: EPA 524.2 — Preparation Method: 524.2

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Amyl methyl ether	ND	ug/L	5.0		1	06/26/14	06/27/14 04:26	1014

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14062509
Project ID: 60144916

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.

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): 14062509
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
EPA 524.2	124 Hanover INF	Initial	14062509-001	1014	W	51015	114931	06/24/2014	06/26/2014 10:02	06/27/2014 01:45
	124 Hanover GAC1	Initial	14062509-002	1014	W	51015	114931	06/24/2014	06/26/2014 10:02	06/27/2014 03:05
	124 Hanover GAC2	Initial	14062509-003	1014	W	51015	114931	06/24/2014	06/26/2014 10:02	06/27/2014 03:46
	124 Hanover FINAL EFF	Initial	14062509-004	1014	W	51015	114931	06/24/2014	06/26/2014 10:02	06/27/2014 04:26
	51015-1-BKS	BKS	51015-1-BKS	1014	W	51015	114931	--------	06/26/2014 10:02	06/26/2014 23:03
	51015-1-BLK	BLK	51015-1-BLK	1014	W	51015	114931	--------	06/26/2014 10:02	06/27/2014 01:04
	51015-1-BSD	BSD	51015-1-BSD	1014	W	51015	114931	--------	06/26/2014 10:02	06/26/2014 23:43

PHASE SEPARATION SCIENCE, INC.

QC Summary 14062509

AECOM
7-11 Store 32785

Analytical Method: EPA 524.2 Prep Method: E524.2PREP
Seq Number: 114931 Matrix: Ground Water Date Prep: 06/26/2014
PSS Sample ID: 14062509-001

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	97		83-115	%	06/27/14 01:45
Dibromofluoromethane	102		89-106	%	06/27/14 01:45
Toluene-D8	101		94-109	%	06/27/14 01:45

Analytical Method: EPA 524.2 Prep Method: E524.2PREP
Seq Number: 114931 Matrix: Ground Water Date Prep: 06/26/2014
PSS Sample ID: 14062509-002

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	99		83-115	%	06/27/14 03:05
Dibromofluoromethane	103		89-106	%	06/27/14 03:05
Toluene-D8	103		94-109	%	06/27/14 03:05

Analytical Method: EPA 524.2 Prep Method: E524.2PREP
Seq Number: 114931 Matrix: Ground Water Date Prep: 06/26/2014
PSS Sample ID: 14062509-003

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	99		83-115	%	06/27/14 03:46
Dibromofluoromethane	104		89-106	%	06/27/14 03:46
Toluene-D8	102		94-109	%	06/27/14 03:46

Analytical Method: EPA 524.2 Prep Method: E524.2PREP
Seq Number: 114931 Matrix: Ground Water Date Prep: 06/26/2014
PSS Sample ID: 14062509-004

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	98		83-115	%	06/27/14 04:26
Dibromofluoromethane	102		89-106	%	06/27/14 04:26
Toluene-D8	102		94-109	%	06/27/14 04:26

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 14062509

AECOM

7-11 Store 32785

Analytical Method: EPA 524.2 Prep Method: E524.2PREP

Seq Number: 114931 Matrix: Water Date Prep: 06/26/14

MB Sample Id: 51015-1-BLK LCS Sample Id: 51015-1-BKS LCSD Sample Id: 51015-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.5000	10.00	9.580	96	10.05	101	70-130	5	30	ug/L	06/26/14 23:03	
Bromobenzene	<0.5000	10.00	9.370	94	9.930	99	70-130	6	30	ug/L	06/26/14 23:03	
Bromochloromethane	<0.5000	10.00	9.670	97	9.980	100	70-130	3	30	ug/L	06/26/14 23:03	
Bromodichloromethane	<0.5000	10.00	9.540	95	9.920	99	70-130	4	30	ug/L	06/26/14 23:03	
Bromoform	<5.000	20.00	18.23	91	19.40	97	70-130	6	30	ug/L	06/26/14 23:03	
Bromomethane	<0.5000	10.00	9.730	97	10.08	101	70-130	4	30	ug/L	06/26/14 23:03	
tert-Butylbenzene	<0.5000	10.00	9.620	96	10.26	103	70-130	6	30	ug/L	06/26/14 23:03	
sec-Butylbenzene	<0.5000	10.00	9.690	97	10.42	104	70-130	7	30	ug/L	06/26/14 23:03	
n-Butylbenzene	<0.5000	10.00	9.670	97	10.41	104	70-130	7	30	ug/L	06/26/14 23:03	
Carbon Tetrachloride	<0.5000	10.00	10.25	103	10.54	105	70-130	3	30	ug/L	06/26/14 23:03	
Chlorobenzene	<0.5000	10.00	9.250	93	9.800	98	70-130	6	30	ug/L	06/26/14 23:03	
Chloroethane	<0.5000	10.00	9.650	97	10.19	102	70-130	5	30	ug/L	06/26/14 23:03	
Chloroform	<0.5000	10.00	9.480	95	9.840	98	70-130	4	30	ug/L	06/26/14 23:03	
Chloromethane	<0.5000	10.00	9.620	96	10.14	101	70-130	5	30	ug/L	06/26/14 23:03	
2-Chlorotoluene	<0.5000	10.00	9.370	94	10.02	100	70-130	7	30	ug/L	06/26/14 23:03	
4-Chlorotoluene	<0.5000	10.00	9.470	95	10.18	102	70-130	7	30	ug/L	06/26/14 23:03	
1,2-Dibromo-3-Chloropropane	<5.000	50.00	45.56	91	50.08	100	70-130	9	30	ug/L	06/26/14 23:03	
Dibromochloromethane	<0.5000	10.00	9.150	92	9.640	96	70-130	5	30	ug/L	06/26/14 23:03	
1,2-Dibromoethane	<0.5000	10.00	9.010	90	9.580	96	70-130	6	30	ug/L	06/26/14 23:03	
Dibromomethane	<0.5000	10.00	9.520	95	9.850	99	70-130	3	30	ug/L	06/26/14 23:03	
1,2-Dichlorobenzene	<0.5000	10.00	9.460	95	10.13	101	70-130	7	30	ug/L	06/26/14 23:03	
1,3-Dichlorobenzene	<0.5000	10.00	9.370	94	10.10	101	70-130	7	30	ug/L	06/26/14 23:03	
1,4-Dichlorobenzene	<0.5000	10.00	9.420	94	10.13	101	70-130	7	30	ug/L	06/26/14 23:03	
Dichlorodifluoromethane	<0.5000	10.00	9.670	97	10.44	104	70-130	8	30	ug/L	06/26/14 23:03	
1,1-Dichloroethane	<0.5000	10.00	9.590	96	9.930	99	70-130	3	30	ug/L	06/26/14 23:03	
1,2-Dichloroethane	<0.5000	10.00	9.850	99	10.05	101	70-130	2	30	ug/L	06/26/14 23:03	
cis-1,2-Dichloroethene	<0.5000	10.00	9.490	95	9.890	99	70-130	4	30	ug/L	06/26/14 23:03	
trans-1,2-Dichloroethene	<0.5000	10.00	9.540	95	9.730	97	70-130	2	30	ug/L	06/26/14 23:03	
1,1-Dichloroethene	<0.5000	10.00	9.660	97	10.09	101	70-130	4	30	ug/L	06/26/14 23:03	
1,2-Dichloropropane	<0.5000	10.00	9.530	95	10.02	100	70-130	5	30	ug/L	06/26/14 23:03	
1,3-Dichloropropane	<0.5000	10.00	9.280	93	9.700	97	70-130	4	30	ug/L	06/26/14 23:03	
2,2-Dichloropropane	<0.5000	10.00	8.650	87	8.980	90	70-130	4	30	ug/L	06/26/14 23:03	
1,1-Dichloropropene	<0.5000	10.00	9.570	96	10.10	101	70-130	5	30	ug/L	06/26/14 23:03	
cis-1,3-Dichloropropene	<0.5000	10.00	9.170	92	9.730	97	70-130	6	30	ug/L	06/26/14 23:03	
Ethylbenzene	<0.5000	10.00	9.430	94	10.06	101	70-130	6	30	ug/L	06/26/14 23:03	
Isopropylbenzene	<0.5000	10.00	9.490	95	10.18	102	70-130	7	30	ug/L	06/26/14 23:03	
4-Isopropyltoluene	<0.5000	10.00	9.510	95	10.30	103	70-130	8	30	ug/L	06/26/14 23:03	
Methylene Chloride	<5.000	10.00	9.390	94	9.720	97	70-130	3	30	ug/L	06/26/14 23:03	
Methyl-t-butyl ether	<0.5000	10.00	9.470	95	9.820	98	70-130	4	30	ug/L	06/26/14 23:03	
Naphthalene	<0.5000	10.00	9.410	94	10.14	101	70-130	7	30	ug/L	06/26/14 23:03	
n-Propylbenzene	<0.5000	10.00	9.590	96	10.35	104	70-130	8	30	ug/L	06/26/14 23:03	
Styrene	<0.5000	10.00	9.300	93	10.11	101	70-130	8	30	ug/L	06/26/14 23:03	
1,1,1,2-Tetrachloroethane	<0.5000	10.00	9.160	92	9.690	97	70-130	6	30	ug/L	06/26/14 23:03	
Diisopropyl ether	<5.000	40.00	38.65	97	38.54	96	70-130	0	30	ug/L	06/26/14 23:03	
1,1,2,2-Tetrachloroethane	<0.5000	10.00	9.160	92	9.910	99	70-130	8	30	ug/L	06/26/14 23:03	
Tetrachloroethylene	<0.5000	10.00	9.460	95	10.03	100	70-130	6	30	ug/L	06/26/14 23:03	
Toluene	<0.5000	10.00	9.350	94	10.01	100	70-130	7	30	ug/L	06/26/14 23:03	
1,2,3-Trichlorobenzene	<1.000	10.00	9.490	95	10.26	103	70-130	8	30	ug/L	06/26/14 23:03	
1,2,4-Trichlorobenzene	<0.5000	10.00	9.310	93	9.940	99	70-130	7	30	ug/L	06/26/14 23:03	
1,1,1-Trichloroethane	<0.5000	10.00	9.560	96	10.07	101	70-130	5	30	ug/L	06/26/14 23:03	
1,1,2-Trichloroethane	<0.5000	10.00	9.450	95	9.990	100	70-130	6	30	ug/L	06/26/14 23:03	

PHASE SEPARATION SCIENCE, INC.

QC Summary 14062509

AECOM

7-11 Store 32785

Analytical Method: EPA 524.2 Prep Method: E524.2PREP

Seq Number: 114931 Matrix: Water Date Prep: 06/26/14

MB Sample Id: 51015-1-BLK LCS Sample Id: 51015-1-BKS LCSD Sample Id: 51015-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Trichloroethene	<0.5000	10.00	9.630	96	10.23	102	70-130	6	30	ug/L	06/26/14 23:03	
1,2,3-Trichloropropane	<0.5000	10.00	8.770	88	9.310	93	70-130	6	30	ug/L	06/26/14 23:03	
1,2,4-Trimethylbenzene	<0.5000	10.00	9.430	94	10.18	102	70-130	8	30	ug/L	06/26/14 23:03	
1,3,5-Trimethylbenzene	<0.5000	10.00	9.490	95	10.23	102	70-130	8	30	ug/L	06/26/14 23:03	
Vinyl Chloride	<0.5000	10.00	10.09	101	10.41	104	70-130	3	30	ug/L	06/26/14 23:03	
o-Xylene	<0.5000	10.00	9.490	95	10.02	100	70-130	5	30	ug/L	06/26/14 23:03	
m,p-Xylenes	<1.000	20.00	18.62	93	20.00	100	70-130	7	30	ug/L	06/26/14 23:03	
tert-Butyl ethyl ether	<5.000	40.00	38.17	95	37.90	95	68-126	1	30	ug/L	06/26/14 23:03	
tert-Butyl alcohol	<20.00	80.00	74.39	93	75.34	94	54-122	1	30	ug/L	06/26/14 23:03	
tert-Amyl methyl ether	<5.000	40.00	38.33	96	37.95	95	67-124	1	30	ug/L	06/26/14 23:03	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	LCSD Result	LCSD Flag	Limits	Units	Analysis Date
4-Bromofluorobenzene	98		99		99		83-115	%	06/26/14 23:03
Dibromofluoromethane	103		100		98		89-106	%	06/26/14 23:03
Toluene-D8	102		99		100		94-109	%	06/26/14 23:03

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

5

1

*CLIENT: AECOM *OFFICE LOC. Columbia, MD

*PROJECT MGR: J. Canzeri *PHONE NO.: (240) 526-6516

EMAIL: FAX NO.: ( )

*PROJECT NAME: 7-11 Store 32785 PROJECT NO. 60144916

SITE LOCATION: Hampstead, MD P.O. NO.: 45814 AEM

SAMPLER(S): Mike Parsons DW CERT NO.:

PSS Work Order #: 1406279

PAGE 1 OF 1

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

2

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE (C = COMP, G = GRAB)	Preservatives Used: HCl	Analysis/ Method Required (3) * 524.2 + OXY	REMARKS
	124 Hanover INF	6/24/14	1203	GW	3	G	✓	✓	
	124 Hanover GAC1		1159		3		✓	✓	
	124 Hanover GAC2		1130		3		✓	✓	
	124 Hanover FINAL EFF		1153		3		✓	✓	

5

Relinquished By: (1)	Date	Time	Received By:
Mike Parsons	6/25/14	10:30	Sim
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

4

*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day ☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA ☑ QC SUMM ☐ CLP LIKE ☐ OTHER ☐

# of Coolers: 1

Custody Seal: ABS

Ice Present: Yes Temp: 5°C

Shipping Carrier: client

Special Instructions:

DW COMPLIANCE? YES ☐

EDD FORMAT TYPE: AECOM

STATE RESULTS REPORTED TO:
MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER ☐

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14062509	**Received By**	Simon Crisp
Client Name	AECOM	**Date Received**	06/25/2014 10:30:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	07/30/2014	**Logged In By**	Lynn Jackson

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	5
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Mike Parsons
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 4

Total No. of Containers Received 12

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: L Jackson — Date: 06/25/2014

Lynn Jackson

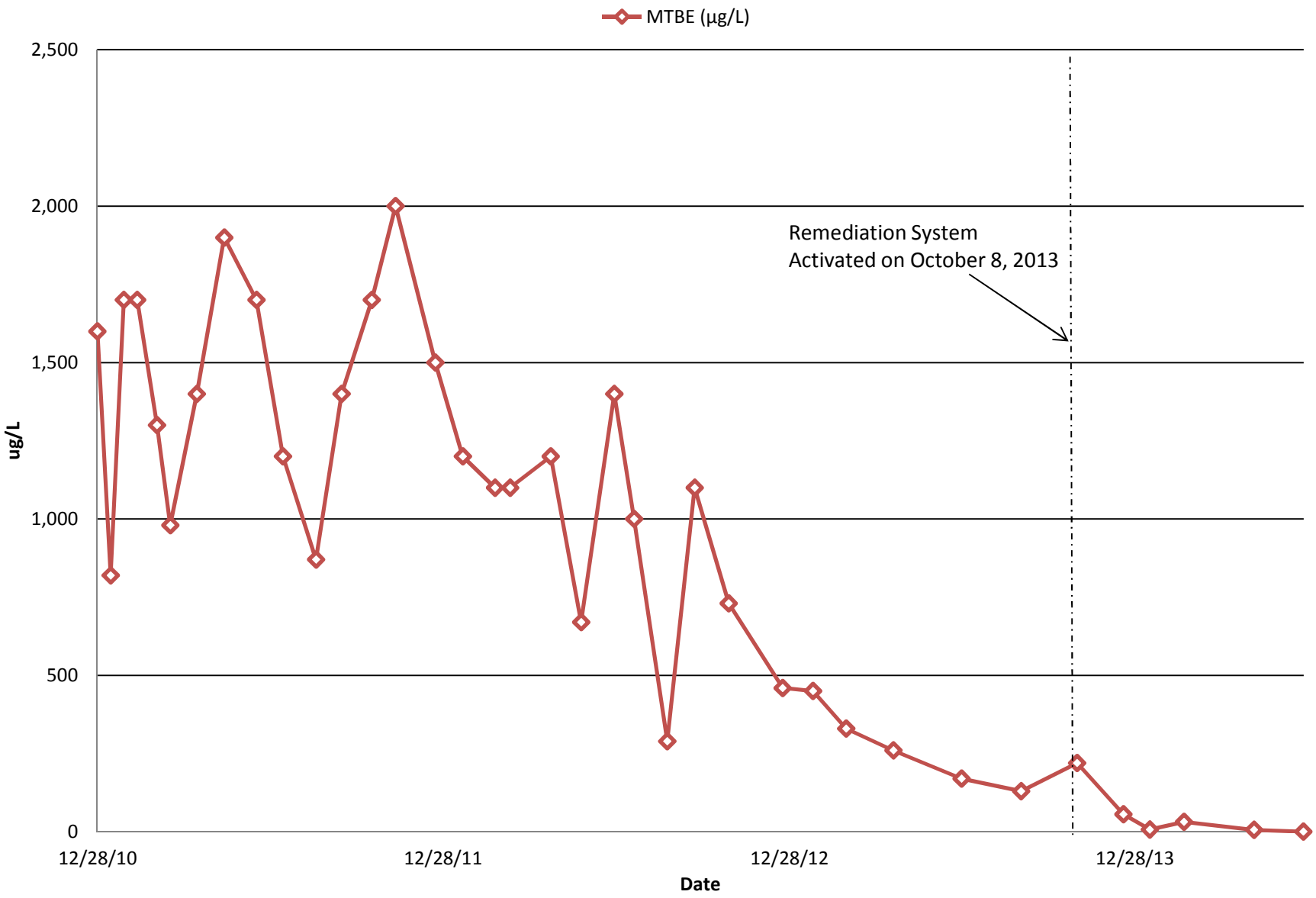
PM Review and Approval: Amy Friedlander — Date: 06/25/2014

Amy Friedlander

ATTACHMENT D

Residential Treatment System Influent MTBE Concentrations Over Time

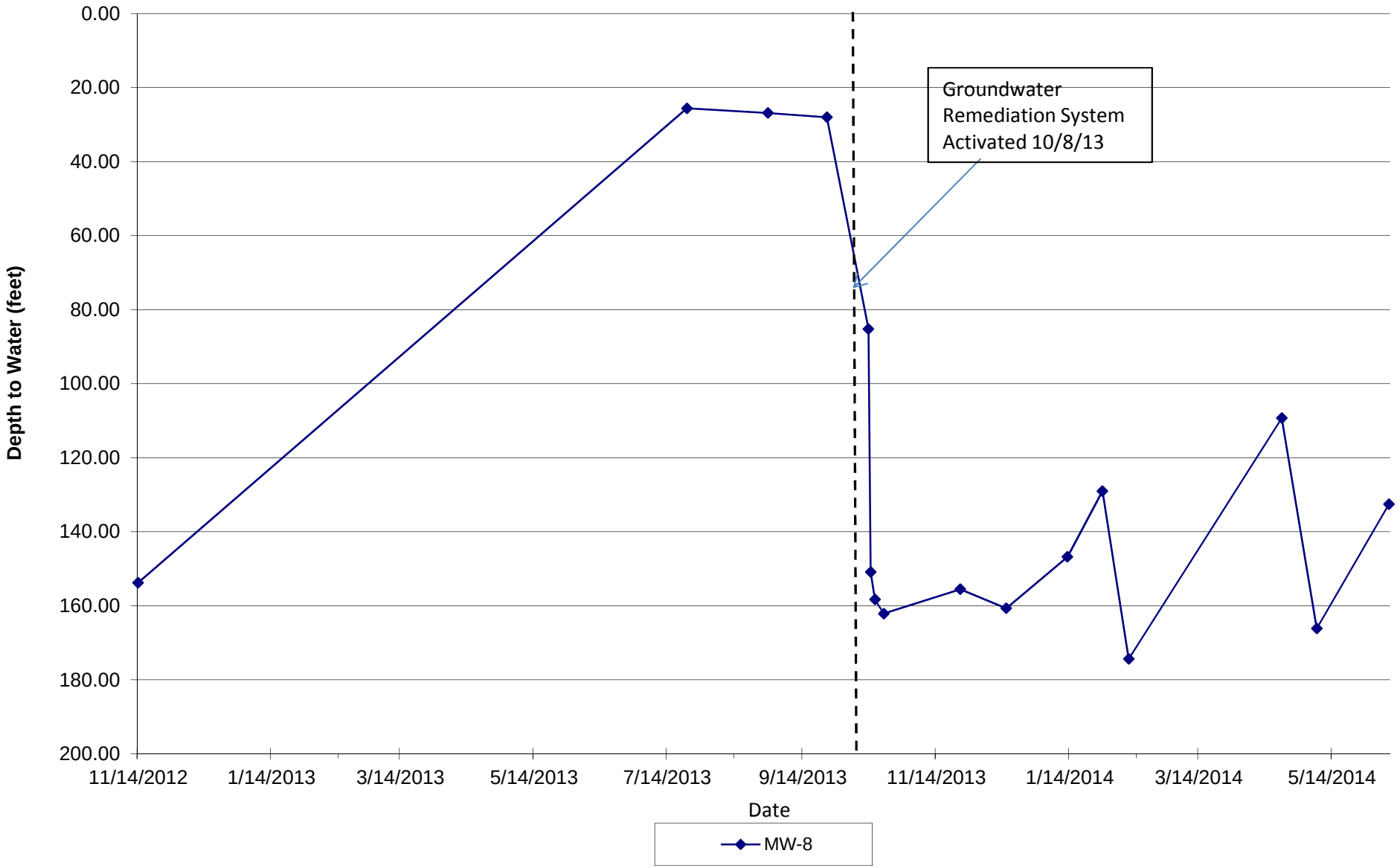
Potable Carbon Treatment System - Influent MTBE Concentrations Over Time
124 Hanover Pike
Hampstead, MD



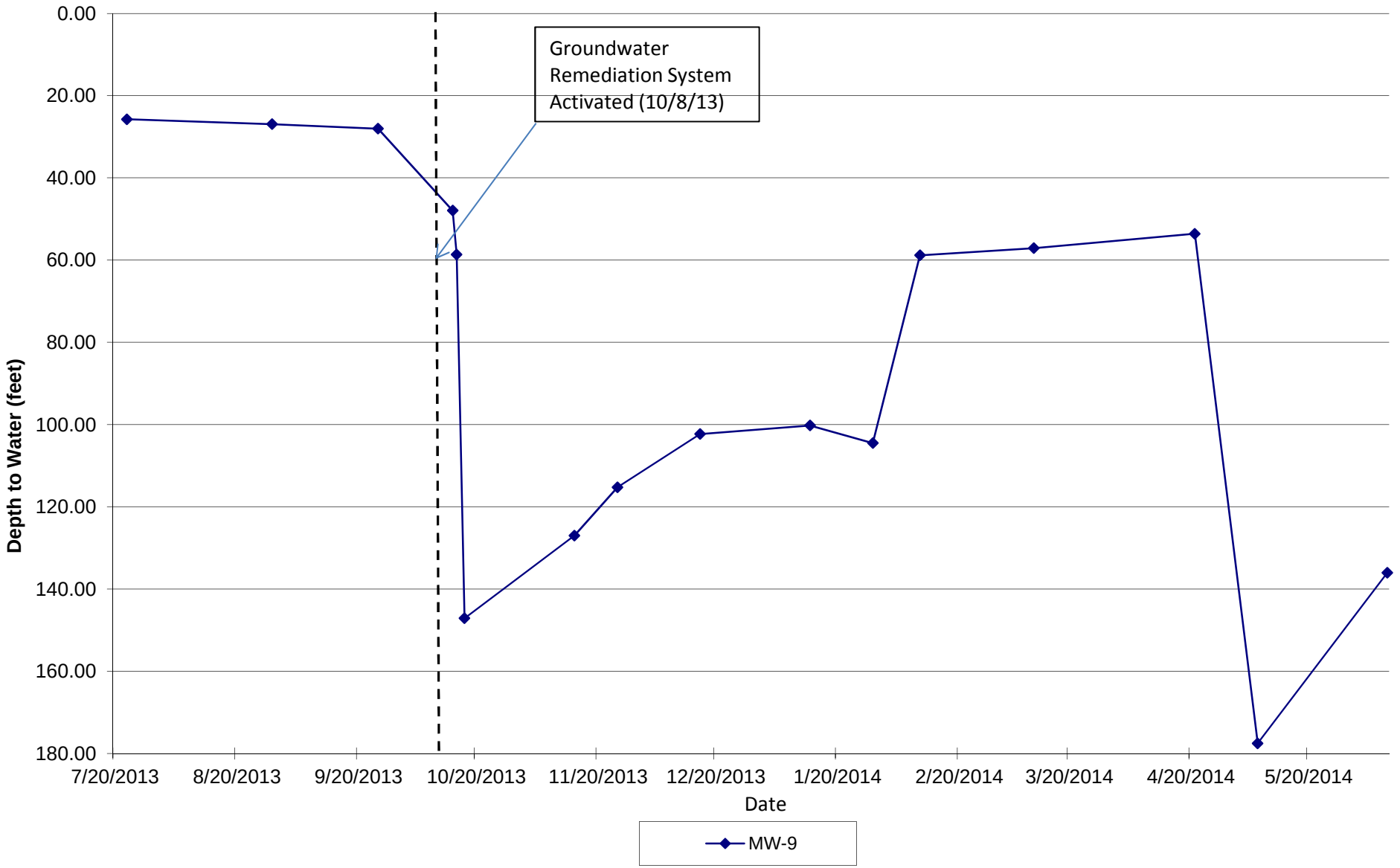
ATTACHMENT E

Groundwater Drawdown Graphs (Pumping Wells)

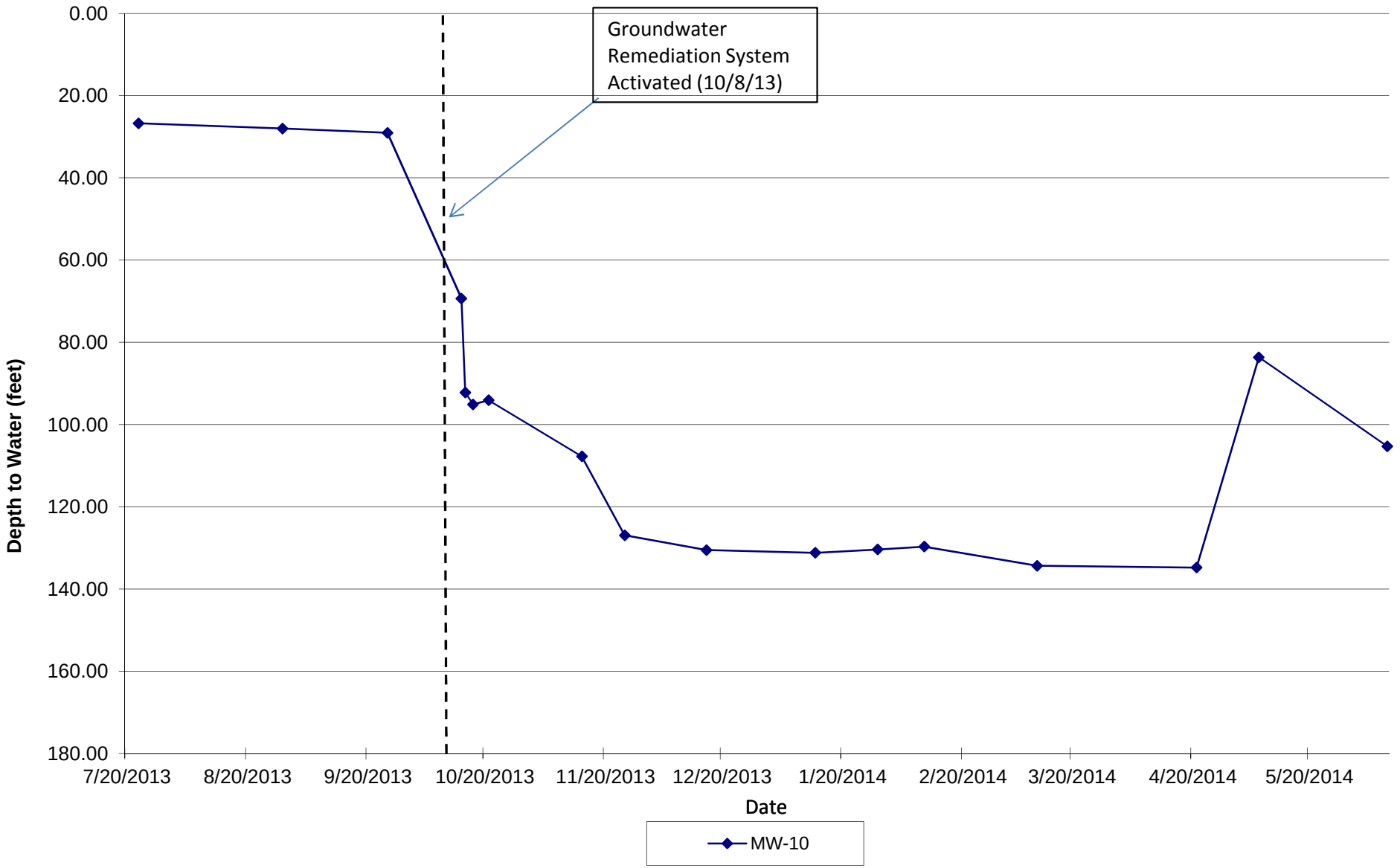
MW-8
Depth To Water Over Time



MW-9
Depth to Water Over Time



MW-10
Depth to Water Over Time



ATTACHMENT F

Groundwater Treatment System Laboratory Reports

Analytical Report for

AECOM

Certificate of Analysis No.: 14040905

Project Manager: John Canzeri

Project Name : 7-11 Store 32785

Project Location: Hampstead, MD

Project ID : 60144916

April 16, 2014

Phase Separation Science, Inc.

6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

April 16, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14040905**
Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID.: 60144916

Dear John Canzeri :

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 **14040905**.

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 May 14, 2014. 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: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14040905

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 04/09/2014 at 09:12 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14040905-001	A/S INF	GROUND WATER	04/08/14 07:43
14040905-002	A/S EFF	GROUND WATER	04/08/14 07:40
14040905-003	GAC-1 EFF	GROUND WATER	04/08/14 07:32

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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
LDBA MWAA LD1997-0041-2015

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14040905
AECOM, Columbia, MD
April 16, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: A/S INF **Date/Time Sampled: 04/08/2014 07:43** **PSS Sample ID: 14040905-001**
Matrix: GROUND WATER **Date/Time Received: 04/09/2014 09:12**

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)	**170**	ug/L	100		1	04/10/14	04/10/14 15:45	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	04/09/14	04/09/14 16:00	1011
Methyl-t-Butyl Ether	**240**	ug/L	10		10	04/09/14	04/14/14 15:59	1011
Benzene	ND	ug/L	1.0		1	04/09/14	04/09/14 16:00	1011
Toluene	ND	ug/L	1.0		1	04/09/14	04/09/14 16:00	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	04/09/14	04/09/14 16:00	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	04/09/14	04/09/14 16:00	1011
Diisopropyl ether	ND	ug/L	10		1	04/09/14	04/09/14 16:00	1011
tert-Amyl methyl ether	ND	ug/L	10		1	04/09/14	04/09/14 16:00	1011
tert-Amyl alcohol	ND	ug/L	20		1	04/09/14	04/09/14 16:00	1011
Ethylbenzene	ND	ug/L	1.0		1	04/09/14	04/09/14 16:00	1011
m&p-Xylene	ND	ug/L	2.0		1	04/09/14	04/09/14 16:00	1011
o-Xylene	ND	ug/L	1.0		1	04/09/14	04/09/14 16:00	1011
Naphthalene	ND	ug/L	1.0		1	04/09/14	04/09/14 16:00	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14040905
AECOM, Columbia, MD
April 16, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: A/S EFF **Date/Time Sampled: 04/08/2014 07:40** **PSS Sample ID: 14040905-002**
Matrix: GROUND WATER **Date/Time Received: 04/09/2014 09:12**

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	04/10/14	04/10/14 16:10	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	04/09/14	04/09/14 15:01	1011
Methyl-t-Butyl Ether	**1.6**	ug/L	1.0		1	04/09/14	04/09/14 15:01	1011
Benzene	ND	ug/L	1.0		1	04/09/14	04/09/14 15:01	1011
Toluene	ND	ug/L	1.0		1	04/09/14	04/09/14 15:01	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	04/09/14	04/09/14 15:01	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	04/09/14	04/09/14 15:01	1011
Diisopropyl ether	ND	ug/L	10		1	04/09/14	04/09/14 15:01	1011
tert-Amyl methyl ether	ND	ug/L	10		1	04/09/14	04/09/14 15:01	1011
tert-Amyl alcohol	ND	ug/L	20		1	04/09/14	04/09/14 15:01	1011
Ethylbenzene	ND	ug/L	1.0		1	04/09/14	04/09/14 15:01	1011
m&p-Xylene	ND	ug/L	2.0		1	04/09/14	04/09/14 15:01	1011
o-Xylene	ND	ug/L	1.0		1	04/09/14	04/09/14 15:01	1011
Naphthalene	ND	ug/L	1.0		1	04/09/14	04/09/14 15:01	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14040905
AECOM, Columbia, MD
April 16, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: GAC-1 EFF **Date/Time Sampled: 04/08/2014 07:32** **PSS Sample ID: 14040905-003**
Matrix: GROUND WATER **Date/Time Received: 04/09/2014 09:12**

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	04/10/14	04/10/14 16:36	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	04/09/14	04/09/14 15:30	1011
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	04/09/14	04/09/14 15:30	1011
Benzene	ND	ug/L	1.0		1	04/09/14	04/09/14 15:30	1011
Toluene	ND	ug/L	1.0		1	04/09/14	04/09/14 15:30	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	04/09/14	04/09/14 15:30	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	04/09/14	04/09/14 15:30	1011
Diisopropyl ether	ND	ug/L	10		1	04/09/14	04/09/14 15:30	1011
tert-Amyl methyl ether	ND	ug/L	10		1	04/09/14	04/09/14 15:30	1011
tert-Amyl alcohol	ND	ug/L	20		1	04/09/14	04/09/14 15:30	1011
Ethylbenzene	ND	ug/L	1.0		1	04/09/14	04/09/14 15:30	1011
m&p-Xylene	ND	ug/L	2.0		1	04/09/14	04/09/14 15:30	1011
o-Xylene	ND	ug/L	1.0		1	04/09/14	04/09/14 15:30	1011
Naphthalene	ND	ug/L	1.0		1	04/09/14	04/09/14 15:30	1011

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14040905
Project ID: 60144916

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.

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): **14040905**
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8015C	A/S INF	Initial	14040905-001	1035	W	49931	113056	04/08/2014	04/10/2014 10:39	04/10/2014 15:45
	A/S EFF	Initial	14040905-002	1035	W	49931	113056	04/08/2014	04/10/2014 10:39	04/10/2014 16:10
	GAC-1 EFF	Initial	14040905-003	1035	W	49931	113056	04/08/2014	04/10/2014 10:39	04/10/2014 16:36
	49931-2-BKS	BKS	49931-2-BKS	1035	W	49931	113056	--------	04/10/2014 10:39	04/10/2014 12:46
	49931-2-BLK	BLK	49931-2-BLK	1035	W	49931	113056	--------	04/10/2014 10:39	04/10/2014 12:21
	GAC-2 FINAL S	MS	14040903-001 S	1035	W	49931	113056	04/07/2014	04/10/2014 10:39	04/10/2014 21:14
	GAC-2 FINAL SD	MSD	14040903-001 SD	1035	W	49931	113056	04/07/2014	04/10/2014 10:39	04/10/2014 21:40
SW-846 8260 B	A/S INF	Initial	14040905-001	1011	W	49951	113085	04/08/2014	04/09/2014 12:00	04/09/2014 16:00
	A/S EFF	Initial	14040905-002	1011	W	49951	113085	04/08/2014	04/09/2014 12:00	04/09/2014 15:01
	GAC-1 EFF	Initial	14040905-003	1011	W	49951	113085	04/08/2014	04/09/2014 12:00	04/09/2014 15:30
	49951-1-BKS	BKS	49951-1-BKS	1011	W	49951	113085	--------	04/09/2014 12:00	04/09/2014 09:57
	49951-1-BLK	BLK	49951-1-BLK	1011	W	49951	113085	--------	04/09/2014 12:00	04/09/2014 12:54
	GAC-2 FINAL S	MS	14040903-001 S	1011	W	49951	113085	04/07/2014	04/09/2014 12:00	04/09/2014 18:57
	GAC-2 FINAL SD	MSD	14040903-001 SD	1011	W	49951	113085	04/07/2014	04/09/2014 12:00	04/09/2014 19:26
	49968-1-BKS	BKS	49968-1-BKS	1011	W	49968	113112	--------	04/14/2014 13:00	04/14/2014 11:09
	49968-1-BLK	BLK	49968-1-BLK	1011	W	49968	113112	--------	04/14/2014 13:00	04/14/2014 15:00
	GAC-2 FINAL S	MS	14040904-001 S	1011	W	49968	113112	04/08/2014	04/14/2014 13:00	04/14/2014 19:26
	GAC-2 FINAL SD	MSD	14040904-001 SD	1011	W	49968	113112	04/08/2014	04/14/2014 13:00	04/14/2014 19:55
	A/S INF	Reanalysis	14040905-001	1011	W	49951	113112	04/08/2014	04/09/2014 12:00	04/14/2014 15:59

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/16/2014

Work Order #: 14040905 **Project ID:** 60144916

Lab Batch #: 113056 **Sample:** 49931-2-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/10/2014 12:21

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	85.5	100	86	65-111	

Lab Batch #: 113056 **Sample:** 49931-2-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/10/2014 12:46

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	76.2	100	76	65-111	

Lab Batch #: 113056 **Sample:** 14040905-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/10/2014 15:45

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	83.0	100	83	65-111	

Lab Batch #: 113056 **Sample:** 14040905-002 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/10/2014 16:10

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	83.0	100	83	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/16/2014

Work Order #: 14040905 **Project ID:** 60144916

Lab Batch #: 113056 **Sample:** 14040905-003 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/10/2014 16:36

Total Petroleum Hydrocarbons-GRO Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	86.0	100	86	65-111	

Lab Batch #: 113056 **Sample:** 14040903-001 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/10/2014 21:14

Total Petroleum Hydrocarbons-GRO Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	89.6	100	90	65-111	

Lab Batch #: 113056 **Sample:** 14040903-001 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/10/2014 21:40

Total Petroleum Hydrocarbons-GRO Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	91.9	100	92	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/16/2014

Work Order #: 14040905 **Project ID:** 60144916

Lab Batch #: 113085 **Sample:** 49951-1-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/09/2014 09:57

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.5	50.00	101	84-110	
Toluene-D8	49.9	50.00	100	94-109	
4-Bromofluorobenzene	46.0	50.00	92	81-133	

Lab Batch #: 113085 **Sample:** 49951-1-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/09/2014 12:54

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.7	50.00	101	84-110	
Toluene-D8	49.5	50.00	99	94-109	
4-Bromofluorobenzene	52.5	50.00	105	81-133	

Lab Batch #: 113085 **Sample:** 14040905-002 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/09/2014 15:01

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	49.0	50.00	98	84-110	
Toluene-D8	49.0	50.00	97	94-109	
4-Bromofluorobenzene	49.0	50.00	99	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/16/2014

Work Order #: 14040905 **Project ID:** 60144916

Lab Batch #: 113085 **Sample:** 14040905-003 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/09/2014 15:30

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	49.0	50.00	97	84-110	
Toluene-D8	48.0	50.00	95	94-109	
4-Bromofluorobenzene	49.0	50.00	98	81-133	

Lab Batch #: 113085 **Sample:** 14040905-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/09/2014 16:00

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	48.0	50.00	97	84-110	
Toluene-D8	47.0	50.00	95	94-109	
4-Bromofluorobenzene	50.0	50.00	101	81-133	

Lab Batch #: 113085 **Sample:** 14040903-001 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/09/2014 18:57

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	48.5	50.00	97	84-110	
Toluene-D8	48.0	50.00	96	94-109	
4-Bromofluorobenzene	48.8	50.00	98	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/16/2014

Work Order #: 14040905 **Project ID:** 60144916

Lab Batch #: 113085 **Sample:** 14040903-001 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/09/2014 19:26

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
Dibromofluoromethane	49.6	50.00	99	84-110	
Toluene-D8	48.0	50.00	96	94-109	
4-Bromofluorobenzene	51.6	50.00	103	81-133	

Lab Batch #: 113112 **Sample:** 49968-1-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/14/2014 11:09

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
Dibromofluoromethane	50.4	50.00	101	84-110	
Toluene-D8	49.5	50.00	99	94-109	
4-Bromofluorobenzene	48.0	50.00	96	81-133	

Lab Batch #: 113112 **Sample:** 49968-1-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/14/2014 15:00

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
Dibromofluoromethane	50.0	50.00	100	84-110	
Toluene-D8	48.9	50.00	98	94-109	
4-Bromofluorobenzene	50.3	50.00	101	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/16/2014

Work Order #: 14040905 **Project ID:** 60144916

Lab Batch #: 113112 **Sample:** 14040905-001 / DL **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/14/2014 15:59

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
Dibromofluoromethane	49.0	50.00	99	84-110	
Toluene-D8	49.0	50.00	99	94-109	
4-Bromofluorobenzene	51.0	50.00	101	81-133	

Lab Batch #: 113112 **Sample:** 14040904-001 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/14/2014 19:26

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
Dibromofluoromethane	50.6	50.00	101	84-110	
Toluene-D8	49.6	50.00	99	94-109	
4-Bromofluorobenzene	47.4	50.00	95	81-133	

Lab Batch #: 113112 **Sample:** 14040904-001 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/14/2014 19:55

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
Dibromofluoromethane	50.0	50.00	100	84-110	
Toluene-D8	48.9	50.00	98	94-109	
4-Bromofluorobenzene	50.3	50.00	101	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Blank Summary 14040905

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **SW-846 8015C** Prep Method: SW5030B

Matrix: **WATER**

Sample Id: **49931-2-BLK** Lab Sample Id: **49931-2-BLK**

Date Analyzed: Apr-10-14 12:21 Analyst: 1035 Seq Number: 113056 Date Prep: Apr-10-14 10:39 Tech: 1035

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
TPH-GRO (Gasoline Range Organics)	C6C10GRO	ND	100	40.00	ug/L	U	1

Blank Summary 14040905

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **SW-846 8260 B** Prep Method: SW5030B
Matrix: **WATER**

Sample Id: **49951-1-BLK** Lab Sample Id: **49951-1-BLK**

Date Analyzed: Apr-09-14 12:54 Analyst: 1011 Seq Number: 113085 Date Prep: Apr-09-14 12:00 Tech: 1011

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
tert-Butanol	75-65-0	ND	20.00	10.00	ug/L	U	1
Methyl-t-Butyl Ether	1634-04-4	ND	1.000	0.5000	ug/L	U	1
Benzene	71-43-2	ND	1.000	0.5000	ug/L	U	1
Toluene	108-88-3	ND	1.000	0.5000	ug/L	U	1
tert-Amyl ethyl ether	919-94-8	ND	10.00	5.000	ug/L	U	1
tert-Butyl ethyl ether	637-92-3	ND	10.00	5.000	ug/L	U	1
Diisopropyl ether	108-20-3	ND	10.00	5.000	ug/L	U	1
tert-Amyl methyl ether	994-05-8	ND	10.00	5.000	ug/L	U	1
tert-Amyl alcohol	75-85-4	ND	20.00	10.00	ug/L	U	1
Ethylbenzene	100-41-4	ND	1.000	0.5000	ug/L	U	1
m&p-Xylene	108-38-3	ND	2.000	1.000	ug/L	U	1
o-Xylene	95-47-6	ND	1.000	0.5000	ug/L	U	1
Naphthalene	91-20-3	ND	1.000	0.5000	ug/L	U	1

Sample Id: **49968-1-BLK** Lab Sample Id: **49968-1-BLK**

Date Analyzed: Apr-14-14 15:00 Analyst: 1011 Seq Number: 113112 Date Prep: Apr-14-14 13:00 Tech: 1011

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
Methyl-t-Butyl Ether	1634-04-4	ND	1.000	0.5000	ug/L	U	1

Blank Spike Recovery

Project Name: 7-11 Store 32785

Work Order #: 14040905 **Project ID:** 60144916

Prep Batch #: 49931 **Date Prepared:** 04/10/2014 10:39 **Sample ID:** 49931-2-BKS **Matrix:** Water

Lab Batch ID: 113056 **Date Analyzed:** 04/10/2014 12:21 **Analyst:** 1035

Reporting Units: ug/L

	BLANK /BLANK SPIKE RECOVERY STUDY					
Total Petroleum Hydrocarbons-GRO **Analytes**	**Blank Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Control Limits %R**	**Flags**
TPH-GRO (Gasoline Range Organics)	<100	5000	4999	100	61-138	

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

Blank Spike Recovery

Project Name: 7-11 Store 32785

Work Order #: 14040905 **Project ID:** 60144916

Prep Batch #: 49951 **Date Prepared:** 04/09/2014 12:00 **Sample ID:** 49951-1-BKS **Matrix:** Water

Lab Batch ID: 113085 **Date Analyzed:** 04/09/2014 12:54 **Analyst:** 1011

Reporting Units: ug/L

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX, Naphthalene + Oxygenates Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags	Marginal Exceedance Limits
tert-Butanol	<20.00	50.00	81.64	163	15-150	H	0-215
Methyl-t-Butyl Ether	<1.000	50.00	76.61	153	30-168		7-190
Benzene	<1.000	50.00	49.84	100	77-122		70-130
Toluene	<1.000	50.00	52.50	105	77-123		70-130
tert-Amyl ethyl ether	<10.00	50.00	47.21	94	60-121		50-132
tert-Butyl ethyl ether	<10.00	50.00	57.09	114	62-137		49-149
Diisopropyl ether	<10.00	50.00	65.78	132	48-146		32-162
tert-Amyl methyl ether	<10.00	50.00	53.82	108	61-129		50-140
tert-Amyl alcohol	<20.00	50.00	54.78	110	27-139		8-158
Ethylbenzene	<1.000	50.00	53.38	107	79-122		72-130
m&p-Xylene	<2.000	100	106.7	107	78-119		72-125
o-Xylene	<1.000	50.00	53.52	107	79-123		72-131
Naphthalene	<1.000	50.00	56.08	112	46-154		28-172

Prep Batch #: 49968 **Date Prepared:** 04/14/2014 13:00 **Sample ID:** 49968-1-BKS **Matrix:** Water

Lab Batch ID: 113112 **Date Analyzed:** 04/14/2014 15:00 **Analyst:** 1011

Reporting Units: ug/L

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX, Naphthalene + Oxygenates Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags	Marginal Exceedance Limits
Methyl-t-Butyl Ether	<1.000	50.00	76.21	152	30-168		7-190

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

Final 1.000

SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

PHASE SEPARATION SCIENCE, INC.

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

(1)

*CLIENT: AECOM *OFFICE LOC: Columbia, MD

*PROJECT MGR: J. Canzeri *PHONE NO.: (240) 5650514

EMAIL: FAX NO.: ( )

*PROJECT NAME: 7-11 Store 32785 PROJECT NO: 60144916

SITE LOCATION: Hampstead, MD P.O. NO.: 45814 ACM

SAMPLER(S): M. Parsons DW CERT NO.:

PSS Work Order #: 14040905 PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used	Analysis/ Method Required (3) * BTEX + OXY 8260	Naphthalene	TPH-GRO 8015	REMARKS
1	A/S INF	4/8/14	0743	GW	6	G	HCl	✓	✓	✓	
2	A/S EFF	"	0740	"	6	"	HCl	✓	✓	✓	
3	GAC-1 EFF	"	0732	"	6	"	HCl	✓	✓	✓	

(5)

Relinquished By: (1)	Date	Time	Received By:
M. Parsons	4/8/14	19:00	
Relinquished By: (2)	Date	Time	Received By:
	4/8/14	9:12	
Relinquished By: (3)	Date	Time	Received By:
PR	4/9/14		
Relinquished By: (4)	Date	Time	Received By:

(4)

*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day ☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required: COA ☑ QC SUMM ☐ CLP LIKE ☐ OTHER

Special Instructions:

DW COMPLIANCE? YES ☐

EDD FORMAT TYPE: AECOM

STATE RESULTS REPORTED TO: MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER

# of Coolers: 3

Custody Seal: Abs

Ice Present: Abs Temp: 1, 1, 2 °C

Shipping Carrier: Client

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14040905	**Received By**	Robyn Rhudy
Client Name	AECOM	**Date Received**	04/09/2014 09:12:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	05/14/2014	**Logged In By**	Robyn Rhudy

Shipping Container(s)

No. of Coolers 3

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	1
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No
		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	2
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Mike Parsons
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 3

Total No. of Containers Received 18

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

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14040905	**Received By**	Robyn Rhudy
Client Name	AECOM	**Date Received**	04/09/2014 09:12:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	05/14/2014	**Logged In By**	Robyn Rhudy

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: Robyn Rhudy — Date: 04/09/2014

PM Review and Approval: Amy Friedlander — Date: 04/09/2014

Analytical Report for

AECOM

Certificate of Analysis No.: 14040904

Project Manager: John Canzeri
Project Name : 7-11 Store 32785
Project Location: Hampstead, MD
Project ID : 60144916

April 16, 2014

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

April 16, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14040904**
Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID.: 60144916

Dear John Canzeri :

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 **14040904**.

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 May 14, 2014. 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: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14040904

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 04/09/2014 at 09:12 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14040904-001	GAC-2 FINAL	GROUND WATER	04/08/14 07:26

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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
LDBA MWAA LD1997-0041-2015

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14040904
AECOM, Columbia, MD
April 16, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: GAC-2 FINAL **Date/Time Sampled: 04/08/2014 07:26** **PSS Sample ID: 14040904-001**
Matrix: GROUND WATER **Date/Time Received: 04/09/2014 09:12**

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	04/10/14	04/10/14 15:18	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	04/14/14	04/14/14 15:29	1011
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	04/14/14	04/14/14 15:29	1011
Benzene	ND	ug/L	1.0		1	04/14/14	04/14/14 15:29	1011
Toluene	ND	ug/L	1.0		1	04/14/14	04/14/14 15:29	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	04/14/14	04/14/14 15:29	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	04/14/14	04/14/14 15:29	1011
Diisopropyl ether	ND	ug/L	10		1	04/14/14	04/14/14 15:29	1011
tert-Amyl methyl ether	ND	ug/L	10		1	04/14/14	04/14/14 15:29	1011
tert-Amyl alcohol	ND	ug/L	20		1	04/14/14	04/14/14 15:29	1011
Ethylbenzene	ND	ug/L	1.0		1	04/14/14	04/14/14 15:29	1011
m&p-Xylene	ND	ug/L	2.0		1	04/14/14	04/14/14 15:29	1011
o-Xylene	ND	ug/L	1.0		1	04/14/14	04/14/14 15:29	1011
Naphthalene	ND	ug/L	1.0		1	04/14/14	04/14/14 15:29	1011

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14040904
Project ID: 60144916

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.

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): **14040904**
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8015C	GAC-2 FINAL	Initial	14040904-001	1035	W	49931	113056	04/08/2014	04/10/2014 10:39	04/10/2014 15:18
	49931-2-BKS	BKS	49931-2-BKS	1035	W	49931	113056	--------	04/10/2014 10:39	04/10/2014 12:46
	49931-2-BLK	BLK	49931-2-BLK	1035	W	49931	113056	--------	04/10/2014 10:39	04/10/2014 12:21
	GAC-2 FINAL S	MS	14040903-001 S	1035	W	49931	113056	04/07/2014	04/10/2014 10:39	04/10/2014 21:14
	GAC-2 FINAL SD	MSD	14040903-001 SD	1035	W	49931	113056	04/07/2014	04/10/2014 10:39	04/10/2014 21:40
SW-846 8260 B	GAC-2 FINAL	Initial	14040904-001	1011	W	49968	113112	04/08/2014	04/14/2014 13:00	04/14/2014 15:29
	49968-1-BKS	BKS	49968-1-BKS	1011	W	49968	113112	--------	04/14/2014 13:00	04/14/2014 11:09
	49968-1-BLK	BLK	49968-1-BLK	1011	W	49968	113112	--------	04/14/2014 13:00	04/14/2014 15:00
	GAC-2 FINAL S	MS	14040904-001 S	1011	W	49968	113112	04/08/2014	04/14/2014 13:00	04/14/2014 19:26
	GAC-2 FINAL SD	MSD	14040904-001 SD	1011	W	49968	113112	04/08/2014	04/14/2014 13:00	04/14/2014 19:55

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/16/2014

Work Order #: 14040904 **Project ID:** 60144916

Lab Batch #: 113056 **Sample:** 49931-2-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/10/2014 12:21

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	85.5	100	86	65-111	

Lab Batch #: 113056 **Sample:** 49931-2-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/10/2014 12:46

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	76.2	100	76	65-111	

Lab Batch #: 113056 **Sample:** 14040904-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/10/2014 15:18

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	79.0	100	79	65-111	

Lab Batch #: 113056 **Sample:** 14040903-001 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/10/2014 21:14

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	89.6	100	90	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/16/2014

Work Order #: 14040904 **Project ID:** 60144916

Lab Batch #: 113056 **Sample:** 14040903-001 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/10/2014 21:40

	SURROGATE RECOVERY STUDY				
Total Petroleum Hydrocarbons-GRO **Analytes**	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
a,a,a-Trifluorotoluene	91.9	100	92	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/16/2014

Work Order #: 14040904 **Project ID:** 60144916

Lab Batch #: 113112 **Sample:** 49968-1-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/14/2014 11:09

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.4	50.00	101	84-110	
Toluene-D8	49.5	50.00	99	94-109	
4-Bromofluorobenzene	48.0	50.00	96	81-133	

Lab Batch #: 113112 **Sample:** 49968-1-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/14/2014 15:00

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.0	50.00	100	84-110	
Toluene-D8	48.9	50.00	98	94-109	
4-Bromofluorobenzene	50.3	50.00	101	81-133	

Lab Batch #: 113112 **Sample:** 14040904-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/14/2014 15:29

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.0	50.00	100	84-110	
Toluene-D8	49.0	50.00	98	94-109	
4-Bromofluorobenzene	50.0	50.00	101	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/16/2014

Work Order #: 14040904 **Project ID:** 60144916

Lab Batch #: 113112 **Sample:** 14040904-001 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/14/2014 19:26

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.6	50.00	101	84-110	
Toluene-D8	49.6	50.00	99	94-109	
4-Bromofluorobenzene	47.4	50.00	95	81-133	

Lab Batch #: 113112 **Sample:** 14040904-001 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/14/2014 19:55

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.0	50.00	100	84-110	
Toluene-D8	48.9	50.00	98	94-109	
4-Bromofluorobenzene	50.3	50.00	101	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Blank Summary 14040904

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **SW-846 8015C** Prep Method: SW5030B

Matrix: **WATER**

Sample Id: **49931-2-BLK** Lab Sample Id: **49931-2-BLK**

Date Analyzed: Apr-10-14 12:21 Analyst: 1035 Seq Number: 113056 Date Prep: Apr-10-14 10:39 Tech: 1035

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
TPH-GRO (Gasoline Range Organics)	C6C10GRO	ND	100	40.00	ug/L	U	1

Blank Summary 14040904

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **SW-846 8260 B** Prep Method: SW5030B
Matrix: **WATER**

Sample Id: **49968-1-BLK** Lab Sample Id: **49968-1-BLK**

Date Analyzed: Apr-14-14 15:00 Analyst: 1011 Seq Number: 113112 Date Prep: Apr-14-14 13:00 Tech: 1011

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
tert-Butanol	75-65-0	ND	20.00	10.00	ug/L	U	1
Methyl-t-Butyl Ether	1634-04-4	ND	1.000	0.5000	ug/L	U	1
Benzene	71-43-2	ND	1.000	0.5000	ug/L	U	1
Toluene	108-88-3	ND	1.000	0.5000	ug/L	U	1
tert-Amyl ethyl ether	919-94-8	ND	10.00	5.000	ug/L	U	1
tert-Butyl ethyl ether	637-92-3	ND	10.00	5.000	ug/L	U	1
Diisopropyl ether	108-20-3	ND	10.00	5.000	ug/L	U	1
tert-Amyl methyl ether	994-05-8	ND	10.00	5.000	ug/L	U	1
tert-Amyl alcohol	75-85-4	ND	20.00	10.00	ug/L	U	1
Ethylbenzene	100-41-4	ND	1.000	0.5000	ug/L	U	1
m&p-Xylene	108-38-3	ND	2.000	1.000	ug/L	U	1
o-Xylene	95-47-6	ND	1.000	0.5000	ug/L	U	1
Naphthalene	91-20-3	ND	1.000	0.5000	ug/L	U	1

Blank Spike Recovery

Project Name: 7-11 Store 32785

Work Order #: 14040904 **Project ID:** 60144916

Prep Batch #: 49931 **Date Prepared:** 04/10/2014 10:39 **Sample ID:** 49931-2-BKS **Matrix:** Water

Lab Batch ID: 113056 **Date Analyzed:** 04/10/2014 12:21 **Analyst:** 1035

Reporting Units: ug/L

	BLANK /BLANK SPIKE RECOVERY STUDY					
Total Petroleum Hydrocarbons-GRO **Analytes**	**Blank Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Control Limits %R**	**Flags**
TPH-GRO (Gasoline Range Organics)	<100	5000	4999	100	61-138	

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

Blank Spike Recovery

Project Name: 7-11 Store 32785

Work Order #: 14040904 **Project ID:** 60144916

Prep Batch #: 49968 **Date Prepared:** 04/14/2014 13:00 **Sample ID:** 49968-1-BKS **Matrix:** Water

Lab Batch ID: 113112 **Date Analyzed:** 04/14/2014 15:00 **Analyst:** 1011

Reporting Units: ug/L

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX, Naphthalene + Oxygenates Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags	Marginal Exceedance Limits
tert-Butanol	<20.00	50.00	75.76	152	15-150	H	0-215
Methyl-t-Butyl Ether	<1.000	50.00	76.21	152	30-168		7-190
Benzene	<1.000	50.00	50.75	102	77-122		70-130
Toluene	<1.000	50.00	51.99	104	77-123		70-130
tert-Amyl ethyl ether	<10.00	50.00	59.59	119	60-121		50-132
tert-Butyl ethyl ether	<10.00	50.00	63.80	128	62-137		49-149
Diisopropyl ether	<10.00	50.00	61.41	123	48-146		32-162
tert-Amyl methyl ether	<10.00	50.00	60.01	120	61-129		50-140
tert-Amyl alcohol	<20.00	50.00	63.47	127	27-139		8-158
Ethylbenzene	<1.000	50.00	55.87	112	79-122		72-130
m&p-Xylene	<2.000	100	110.3	110	78-119		72-125
o-Xylene	<1.000	50.00	55.59	111	79-123		72-131
Naphthalene	<1.000	50.00	53.47	107	46-154		28-172

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD 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: AECOM *OFFICE LOC.: Columbia, MD

*PROJECT MGR: J. Canzeri *PHONE NO.: (240)565-6516

EMAIL: FAX NO.: ( )

*PROJECT NAME: 7-11 Store 32785 PROJECT NO: 60444116

SITE LOCATION: Hampstead, MD P.O. NO.: 45814ACM

SAMPLER(S): M. Parsons DW CERT NO.:

PSS Work Order #: 1404 0904 PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used												REMARKS
								HCl	HCl	HCl									
							Analysis/ Method Required (3) *	BTEX + OXY 8260	Naphthalene	TPH-GRO 8015									
	GAC-2 Final	4/8/14	0726	GW	6	G		✓	✓	✓									

(5)

Relinquished By: (1)	Date	Time	Received By:
M (Parsons)	4/8/14	19:00	
Relinquished By: (2)	Date	Time	Received By:
	4/8/14	9:12	Robyn Rhudy
Relinquished By: (3)	Date	Time	Received By:
PR	4/9/14		
Relinquished By: (4)	Date	Time	Received By:

(4)

*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day ☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA ☑ QC SUMM ☐ CLP LIKE ☐ OTHER ☐

# of Coolers: 3

Custody Seal: Abs

Ice Present: Yes Temp: 1.1, 1.2 °C

Shipping Carrier: Client

Special Instructions:

DW COMPLIANCE? YES ☐

EDD FORMAT TYPE: AECOM

STATE RESULTS REPORTED TO:
MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER ☐

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14040904	**Received By**	Robyn Rhudy
Client Name	AECOM	**Date Received**	04/09/2014 09:12:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	05/14/2014	**Logged In By**	Robyn Rhudy

Shipping Container(s)

No. of Coolers 3

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	1
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No
		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	2
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Mike Parsons
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 1

Total No. of Containers Received 6

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

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14040904	**Received By**	Robyn Rhudy
Client Name	AECOM	**Date Received**	04/09/2014 09:12:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	05/14/2014	**Logged In By**	Robyn Rhudy

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: Robyn Rhudy — Date: 04/09/2014

PM Review and Approval: Amy Friedlander — Date: 04/09/2014

Analytical Report for

AECOM

Certificate of Analysis No.: 14042203

Project Manager: John Canzeri
Project Name : 7-11 Store 32785
Project Location: Hampstead, MD
Project ID : 60144916

April 29, 2014

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

April 29, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14042203**
Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID.: 60144916

Dear John Canzeri :

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 **14042203**.

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 May 27, 2014. 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: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14042203

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 04/22/2014 at 08:05 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14042203-001	GAC-2 FINAL	GROUND WATER	04/21/14 16:40

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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
LDBA MWAA LD1997-0041-2015

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14042203
AECOM, Columbia, MD
April 29, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: GAC-2 FINAL **Date/Time Sampled: 04/21/2014 16:40** **PSS Sample ID: 14042203-001**
Matrix: GROUND WATER **Date/Time Received: 04/22/2014 08:05**

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	04/22/14	04/22/14 17:40	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	04/24/14	04/24/14 14:07	1011
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	04/24/14	04/24/14 14:07	1011
Benzene	ND	ug/L	1.0		1	04/24/14	04/24/14 14:07	1011
Toluene	ND	ug/L	1.0		1	04/24/14	04/24/14 14:07	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	04/24/14	04/24/14 14:07	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	04/24/14	04/24/14 14:07	1011
Diisopropyl ether	ND	ug/L	10		1	04/24/14	04/24/14 14:07	1011
tert-Amyl methyl ether	ND	ug/L	10		1	04/24/14	04/24/14 14:07	1011
tert-Amyl alcohol	ND	ug/L	20		1	04/24/14	04/24/14 14:07	1011
Ethylbenzene	ND	ug/L	1.0		1	04/24/14	04/24/14 14:07	1011
m&p-Xylene	ND	ug/L	2.0		1	04/24/14	04/24/14 14:07	1011
o-Xylene	ND	ug/L	1.0		1	04/24/14	04/24/14 14:07	1011
Naphthalene	ND	ug/L	1.0		1	04/24/14	04/24/14 14:07	1011

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14042203
Project ID: 60144916

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.

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): **14042203**
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8015C	GAC-2 FINAL	Initial	14042203-001	1035	W	50086	113294	04/21/2014	04/22/2014 09:35	04/22/2014 17:40
	50086-2-BKS	BKS	50086-2-BKS	1035	W	50086	113294	--------	04/22/2014 09:35	04/22/2014 11:26
	50086-2-BLK	BLK	50086-2-BLK	1035	W	50086	113294	--------	04/22/2014 09:35	04/22/2014 11:00
	GAC-2 FINAL S	MS	14042203-001 S	1035	W	50086	113294	04/21/2014	04/22/2014 09:35	04/22/2014 19:47
	GAC-2 FINAL SD	MSD	14042203-001 SD	1035	W	50086	113294	04/21/2014	04/22/2014 09:35	04/22/2014 20:12
SW-846 8260 B	GAC-2 FINAL	Initial	14042203-001	1011	W	50126	113359	04/21/2014	04/24/2014 13:00	04/24/2014 14:07
	50126-1-BKS	BKS	50126-1-BKS	1011	W	50126	113359	--------	04/24/2014 13:00	04/24/2014 10:33
	50126-1-BLK	BLK	50126-1-BLK	1011	W	50126	113359	--------	04/24/2014 13:00	04/24/2014 13:30
	GAC-2 FINAL S	MS	14042203-001 S	1011	W	50126	113359	04/21/2014	04/24/2014 13:00	04/24/2014 19:32
	GAC-2 FINAL SD	MSD	14042203-001 SD	1011	W	50126	113359	04/21/2014	04/24/2014 13:00	04/24/2014 20:01

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/29/2014

Work Order #: 14042203 **Project ID:** 60144916

Lab Batch #: 113294 **Sample:** 50086-2-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/22/2014 11:00

Total Petroleum Hydrocarbons-GRO Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	82.4	100	82	65-111	

Lab Batch #: 113294 **Sample:** 50086-2-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/22/2014 11:26

Total Petroleum Hydrocarbons-GRO Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	105	100	105	65-111	

Lab Batch #: 113294 **Sample:** 14042203-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/22/2014 17:40

Total Petroleum Hydrocarbons-GRO Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	84.0	100	84	65-111	

Lab Batch #: 113294 **Sample:** 14042203-001 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/22/2014 19:47

Total Petroleum Hydrocarbons-GRO Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	88.7	100	89	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/29/2014

Work Order #: 14042203 **Project ID:** 60144916

Lab Batch #: 113294 **Sample:** 14042203-001 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/22/2014 20:12

	SURROGATE RECOVERY STUDY				
Total Petroleum Hydrocarbons-GRO **Analytes**	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
a,a,a-Trifluorotoluene	87.6	100	88	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/29/2014

Work Order #: 14042203 **Project ID:** 60144916

Lab Batch #: 113359 **Sample:** 50126-1-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/24/2014 10:33

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	48.3	50.00	97	84-110	
Toluene-D8	49.9	50.00	100	94-109	
4-Bromofluorobenzene	47.2	50.00	94	81-133	

Lab Batch #: 113359 **Sample:** 50126-1-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 04/24/2014 13:30

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	48.6	50.00	97	84-110	
Toluene-D8	48.6	50.00	97	94-109	
4-Bromofluorobenzene	54.1	50.00	108	81-133	

Lab Batch #: 113359 **Sample:** 14042203-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/24/2014 14:07

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	49.0	50.00	97	84-110	
Toluene-D8	49.0	50.00	97	94-109	
4-Bromofluorobenzene	50.0	50.00	99	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

04/29/2014

Work Order #: 14042203 **Project ID:** 60144916

Lab Batch #: 113359 **Sample:** 14042203-001 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/24/2014 19:32

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	48.8	50.00	98	84-110	
Toluene-D8	49.4	50.00	99	94-109	
4-Bromofluorobenzene	46.4	50.00	93	81-133	

Lab Batch #: 113359 **Sample:** 14042203-001 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 04/24/2014 20:01

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	48.7	50.00	97	84-110	
Toluene-D8	49.5	50.00	99	94-109	
4-Bromofluorobenzene	50.1	50.00	100	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Blank Summary 14042203

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **SW-846 8015C** Prep Method: SW5030B

Matrix: **WATER**

Sample Id: **50086-2-BLK** Lab Sample Id: **50086-2-BLK**

Date Analyzed: Apr-22-14 11:00 Analyst: 1035 Seq Number: 113294 Date Prep: Apr-22-14 09:35 Tech: 1035

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
TPH-GRO (Gasoline Range Organics)	C6C10GRO	ND	100	40.00	ug/L	U	1

Blank Summary 14042203

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **SW-846 8260 B** Prep Method: SW5030B
Matrix: **WATER**

Sample Id: **50126-1-BLK** Lab Sample Id: **50126-1-BLK**

Date Analyzed: Apr-24-14 13:30 Analyst: 1011 Seq Number: 113359 Date Prep: Apr-24-14 13:00 Tech: 1011

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
tert-Butanol	75-65-0	ND	20.00	10.00	ug/L	U	1
Methyl-t-Butyl Ether	1634-04-4	ND	1.000	0.5000	ug/L	U	1
Benzene	71-43-2	ND	1.000	0.5000	ug/L	U	1
Toluene	108-88-3	ND	1.000	0.5000	ug/L	U	1
tert-Amyl ethyl ether	919-94-8	ND	10.00	5.000	ug/L	U	1
tert-Butyl ethyl ether	637-92-3	ND	10.00	5.000	ug/L	U	1
Diisopropyl ether	108-20-3	ND	10.00	5.000	ug/L	U	1
tert-Amyl methyl ether	994-05-8	ND	10.00	5.000	ug/L	U	1
tert-Amyl alcohol	75-85-4	ND	20.00	10.00	ug/L	U	1
Ethylbenzene	100-41-4	ND	1.000	0.5000	ug/L	U	1
m&p-Xylene	108-38-3	ND	2.000	1.000	ug/L	U	1
o-Xylene	95-47-6	ND	1.000	0.5000	ug/L	U	1
Naphthalene	91-20-3	ND	1.000	0.5000	ug/L	U	1

Blank Spike Recovery

Project Name: 7-11 Store 32785

Work Order #: 14042203 **Project ID:** 60144916

Prep Batch #: 50086 **Date Prepared:** 04/22/2014 09:35 **Sample ID:** 50086-2-BKS **Matrix:** Water

Lab Batch ID: 113294 **Date Analyzed:** 04/22/2014 11:00 **Analyst:** 1035

Reporting Units: ug/L

BLANK /BLANK SPIKE RECOVERY STUDY

Total Petroleum Hydrocarbons-GRO Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
TPH-GRO (Gasoline Range Organics)	<100	5000	3635	73	61-138	

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

Blank Spike Recovery

Project Name: 7-11 Store 32785

Work Order #: 14042203 **Project ID:** 60144916

Prep Batch #: 50126 **Date Prepared:** 04/24/2014 13:00 **Sample ID:** 50126-1-BKS **Matrix:** Water

Lab Batch ID: 113359 **Date Analyzed:** 04/24/2014 13:30 **Analyst:** 1011

Reporting Units: ug/L

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX, Naphthalene + Oxygenates Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags	Marginal Exceedance Limits
tert-Butanol	<20.00	50.00	26.38	53	15-150		0-215
Methyl-t-Butyl Ether	<1.000	50.00	51.17	102	30-168		7-190
Benzene	<1.000	50.00	53.25	107	77-122		70-130
Toluene	<1.000	50.00	55.65	111	77-123		70-130
tert-Amyl ethyl ether	<10.00	50.00	36.97	74	60-121		50-132
tert-Butyl ethyl ether	<10.00	50.00	46.02	92	62-137		49-149
Diisopropyl ether	<10.00	50.00	48.80	98	48-146		32-162
tert-Amyl methyl ether	<10.00	50.00	42.73	85	61-129		50-140
tert-Amyl alcohol	<20.00	50.00	27.25	55	27-139		8-158
Ethylbenzene	<1.000	50.00	58.33	117	79-122		72-130
m&p-Xylene	<2.000	100	114.7	115	78-119		72-125
o-Xylene	<1.000	50.00	58.31	117	79-123		72-131
Naphthalene	<1.000	50.00	61.12	122	46-154		28-172

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD 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: AECOM *OFFICE LOC. Columbia, MD
*PROJECT MGR: J Canzeri *PHONE NO.: (240) 565 6516
EMAIL: FAX NO.: ( )
*PROJECT NAME: 7-11 Store 32785 PROJECT NO. 60144116
SITE LOCATION: Hampstead, MD P.O. NO.: 45814 ACM
SAMPLER(S): M. Parsons DW CERT NO.:

PSS Work Order #: 1404203 PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used												REMARKS
								HCl	HCl	HCl									
							Analysis/ Method Required (3) *	BTEX + DAY 8260	Naphthalene	TPH-GRO 8015									
	GAC-2 FINAL	4/21/14	1640	GW	6	G		✓	✓	✓									

(5)

Relinquished By: (1)	Date	Time	Received By:
MCP (Parsons)	4/22/14	0805	[signature]
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA ☑ QC SUMM ☐ CLP LIKE ☐ OTHER ____

# of Coolers: 1
Custody Seal: N/A
Ice Present: Yes Temp: 10C
Shipping Carrier: Client

Special Instructions:

DW COMPLIANCE? YES ☐
EDD FORMAT TYPE: AECOM
STATE RESULTS REPORTED TO: ☑ MD ☐ DE ☐ PA ☐ VA ☐ WV OTHER ____

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14042203	**Received By**	Amy Friedlander
Client Name	AECOM	**Date Received**	04/22/2014 08:05:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	05/27/2014	**Logged In By**	Robyn Rhudy

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	1
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Mike Parsons
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 1

Total No. of Containers Received 6

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: Robyn Rhudy — Date: 04/22/2014

PM Review and Approval: Amy Friedlander — Date: 04/22/2014

Analytical Report for

AECOM

Certificate of Analysis No.: 14050905

Project Manager: John Canzeri

Project Name : 7-11 Store 32785

Project Location: Hampstead, MD

Project ID : 60144916

May 19, 2014

Phase Separation Science, Inc.

6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

May 19, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14050905**
Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID.: 60144916

Dear John Canzeri :

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 **14050905**.

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 June 13, 2014. 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: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14050905

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 05/09/2014 at 11:11 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14050905-001	A/S INF	GROUND WATER	05/07/14 10:25
14050905-002	A/S EFF	GROUND WATER	05/07/14 10:21
14050905-003	GAC-1 EFF	GROUND WATER	05/07/14 10:17

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050905
AECOM, Columbia, MD
May 19, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: A/S INF **Date/Time Sampled: 05/07/2014 10:25** **PSS Sample ID: 14050905-001**
Matrix: GROUND WATER **Date/Time Received: 05/09/2014 11:11**

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)	**260**	ug/L	100		1	05/09/14	05/09/14 14:55	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	**25**	ug/L	20		1	05/16/14	05/16/14 18:27	1011
Methyl-t-Butyl Ether	**180**	ug/L	5.0		5	05/16/14	05/16/14 19:50	1011
Benzene	ND	ug/L	1.0		1	05/16/14	05/16/14 18:27	1011
Toluene	ND	ug/L	1.0		1	05/16/14	05/16/14 18:27	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	05/16/14	05/16/14 18:27	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	05/16/14	05/16/14 18:27	1011
Diisopropyl ether	ND	ug/L	10		1	05/16/14	05/16/14 18:27	1011
tert-Amyl methyl ether	ND	ug/L	10		1	05/16/14	05/16/14 18:27	1011
tert-Amyl alcohol	ND	ug/L	20		1	05/16/14	05/16/14 18:27	1011
Ethylbenzene	ND	ug/L	1.0		1	05/16/14	05/16/14 18:27	1011
m&p-Xylene	ND	ug/L	2.0		1	05/16/14	05/16/14 18:27	1011
o-Xylene	ND	ug/L	1.0		1	05/16/14	05/16/14 18:27	1011
Naphthalene	ND	ug/L	1.0		1	05/16/14	05/16/14 18:27	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050905
AECOM, Columbia, MD
May 19, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: A/S EFF **Date/Time Sampled: 05/07/2014 10:21** **PSS Sample ID: 14050905-002**
Matrix: GROUND WATER **Date/Time Received: 05/09/2014 11:11**

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	05/09/14	05/09/14 12:52	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	05/16/14	05/16/14 17:31	1011
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	05/16/14	05/16/14 17:31	1011
Benzene	ND	ug/L	1.0		1	05/16/14	05/16/14 17:31	1011
Toluene	ND	ug/L	1.0		1	05/16/14	05/16/14 17:31	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	05/16/14	05/16/14 17:31	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	05/16/14	05/16/14 17:31	1011
Diisopropyl ether	ND	ug/L	10		1	05/16/14	05/16/14 17:31	1011
tert-Amyl methyl ether	ND	ug/L	10		1	05/16/14	05/16/14 17:31	1011
tert-Amyl alcohol	ND	ug/L	20		1	05/16/14	05/16/14 17:31	1011
Ethylbenzene	ND	ug/L	1.0		1	05/16/14	05/16/14 17:31	1011
m&p-Xylene	ND	ug/L	2.0		1	05/16/14	05/16/14 17:31	1011
o-Xylene	ND	ug/L	1.0		1	05/16/14	05/16/14 17:31	1011
Naphthalene	ND	ug/L	1.0		1	05/16/14	05/16/14 17:31	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050905
AECOM, Columbia, MD
May 19, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: GAC-1 EFF **Date/Time Sampled: 05/07/2014 10:17** **PSS Sample ID: 14050905-003**
Matrix: GROUND WATER **Date/Time Received: 05/09/2014 11:11**

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	05/09/14	05/09/14 14:30	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	05/16/14	05/16/14 17:59	1011
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	05/16/14	05/16/14 17:59	1011
Benzene	ND	ug/L	1.0		1	05/16/14	05/16/14 17:59	1011
Toluene	ND	ug/L	1.0		1	05/16/14	05/16/14 17:59	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	05/16/14	05/16/14 17:59	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	05/16/14	05/16/14 17:59	1011
Diisopropyl ether	ND	ug/L	10		1	05/16/14	05/16/14 17:59	1011
tert-Amyl methyl ether	ND	ug/L	10		1	05/16/14	05/16/14 17:59	1011
tert-Amyl alcohol	ND	ug/L	20		1	05/16/14	05/16/14 17:59	1011
Ethylbenzene	ND	ug/L	1.0		1	05/16/14	05/16/14 17:59	1011
m&p-Xylene	ND	ug/L	2.0		1	05/16/14	05/16/14 17:59	1011
o-Xylene	ND	ug/L	1.0		1	05/16/14	05/16/14 17:59	1011
Naphthalene	ND	ug/L	1.0		1	05/16/14	05/16/14 17:59	1011

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14050905
Project ID: 60144916

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.

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): **14050905**
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8015C	A/S INF	Initial	14050905-001	1035	W	50333	113730	05/07/2014	05/09/2014 08:39	05/09/2014 14:55
	A/S EFF	Initial	14050905-002	1035	W	50333	113730	05/07/2014	05/09/2014 08:39	05/09/2014 12:52
	GAC-1 EFF	Initial	14050905-003	1035	W	50333	113730	05/07/2014	05/09/2014 08:39	05/09/2014 14:30
	50333-2-BKS	BKS	50333-2-BKS	1035	W	50333	113730	--------	05/09/2014 08:39	05/09/2014 11:21
	50333-2-BLK	BLK	50333-2-BLK	1035	W	50333	113730	--------	05/09/2014 08:39	05/09/2014 10:04
	GAC-2 FINAL S	MS	14050906-001 S	1035	W	50333	113730	05/07/2014	05/09/2014 08:39	05/09/2014 15:21
	GAC-2 FINAL SD	MSD	14050906-001 SD	1035	W	50333	113730	05/07/2014	05/09/2014 08:39	05/09/2014 15:46
SW-846 8260 B	A/S INF	Initial	14050905-001	1011	W	50427	113890	05/07/2014	05/16/2014 15:18	05/16/2014 18:27
	A/S EFF	Initial	14050905-002	1011	W	50427	113890	05/07/2014	05/16/2014 15:18	05/16/2014 17:31
	GAC-1 EFF	Initial	14050905-003	1011	W	50427	113890	05/07/2014	05/16/2014 15:18	05/16/2014 17:59
	50427-1-BKS	BKS	50427-1-BKS	1011	W	50427	113890	--------	05/16/2014 15:18	05/16/2014 10:30
	50427-1-BLK	BLK	50427-1-BLK	1011	W	50427	113890	--------	05/16/2014 15:18	05/16/2014 11:26
	GAC-2 FINAL S	MS	14050906-001 S	1011	W	50427	113890	05/07/2014	05/16/2014 15:18	05/16/2014 15:40
	GAC-2 FINAL SD	MSD	14050906-001 SD	1011	W	50427	113890	05/07/2014	05/16/2014 15:18	05/16/2014 16:08
	A/S INF	Reanalysis	14050905-001	1011	W	50427	113890	05/07/2014	05/16/2014 15:18	05/16/2014 19:50

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/19/2014

Work Order #: 14050905 **Project ID:** 60144916

Lab Batch #: 113730 **Sample:** 50333-2-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/09/2014 10:04

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	85.7	100	86	65-111	

Lab Batch #: 113730 **Sample:** 50333-2-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/09/2014 11:21

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	87.6	100	88	65-111	

Lab Batch #: 113730 **Sample:** 14050905-002 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/09/2014 12:52

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	85.0	100	85	65-111	

Lab Batch #: 113730 **Sample:** 14050905-003 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/09/2014 14:30

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	83.0	100	83	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/19/2014

Work Order #: 14050905 **Project ID:** 60144916

Lab Batch #: 113730 **Sample:** 14050905-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/09/2014 14:55

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
a,a,a-Trifluorotoluene	84.0	100	84	65-111	

Lab Batch #: 113730 **Sample:** 14050906-001 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/09/2014 15:21

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
a,a,a-Trifluorotoluene	91.9	100	92	65-111	

Lab Batch #: 113730 **Sample:** 14050906-001 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/09/2014 15:46

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
a,a,a-Trifluorotoluene	106	100	106	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/19/2014

Work Order #: 14050905 **Project ID:** 60144916

Lab Batch #: 113890 **Sample:** 50427-1-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/16/2014 10:30

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	53.9	50.00	108	84-110	
Toluene-D8	53.4	50.00	107	94-109	
4-Bromofluorobenzene	53.2	50.00	106	81-133	

Lab Batch #: 113890 **Sample:** 50427-1-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/16/2014 11:26

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.8	50.00	104	84-110	
Toluene-D8	52.1	50.00	104	94-109	
4-Bromofluorobenzene	57.3	50.00	115	81-133	

Lab Batch #: 113890 **Sample:** 14050906-001 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/16/2014 15:40

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	53.6	50.00	107	84-110	
Toluene-D8	52.8	50.00	106	94-109	
4-Bromofluorobenzene	55.0	50.00	110	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/19/2014

Work Order #: 14050905 **Project ID:** 60144916

Lab Batch #: 113890 **Sample:** 14050906-001 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/16/2014 16:08

SURROGATE RECOVERY STUDY

BTEX, Naphthalene + Oxygenates Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	53.3	50.00	107	84-110	
Toluene-D8	53.0	50.00	106	94-109	
4-Bromofluorobenzene	55.5	50.00	111	81-133	

Lab Batch #: 113890 **Sample:** 14050905-002 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/16/2014 17:31

SURROGATE RECOVERY STUDY

BTEX, Naphthalene + Oxygenates Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.0	50.00	103	84-110	
Toluene-D8	52.0	50.00	104	94-109	
4-Bromofluorobenzene	57.0	50.00	114	81-133	

Lab Batch #: 113890 **Sample:** 14050905-003 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/16/2014 17:59

SURROGATE RECOVERY STUDY

BTEX, Naphthalene + Oxygenates Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	52.0	50.00	104	84-110	
Toluene-D8	53.0	50.00	105	94-109	
4-Bromofluorobenzene	58.0	50.00	116	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/19/2014

Work Order #: 14050905 **Project ID:** 60144916

Lab Batch #: 113890 **Sample:** 14050905-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/16/2014 18:27

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
Dibromofluoromethane	51.0	50.00	102	84-110	
Toluene-D8	51.0	50.00	102	94-109	
4-Bromofluorobenzene	58.0	50.00	115	81-133	

Lab Batch #: 113890 **Sample:** 14050905-001 / DL **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/16/2014 19:50

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
Dibromofluoromethane	52.0	50.00	104	84-110	
Toluene-D8	53.0	50.00	106	94-109	
4-Bromofluorobenzene	56.0	50.00	113	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Blank Summary 14050905

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **SW-846 8015C** Prep Method: SW5030B

Matrix: **WATER**

Sample Id: **50333-2-BLK** Lab Sample Id: **50333-2-BLK**

Date Analyzed: May-09-14 10:04 Analyst: 1035 Seq Number: 113730 Date Prep: May-09-14 08:39 Tech: 1035

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
TPH-GRO (Gasoline Range Organics)	C6C10GRO	ND	100	40.00	ug/L	U	1

Blank Summary 14050905

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **SW-846 8260 B** Prep Method: SW5030B
Matrix: **WATER**

Sample Id: **50427-1-BLK** Lab Sample Id: **50427-1-BLK**

Date Analyzed: May-16-14 11:26 Analyst: 1011 Seq Number: 113890 Date Prep: May-16-14 15:18 Tech: 1011

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
tert-Butanol	75-65-0	ND	20.00	10.00	ug/L	U	1
Methyl-t-Butyl Ether	1634-04-4	ND	1.000	0.5000	ug/L	U	1
Benzene	71-43-2	ND	1.000	0.5000	ug/L	U	1
Toluene	108-88-3	ND	1.000	0.5000	ug/L	U	1
tert-Amyl ethyl ether	919-94-8	ND	10.00	5.000	ug/L	U	1
tert-Butyl ethyl ether	637-92-3	ND	10.00	5.000	ug/L	U	1
Diisopropyl ether	108-20-3	ND	10.00	5.000	ug/L	U	1
tert-Amyl methyl ether	994-05-8	ND	10.00	5.000	ug/L	U	1
tert-Amyl alcohol	75-85-4	ND	20.00	10.00	ug/L	U	1
Ethylbenzene	100-41-4	ND	1.000	0.5000	ug/L	U	1
m&p-Xylene	108-38-3	ND	2.000	1.000	ug/L	U	1
o-Xylene	95-47-6	ND	1.000	0.5000	ug/L	U	1
Naphthalene	91-20-3	ND	1.000	0.5000	ug/L	U	1

Blank Spike Recovery

Project Name: 7-11 Store 32785

Work Order #: 14050905 **Project ID:** 60144916

Prep Batch #: 50333 **Date Prepared:** 05/09/2014 08:39 **Sample ID:** 50333-2-BKS **Matrix:** Water

Lab Batch ID: 113730 **Date Analyzed:** 05/09/2014 10:04 **Analyst:** 1035

Reporting Units: ug/L

BLANK /BLANK SPIKE RECOVERY STUDY

Total Petroleum Hydrocarbons-GRO Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
TPH-GRO (Gasoline Range Organics)	<100	5000	5134	103	61-138	

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

Blank Spike Recovery

Project Name: 7-11 Store 32785

Work Order #: 14050905 **Project ID:** 60144916

Prep Batch #: 50427 **Date Prepared:** 05/16/2014 15:18 **Sample ID:** 50427-1-BKS **Matrix:** Water

Lab Batch ID: 113890 **Date Analyzed:** 05/16/2014 11:26 **Analyst:** 1011

Reporting Units: ug/L

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX, Naphthalene + Oxygenates Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags	Marginal Exceedance Limits
tert-Butanol	<20.00	50.00	38.37	77	15-150		0-215
Methyl-t-Butyl Ether	<1.000	50.00	40.81	82	30-168		7-190
Benzene	<1.000	50.00	55.51	111	77-122		70-130
Toluene	<1.000	50.00	58.34	117	77-123		70-130
tert-Amyl ethyl ether	<10.00	50.00	45.43	91	60-121		50-132
tert-Butyl ethyl ether	<10.00	50.00	48.80	98	62-137		49-149
Diisopropyl ether	<10.00	50.00	43.01	86	48-146		32-162
tert-Amyl methyl ether	<10.00	50.00	48.33	97	61-129		50-140
tert-Amyl alcohol	<20.00	50.00	44.01	88	27-139		8-158
Ethylbenzene	<1.000	50.00	57.93	116	79-122		72-130
m&p-Xylene	<2.000	100	117.9	118	78-119		72-125
o-Xylene	<1.000	50.00	57.70	115	79-123		72-131
Naphthalene	<1.000	50.00	56.28	113	46-154		28-172

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD 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: AECOM *OFFICE LOC. Columbia, MD

*PROJECT MGR: J. Canzeri *PHONE NO.: (240) 565-6576

EMAIL: FAX NO.: ( )

*PROJECT NAME: 7-11 Store 32785 PROJECT NO. 60144916

SITE LOCATION: Hampstead, MD P.O. NO.: 45814 ACM

SAMPLER(S): M. Parsons DW CERT NO.:

PSS Work Order #: 1405090S PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used	Analysis/ Method Required (3) * BTEX + oxy 8260	Naphthalene	TPH-GRO 8015	REMARKS
1	A/S INF	5/7/14	1025	GW	6	G	HCl	✓	✓	✓	
2	A/S EFF	"	1021	"	6	"	"	✓	✓	✓	
3	GAC-1 EFF	"	1017	"	6	"	"	✓	✓	✓	

(5)

Relinquished By: (1)	Date	Time	Received By:
M. Parsons	5/9/14	11:11	Robyn Hundy
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA ☑ QC SUMM ☐ CLP LIKE ☐ OTHER ☐

# of Coolers:

Custody Seal: Abs

Ice Present: no, Temp: 3°C

Shipping Carrier: Client

Special Instructions:

DW COMPLIANCE? YES ☐

EDD FORMAT TYPE: AECOM

STATE RESULTS REPORTED TO:
MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER ☐

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14050905	**Received By**	Robyn Rhudy
Client Name	AECOM	**Date Received**	05/09/2014 11:11:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	06/13/2014	**Logged In By**	Robyn Rhudy

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

		Sampler Name	Mike Parsons
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 3

Total No. of Containers Received 18

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: Robyn Rhudy — Date: 05/09/2014

PM Review and Approval: Amy Friedlander — Date: 05/09/2014

Analytical Report for

AECOM

Certificate of Analysis No.: 14052202

Project Manager: John Canzeri
Project Name : 7-11 Hampstead #32785
Project Location: Hampstead, MD
Project ID : 60144916

May 30, 2014

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

May 30, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14052202**
Project Name: 7-11 Hampstead #32785
Project Location: Hampstead, MD
Project ID.: 60144916

Dear John Canzeri :

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 **14052202**.

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 June 26, 2014. 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: AECOM

Project Name: 7-11 Hampstead #32785

Work Order Number(s): 14052202

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 05/22/2014 at 09:39 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14052202-001	GAC-2 Final	GROUND WATER	05/20/14 16:00

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14052202
AECOM, Columbia, MD
May 30, 2014

Project Name: 7-11 Hampstead #32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: GAC-2 Final **Date/Time Sampled: 05/20/2014 16:00** **PSS Sample ID: 14052202-001**
Matrix: GROUND WATER **Date/Time Received: 05/22/2014 09:39**

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	05/23/14	05/23/14 13:49	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	05/24/14	05/24/14 13:50	1011
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	05/24/14	05/24/14 13:50	1011
Benzene	ND	ug/L	1.0		1	05/24/14	05/24/14 13:50	1011
Toluene	ND	ug/L	1.0		1	05/24/14	05/24/14 13:50	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	05/24/14	05/24/14 13:50	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	05/24/14	05/24/14 13:50	1011
Diisopropyl ether	ND	ug/L	10		1	05/24/14	05/24/14 13:50	1011
tert-Amyl methyl ether	ND	ug/L	10		1	05/24/14	05/24/14 13:50	1011
tert-Amyl alcohol	ND	ug/L	20		1	05/24/14	05/24/14 13:50	1011
Ethylbenzene	ND	ug/L	1.0		1	05/24/14	05/24/14 13:50	1011
m&p-Xylene	ND	ug/L	2.0		1	05/24/14	05/24/14 13:50	1011
o-Xylene	ND	ug/L	1.0		1	05/24/14	05/24/14 13:50	1011
Naphthalene	ND	ug/L	1.0		1	05/24/14	05/24/14 13:50	1011

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Hampstead #32785

Work Order Number(s): 14052202
Project ID: 60144916

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.

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): 14052202
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8015C	GAC-2 Final	Initial	14052202-001	1035	W	50529	114118	05/20/2014	05/23/2014 10:50	05/23/2014 13:49
	50529-2-BKS	BKS	50529-2-BKS	1035	W	50529	114118	--------	05/23/2014 10:50	05/23/2014 12:59
	50529-2-BLK	BLK	50529-2-BLK	1035	W	50529	114118	--------	05/23/2014 10:50	05/23/2014 12:34
	SB1-GW-052014 S	MS	14052221-001 S	1035	W	50529	114118	05/20/2014	05/23/2014 10:50	05/24/2014 10:49
	SB1-GW-052014 SD	MSD	14052221-001 SD	1035	W	50529	114118	05/20/2014	05/23/2014 10:50	05/24/2014 11:14
SW-846 8260 B	GAC-2 Final	Initial	14052202-001	1011	W	50556	114153	05/20/2014	05/24/2014 10:00	05/24/2014 13:50
	50556-1-BKS	BKS	50556-1-BKS	1011	W	50556	114153	--------	05/24/2014 10:00	05/24/2014 10:56
	50556-1-BLK	BLK	50556-1-BLK	1011	W	50556	114153	--------	05/24/2014 10:00	05/24/2014 12:05
	MW5 S	MS	14052201-005 S	1011	W	50556	114153	05/21/2014	05/24/2014 10:00	05/24/2014 19:04
	MW5 SD	MSD	14052201-005 SD	1011	W	50556	114153	05/21/2014	05/24/2014 10:00	05/24/2014 19:38

Form 2 - Surrogate Recoveries

Project Name: 7-11 Hampstead #32785

05/30/2014

Work Order #: 14052202 **Project ID:** 60144916

Lab Batch #: 114118 **Sample:** 50529-2-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/23/2014 12:34

Total Petroleum Hydrocarbons-GRO Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	84.3	100	84	65-111	

Lab Batch #: 114118 **Sample:** 50529-2-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/23/2014 12:59

Total Petroleum Hydrocarbons-GRO Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	93.5	100	94	65-111	

Lab Batch #: 114118 **Sample:** 14052202-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/23/2014 13:49

Total Petroleum Hydrocarbons-GRO Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	85.0	100	85	65-111	

Lab Batch #: 114118 **Sample:** 14052221-001 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/24/2014 10:49

Total Petroleum Hydrocarbons-GRO Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	82.3	100	82	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Hampstead #32785

05/30/2014

Work Order #: 14052202 **Project ID:** 60144916

Lab Batch #: 114118 **Sample:** 14052221-001 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/24/2014 11:14

	SURROGATE RECOVERY STUDY				
Total Petroleum Hydrocarbons-GRO **Analytes**	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
a,a,a-Trifluorotoluene	71.4	100	71	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Hampstead #32785

05/30/2014

Work Order #: 14052202 **Project ID:** 60144916

Lab Batch #: 114153 **Sample:** 50556-1-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/24/2014 10:56

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	50.4	50.00	101	84-110	
Toluene-D8	50.1	50.00	100	94-109	
4-Bromofluorobenzene	48.6	50.00	97	81-133	

Lab Batch #: 114153 **Sample:** 50556-1-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/24/2014 12:05

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.2	50.00	102	84-110	
Toluene-D8	50.0	50.00	100	94-109	
4-Bromofluorobenzene	51.9	50.00	104	81-133	

Lab Batch #: 114153 **Sample:** 14052202-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/24/2014 13:50

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	53.0	50.00	105	84-110	
Toluene-D8	50.0	50.00	101	94-109	
4-Bromofluorobenzene	53.0	50.00	105	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Hampstead #32785

05/30/2014

Work Order #: 14052202 **Project ID:** 60144916

Lab Batch #: 114153 **Sample:** 14052201-005 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/24/2014 19:04

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.1	50.00	102	84-110	
Toluene-D8	50.3	50.00	101	94-109	
4-Bromofluorobenzene	49.4	50.00	99	81-133	

Lab Batch #: 114153 **Sample:** 14052201-005 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/24/2014 19:38

BTEX, Naphthalene + Oxygenates Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
Dibromofluoromethane	51.5	50.00	103	84-110	
Toluene-D8	50.1	50.00	100	94-109	
4-Bromofluorobenzene	49.7	50.00	99	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Blank Summary 14052202

AECOM, Columbia, MD

7-11 Hampstead #32785

Analytical Method: **SW-846 8015C** Prep Method: SW5030B
Matrix: **WATER**

Sample Id: **50529-2-BLK** Lab Sample Id: **50529-2-BLK**

Date Analyzed: May-23-14 12:34 Analyst: 1035 Seq Number: 114118 Date Prep: May-23-14 10:50 Tech: 1035

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
TPH-GRO (Gasoline Range Organics)	C6C10GRO	ND	100	40.00	ug/L	U	1

Blank Summary 14052202

AECOM, Columbia, MD

7-11 Hampstead #32785

Analytical Method: **SW-846 8260 B** Prep Method: SW5030B
Matrix: **WATER**

Sample Id: **50556-1-BLK** Lab Sample Id: **50556-1-BLK**

Date Analyzed: May-24-14 12:05 Analyst: 1011 Seq Number: 114153 Date Prep: May-24-14 10:00 Tech: 1011

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
tert-Butanol	75-65-0	ND	20.00	10.00	ug/L	U	1
Methyl-t-Butyl Ether	1634-04-4	ND	1.000	0.5000	ug/L	U	1
Benzene	71-43-2	ND	1.000	0.5000	ug/L	U	1
Toluene	108-88-3	ND	1.000	0.5000	ug/L	U	1
tert-Amyl ethyl ether	919-94-8	ND	10.00	5.000	ug/L	U	1
tert-Butyl ethyl ether	637-92-3	ND	10.00	5.000	ug/L	U	1
Diisopropyl ether	108-20-3	ND	10.00	5.000	ug/L	U	1
tert-Amyl methyl ether	994-05-8	ND	10.00	5.000	ug/L	U	1
tert-Amyl alcohol	75-85-4	ND	20.00	10.00	ug/L	U	1
Ethylbenzene	100-41-4	ND	1.000	0.5000	ug/L	U	1
m&p-Xylene	108-38-3	ND	2.000	1.000	ug/L	U	1
o-Xylene	95-47-6	ND	1.000	0.5000	ug/L	U	1
Naphthalene	91-20-3	ND	1.000	0.5000	ug/L	U	1

Blank Spike Recovery

Project Name: 7-11 Hampstead #32785

Work Order #: 14052202 **Project ID:** 60144916

Prep Batch #: 50529 **Date Prepared:** 05/23/2014 10:50 **Sample ID:** 50529-2-BKS **Matrix:** Water

Lab Batch ID: 114118 **Date Analyzed:** 05/23/2014 12:34 **Analyst:** 1035

Reporting Units: ug/L

BLANK /BLANK SPIKE RECOVERY STUDY

Total Petroleum Hydrocarbons-GRO Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
TPH-GRO (Gasoline Range Organics)	<100	5000	5620	112	61-138	

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

Blank Spike Recovery

Project Name: 7-11 Hampstead #32785

Work Order #: 14052202 **Project ID:** 60144916

Prep Batch #: 50556 **Date Prepared:** 05/24/2014 10:00 **Sample ID:** 50556-1-BKS **Matrix:** Water

Lab Batch ID: 114153 **Date Analyzed:** 05/24/2014 12:05 **Analyst:** 1011

Reporting Units: ug/L

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX, Naphthalene + Oxygenates Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags	Marginal Exceedance Limits
tert-Butanol	<20.00	50.00	57.17	114	15-150		0-215
Methyl-t-Butyl Ether	<1.000	50.00	45.37	91	30-168		7-190
Benzene	<1.000	50.00	49.05	98	77-122		70-130
Toluene	<1.000	50.00	47.74	95	77-123		70-130
tert-Amyl ethyl ether	<10.00	50.00	47.22	94	60-121		50-132
tert-Butyl ethyl ether	<10.00	50.00	46.80	94	62-137		49-149
Diisopropyl ether	<10.00	50.00	50.74	101	48-146		32-162
tert-Amyl methyl ether	<10.00	50.00	45.63	91	61-129		50-140
tert-Amyl alcohol	<20.00	50.00	53.25	107	27-139		8-158
Ethylbenzene	<1.000	50.00	48.01	96	79-122		72-130
m&p-Xylene	<2.000	100	96.08	96	78-119		72-125
o-Xylene	<1.000	50.00	47.19	94	79-123		72-131
Naphthalene	<1.000	50.00	42.10	84	46-154		28-172

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD 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: AECOM *OFFICE LOC.: Columbia, MD

*PROJECT MGR: John Canzeri *PHONE NO.: (240) 565-6501

EMAIL: FAX NO.: ( )

*PROJECT NAME: 7-11 Hampstead MD #32785 PROJECT NO.: 60144916

SITE LOCATION: Hampstead, MD P.O. NO.:

SAMPLER(S): Nick Bagnato DW CERT NO.:

PSS Work Order #: 1405202 PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used: 1 HCl	Analysis/ Method Required (3) * BTEX + oxy 8260	Naphthalene	TPH - Grd 8015	REMARKS
	GAC-2 Final	5/20/14	16:00	GW	6	G		✓	✓	✓	

(5)

Relinquished By: (1)	Date: 5/20/14	Time: 9:39	Received By:
Relinquished By: (2)	Date:	Time:	Received By:
Relinquished By: (3)	Date:	Time:	Received By:
Relinquished By: (4)	Date:	Time:	Received By:

(4)

*Requested TAT (One TAT per COC)
- [x] 5-Day
- [ ] 3-Day
- [ ] 2-Day
- [ ] Next Day
- [ ] Emergency
- [ ] Other

Data Deliverables Required:
COA [x] QC SUMM [ ] CLP LIKE [ ] OTHER

# of Coolers: 1

Custody Seal: Abs

Ice Present: Pres Temp: 3°C

Shipping Carrier: Client

Special Instructions:

DW COMPLIANCE? YES [ ]

EDD FORMAT TYPE:

STATE RESULTS REPORTED TO: MD [x] DE [ ] PA [ ] VA [ ] WV [ ] OTHER

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14052202	**Received By**	Robyn Rhudy
Client Name	AECOM	**Date Received**	05/22/2014 09:39:00 AM
Project Name	7-11 Hampstead #32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	06/26/2014	**Logged In By**	Robyn Rhudy

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

		Sampler Name	Nick Barrett
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 1

Total No. of Containers Received 6

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: Robyn Rhudy — Date: 05/22/2014

PM Review and Approval: Amy Friedlander — Date: 05/22/2014

Analytical Report for

AECOM

Certificate of Analysis No.: 14050906

Project Manager: John Canzeri

Project Name : 7-11 Store 32785

Project Location: Hampstead, MD

Project ID : 60144916

May 16, 2014

Phase Separation Science, Inc.

6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

May 16, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14050906**
Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID.: 60144916

Dear John Canzeri :

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 **14050906**.

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 June 13, 2014. 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: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14050906

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 05/09/2014 at 11:11 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14050906-001	GAC-2 FINAL	GROUND WATER	05/07/14 10:11

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14050906
AECOM, Columbia, MD
May 16, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: GAC-2 FINAL **Date/Time Sampled: 05/07/2014 10:11** **PSS Sample ID: 14050906-001**
Matrix: GROUND WATER **Date/Time Received: 05/09/2014 11:11**

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	05/09/14	05/09/14 14:05	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	05/16/14	05/16/14 13:21	1011
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	05/16/14	05/16/14 13:21	1011
Benzene	ND	ug/L	1.0		1	05/16/14	05/16/14 13:21	1011
Toluene	ND	ug/L	1.0		1	05/16/14	05/16/14 13:21	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	05/16/14	05/16/14 13:21	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	05/16/14	05/16/14 13:21	1011
Diisopropyl ether	ND	ug/L	10		1	05/16/14	05/16/14 13:21	1011
tert-Amyl methyl ether	ND	ug/L	10		1	05/16/14	05/16/14 13:21	1011
tert-Amyl alcohol	ND	ug/L	20		1	05/16/14	05/16/14 13:21	1011
Ethylbenzene	ND	ug/L	1.0		1	05/16/14	05/16/14 13:21	1011
m&p-Xylene	ND	ug/L	2.0		1	05/16/14	05/16/14 13:21	1011
o-Xylene	ND	ug/L	1.0		1	05/16/14	05/16/14 13:21	1011
Naphthalene	ND	ug/L	1.0		1	05/16/14	05/16/14 13:21	1011

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14050906
Project ID: 60144916

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.

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): 14050906
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8015C	GAC-2 FINAL	Initial	14050906-001	1035	W	50333	113730	05/07/2014	05/09/2014 08:39	05/09/2014 14:05
	50333-2-BKS	BKS	50333-2-BKS	1035	W	50333	113730	--------	05/09/2014 08:39	05/09/2014 11:21
	50333-2-BLK	BLK	50333-2-BLK	1035	W	50333	113730	--------	05/09/2014 08:39	05/09/2014 10:04
	GAC-2 FINAL S	MS	14050906-001 S	1035	W	50333	113730	05/07/2014	05/09/2014 08:39	05/09/2014 15:21
	GAC-2 FINAL SD	MSD	14050906-001 SD	1035	W	50333	113730	05/07/2014	05/09/2014 08:39	05/09/2014 15:46
SW-846 8260 B	GAC-2 FINAL	Initial	14050906-001	1011	W	50427	113890	05/07/2014	05/16/2014 15:18	05/16/2014 13:21
	50427-1-BKS	BKS	50427-1-BKS	1011	W	50427	113890	--------	05/16/2014 15:18	05/16/2014 10:30
	50427-1-BLK	BLK	50427-1-BLK	1011	W	50427	113890	--------	05/16/2014 15:18	05/16/2014 11:26

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/16/2014

Work Order #: 14050906 **Project ID:** 60144916

Lab Batch #: 113730 **Sample:** 50333-2-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/09/2014 10:04

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	85.7	100	86	65-111	

Lab Batch #: 113730 **Sample:** 50333-2-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/09/2014 11:21

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	87.6	100	88	65-111	

Lab Batch #: 113730 **Sample:** 14050906-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/09/2014 14:05

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	84.0	100	84	65-111	

Lab Batch #: 113730 **Sample:** 14050906-001 S / MS **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/09/2014 15:21

Total Petroleum Hydrocarbons-GRO	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [C]	Control Limits %R	Flags
a,a,a-Trifluorotoluene	91.9	100	92	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/16/2014

Work Order #: 14050906 **Project ID:** 60144916

Lab Batch #: 113730 **Sample:** 14050906-001 SD / MSD **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/09/2014 15:46

	SURROGATE RECOVERY STUDY				
Total Petroleum Hydrocarbons-GRO **Analytes**	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
a,a,a-Trifluorotoluene	106	100	106	65-111	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Form 2 - Surrogate Recoveries

Project Name: 7-11 Store 32785

05/16/2014

Work Order #: 14050906 **Project ID:** 60144916

Lab Batch #: 113890 **Sample:** 50427-1-BKS / BKS **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/16/2014 10:30

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
Dibromofluoromethane	53.9	50.00	108	84-110	
Toluene-D8	53.4	50.00	107	94-109	
4-Bromofluorobenzene	53.2	50.00	106	81-133	

Lab Batch #: 113890 **Sample:** 50427-1-BLK / BLK **Matrix:** Water

Units: ug/L **Date Analyzed:** 05/16/2014 11:26

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
Dibromofluoromethane	51.8	50.00	104	84-110	
Toluene-D8	52.1	50.00	104	94-109	
4-Bromofluorobenzene	57.3	50.00	115	81-133	

Lab Batch #: 113890 **Sample:** 14050906-001 / SMP **Matrix:** Ground Water

Units: ug/L **Date Analyzed:** 05/16/2014 13:21

BTEX, Naphthalene + Oxygenates	SURROGATE RECOVERY STUDY				
Analytes	**Amount Found [A]**	**True Amount [B]**	**Recovery %R [C]**	**Control Limits %R**	**Flags**
Dibromofluoromethane	52.0	50.00	105	84-110	
Toluene-D8	52.0	50.00	105	94-109	
4-Bromofluorobenzene	58.0	50.00	115	81-133	

* Surrogate outside of Laboratory QC limits

Surrogate Recovery [C] = 100 * A / B

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Blank Summary 14050906

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **SW-846 8015C** Prep Method: SW5030B

Matrix: **WATER**

Sample Id: **50333-2-BLK** Lab Sample Id: **50333-2-BLK**

Date Analyzed: May-09-14 10:04 Analyst: 1035 Seq Number: 113730 Date Prep: May-09-14 08:39 Tech: 1035

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
TPH-GRO (Gasoline Range Organics)	C6C10GRO	ND	100	40.00	ug/L	U	1

Blank Summary 14050906

AECOM, Columbia, MD

7-11 Store 32785

Analytical Method: **SW-846 8260 B** Prep Method: SW5030B
Matrix: **WATER**

Sample Id: **50427-1-BLK** Lab Sample Id: **50427-1-BLK**

Date Analyzed: May-16-14 11:26 Analyst: 1011 Seq Number: 113890 Date Prep: May-16-14 15:18 Tech: 1011

Parameter	Cas Number	Result	RL	LOD	Units	Flag	Dil
tert-Butanol	75-65-0	ND	20.00	10.00	ug/L	U	1
Methyl-t-Butyl Ether	1634-04-4	ND	1.000	0.5000	ug/L	U	1
Benzene	71-43-2	ND	1.000	0.5000	ug/L	U	1
Toluene	108-88-3	ND	1.000	0.5000	ug/L	U	1
tert-Amyl ethyl ether	919-94-8	ND	10.00	5.000	ug/L	U	1
tert-Butyl ethyl ether	637-92-3	ND	10.00	5.000	ug/L	U	1
Diisopropyl ether	108-20-3	ND	10.00	5.000	ug/L	U	1
tert-Amyl methyl ether	994-05-8	ND	10.00	5.000	ug/L	U	1
tert-Amyl alcohol	75-85-4	ND	20.00	10.00	ug/L	U	1
Ethylbenzene	100-41-4	ND	1.000	0.5000	ug/L	U	1
m&p-Xylene	108-38-3	ND	2.000	1.000	ug/L	U	1
o-Xylene	95-47-6	ND	1.000	0.5000	ug/L	U	1
Naphthalene	91-20-3	ND	1.000	0.5000	ug/L	U	1

Blank Spike Recovery

Project Name: 7-11 Store 32785

Work Order #: 14050906 **Project ID:** 60144916

Prep Batch #: 50333 **Date Prepared:** 05/09/2014 08:39 **Sample ID:** 50333-2-BKS **Matrix:** Water

Lab Batch ID: 113730 **Date Analyzed:** 05/09/2014 10:04 **Analyst:** 1035

Reporting Units: ug/L

BLANK /BLANK SPIKE RECOVERY STUDY

Total Petroleum Hydrocarbons-GRO Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
TPH-GRO (Gasoline Range Organics)	<100	5000	5134	103	61-138	

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD exceeded the laboratory control limits
L = Recovery of BS,BSD or both below the laboratory control limits

Blank Spike Recovery

Project Name: 7-11 Store 32785

Work Order #: 14050906 **Project ID:** 60144916

Prep Batch #: 50427 **Date Prepared:** 05/16/2014 15:18 **Sample ID:** 50427-1-BKS **Matrix:** Water

Lab Batch ID: 113890 **Date Analyzed:** 05/16/2014 11:26 **Analyst:** 1011

Reporting Units: ug/L

BLANK /BLANK SPIKE RECOVERY STUDY

BTEX, Naphthalene + Oxygenates Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags	Marginal Exceedance Limits
tert-Butanol	<20.00	50.00	38.37	77	15-150		0-215
Methyl-t-Butyl Ether	<1.000	50.00	40.81	82	30-168		7-190
Benzene	<1.000	50.00	55.51	111	77-122		70-130
Toluene	<1.000	50.00	58.34	117	77-123		70-130
tert-Amyl ethyl ether	<10.00	50.00	45.43	91	60-121		50-132
tert-Butyl ethyl ether	<10.00	50.00	48.80	98	62-137		49-149
Diisopropyl ether	<10.00	50.00	43.01	86	48-146		32-162
tert-Amyl methyl ether	<10.00	50.00	48.33	97	61-129		50-140
tert-Amyl alcohol	<20.00	50.00	44.01	88	27-139		8-158
Ethylbenzene	<1.000	50.00	57.93	116	79-122		72-130
m&p-Xylene	<2.000	100	117.9	118	78-119		72-125
o-Xylene	<1.000	50.00	57.70	115	79-123		72-131
Naphthalene	<1.000	50.00	56.28	113	46-154		28-172

Blank Spike Recovery [D] = 100*(([C])/[B])

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

H= Recovery of BS,BSD or both exceeded the laboratory control limits
F = RPD 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: AECOM *OFFICE LOC. Columbia, MD
*PROJECT MGR: J. Canzeri *PHONE NO.: (240) 565 6516
EMAIL: FAX NO.: ( )
*PROJECT NAME: 7-11 Store 32785 PROJECT NO 60144116
SITE LOCATION: Hampstead, MD P.O. NO.: 458H ACM
SAMPLER(S): M. Parsons DW CERT NO.:

PSS Work Order #: 1405090 6 PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used	Analysis/ Method Required (3) * BTEX + OPA 8260	Naphthalene	TPH-GRO	REMARKS
	GAC-2 FINAL	5/7/14	1011	GW	6	G		✓	✓	✓	

(5)

Relinquished By: (1)	Date	Time	Received By:
M. Parsons	5/9/14	11:11	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA QC SUMM CLP LIKE OTHER
☑ ☐ ☐ _____

# of Coolers: 1
Custody Seal: Abs
Ice Present: Pres Temp: 3°C
Shipping Carrier: Client

Special Instructions:

DW COMPLIANCE? YES ☐
EDD FORMAT TYPE: AECOM
STATE RESULTS REPORTED TO: MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER _____

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14050906	**Received By**	Robyn Rhudy
Client Name	AECOM	**Date Received**	05/09/2014 11:11:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	06/13/2014	**Logged In By**	Robyn Rhudy

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

		Sampler Name	Mike Parsons
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 1

Total No. of Containers Received 6

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: Robyn Rhudy — Date: 05/09/2014

PM Review and Approval: Amy Friedlander — Date: 05/09/2014

Analytical Report for

AECOM

Certificate of Analysis No.: 14061005

Project Manager: John Canzeri
Project Name : 7-11 Store 32785
Project Location: Hampstead
Project ID : 60144916

June 17, 2014

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

June 17, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14061005**
Project Name: 7-11 Store 32785
Project Location: Hampstead
Project ID.: 60144916

Dear John Canzeri :

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 **14061005**.

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 July 15, 2014. 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: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14061005

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/10/2014 at 12:00 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14061005-001	A/S INF	GROUND WATER	06/09/14 17:00
14061005-002	A/S EFF	GROUND WATER	06/09/14 16:50
14061005-003	GAC-1 Eff	GROUND WATER	06/09/14 16:40

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061005
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead
Project ID: 60144916

Sample ID: A/S INF **Date/Time Sampled: 06/09/2014 17:00** **PSS Sample ID: 14061005-001**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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)	**180**	ug/L	100		1	06/11/14	06/11/14 14:34	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	06/11/14	06/12/14 07:23	1011
Methyl-t-Butyl Ether	**180**	ug/L	1.0		1	06/11/14	06/12/14 07:23	1011
Benzene	ND	ug/L	1.0		1	06/11/14	06/12/14 07:23	1011
Toluene	ND	ug/L	1.0		1	06/11/14	06/12/14 07:23	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/11/14	06/12/14 07:23	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/11/14	06/12/14 07:23	1011
Diisopropyl ether	ND	ug/L	10		1	06/11/14	06/12/14 07:23	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/11/14	06/12/14 07:23	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/11/14	06/12/14 07:23	1011
Ethylbenzene	ND	ug/L	1.0		1	06/11/14	06/12/14 07:23	1011
m&p-Xylene	ND	ug/L	2.0		1	06/11/14	06/12/14 07:23	1011
o-Xylene	ND	ug/L	1.0		1	06/11/14	06/12/14 07:23	1011
Naphthalene	ND	ug/L	1.0		1	06/11/14	06/12/14 07:23	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061005
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead
Project ID: 60144916

Sample ID: A/S EFF **Date/Time Sampled: 06/09/2014 16:50** **PSS Sample ID: 14061005-002**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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	06/11/14	06/11/14 15:00	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	06/11/14	06/12/14 05:38	1011
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	06/11/14	06/12/14 05:38	1011
Benzene	ND	ug/L	1.0		1	06/11/14	06/12/14 05:38	1011
Toluene	ND	ug/L	1.0		1	06/11/14	06/12/14 05:38	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/11/14	06/12/14 05:38	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/11/14	06/12/14 05:38	1011
Diisopropyl ether	ND	ug/L	10		1	06/11/14	06/12/14 05:38	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/11/14	06/12/14 05:38	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/11/14	06/12/14 05:38	1011
Ethylbenzene	ND	ug/L	1.0		1	06/11/14	06/12/14 05:38	1011
m&p-Xylene	ND	ug/L	2.0		1	06/11/14	06/12/14 05:38	1011
o-Xylene	ND	ug/L	1.0		1	06/11/14	06/12/14 05:38	1011
Naphthalene	ND	ug/L	1.0		1	06/11/14	06/12/14 05:38	1011

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061005
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead
Project ID: 60144916

Sample ID: GAC-1 Eff **Date/Time Sampled: 06/09/2014 16:40** **PSS Sample ID: 14061005-003**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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	06/11/14	06/11/14 15:25	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	06/11/14	06/12/14 06:13	1011
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	06/11/14	06/12/14 06:13	1011
Benzene	ND	ug/L	1.0		1	06/11/14	06/12/14 06:13	1011
Toluene	ND	ug/L	1.0		1	06/11/14	06/12/14 06:13	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/11/14	06/12/14 06:13	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/11/14	06/12/14 06:13	1011
Diisopropyl ether	ND	ug/L	10		1	06/11/14	06/12/14 06:13	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/11/14	06/12/14 06:13	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/11/14	06/12/14 06:13	1011
Ethylbenzene	ND	ug/L	1.0		1	06/11/14	06/12/14 06:13	1011
m&p-Xylene	ND	ug/L	2.0		1	06/11/14	06/12/14 06:13	1011
o-Xylene	ND	ug/L	1.0		1	06/11/14	06/12/14 06:13	1011
Naphthalene	ND	ug/L	1.0		1	06/11/14	06/12/14 06:13	1011

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14061005
Project ID: 60144916

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.

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): 14061005
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8015C	A/S INF	Initial	14061005-001	1035	W	50767	114547	06/09/2014	06/11/2014 11:15	06/11/2014 14:34
	A/S EFF	Initial	14061005-002	1035	W	50767	114547	06/09/2014	06/11/2014 11:15	06/11/2014 15:00
	GAC-1 Eff	Initial	14061005-003	1035	W	50767	114547	06/09/2014	06/11/2014 11:15	06/11/2014 15:25
	50767-2-BKS	BKS	50767-2-BKS	1035	W	50767	114547	--------	06/11/2014 11:15	06/11/2014 13:01
	50767-2-BLK	BLK	50767-2-BLK	1035	W	50767	114547	--------	06/11/2014 11:15	06/11/2014 12:32
	Discharge 061114 S	MS	14061107-001 S	1035	W	50767	114547	06/11/2014	06/11/2014 11:15	06/11/2014 18:22
	Discharge 061114 SD	MSD	14061107-001 SD	1035	W	50767	114547	06/11/2014	06/11/2014 11:15	06/11/2014 18:47
SW-846 8260 B	A/S INF	Initial	14061005-001	1011	W	50759	114524	06/09/2014	06/11/2014 13:00	06/12/2014 07:23
	A/S EFF	Initial	14061005-002	1011	W	50759	114524	06/09/2014	06/11/2014 13:00	06/12/2014 05:38
	GAC-1 Eff	Initial	14061005-003	1011	W	50759	114524	06/09/2014	06/11/2014 13:00	06/12/2014 06:13
	50759-1-BKS	BKS	50759-1-BKS	1011	W	50759	114524	--------	06/11/2014 13:00	06/11/2014 22:02
	50759-1-BLK	BLK	50759-1-BLK	1011	W	50759	114524	--------	06/11/2014 13:00	06/11/2014 23:12
	MW4 S	MS	14060901-001 S	1011	W	50759	114524	06/06/2014	06/11/2014 13:00	06/12/2014 00:22
	MW4 SD	MSD	14060901-001 SD	1011	W	50759	114524	06/06/2014	06/11/2014 13:00	06/12/2014 00:58

PHASE SEPARATION SCIENCE, INC.

QC Summary 14061005

AECOM
7-11 Store 32785

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114524 Matrix: Ground Water Date Prep: 06/11/2014
PSS Sample ID: 14061005-001

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	107		84-110	%	06/12/14 07:23
Toluene-D8	104		94-109	%	06/12/14 07:23
4-Bromofluorobenzene	103		81-133	%	06/12/14 07:23

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114547 Matrix: Ground Water Date Prep: 06/11/2014
PSS Sample ID: 14061005-001

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	84		65-111	%	06/11/14 14:34

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114524 Matrix: Ground Water Date Prep: 06/11/2014
PSS Sample ID: 14061005-002

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	108		84-110	%	06/12/14 05:38
Toluene-D8	106		94-109	%	06/12/14 05:38
4-Bromofluorobenzene	104		81-133	%	06/12/14 05:38

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114547 Matrix: Ground Water Date Prep: 06/11/2014
PSS Sample ID: 14061005-002

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	81		65-111	%	06/11/14 15:00

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114524 Matrix: Ground Water Date Prep: 06/11/2014
PSS Sample ID: 14061005-003

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	106		84-110	%	06/12/14 06:13
Toluene-D8	105		94-109	%	06/12/14 06:13
4-Bromofluorobenzene	105		81-133	%	06/12/14 06:13

PHASE SEPARATION SCIENCE, INC.

QC Summary 14061005

AECOM
7-11 Store 32785

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114547 Matrix: Ground Water Date Prep: 06/11/2014
PSS Sample ID: 14061005-003

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	82		65-111	%	06/11/14 15:25

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 14061005

AECOM
7-11 Store 32785

Analytical Method: SW-846 8015C Prep Method: SW5030
Seq Number: 114547 Matrix: Water Date Prep: 06/11/14
MB Sample Id: 50767-2-BLK LCS Sample Id: 50767-2-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
TPH-GRO (Gasoline Range Organics	<100	5000	4945	99	61-138	ug/L	06/11/14 13:01	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	84		89		65-111	%	06/11/14 13:01

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114524 Matrix: Water Date Prep: 06/11/14
MB Sample Id: 50759-1-BLK LCS Sample Id: 50759-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
tert-Butanol	<20.00	50.00	48.33	97	15-150	ug/L	06/11/14 22:02	
Methyl-t-Butyl Ether	<1.000	50.00	54.52	109	30-168	ug/L	06/11/14 22:02	
Benzene	<1.000	50.00	54.44	109	77-122	ug/L	06/11/14 22:02	
Toluene	<1.000	50.00	54.63	109	77-123	ug/L	06/11/14 22:02	
tert-Amyl ethyl ether	<10.00	50.00	45.40	91	60-121	ug/L	06/11/14 22:02	
tert-Butyl ethyl ether	<10.00	50.00	47.20	94	62-137	ug/L	06/11/14 22:02	
Diisopropyl ether	<10.00	50.00	50.90	102	48-146	ug/L	06/11/14 22:02	
tert-Amyl methyl ether	<10.00	50.00	50.31	101	61-129	ug/L	06/11/14 22:02	
tert-Amyl alcohol	<20.00	50.00	59.96	120	27-139	ug/L	06/11/14 22:02	
Ethylbenzene	<1.000	50.00	49.82	100	79-122	ug/L	06/11/14 22:02	
m&p-Xylene	<2.000	100	97.06	97	78-119	ug/L	06/11/14 22:02	
o-Xylene	<1.000	50.00	48.28	97	79-123	ug/L	06/11/14 22:02	
Naphthalene	<1.000	50.00	47.51	95	46-154	ug/L	06/11/14 22:02	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	105		103		84-110	%	06/11/14 22:02
Toluene-D8	104		105		94-109	%	06/11/14 22:02
4-Bromofluorobenzene	99		95		81-133	%	06/11/14 22:02

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: AECOM *OFFICE LOC. Columbia MD
*PROJECT MGR: J Canzeri *PHONE NO.: (240) 565-6516
EMAIL: FAX NO.: ( )
*PROJECT NAME: 7-11 Store 32785 PROJECT NO.: 60144916
SITE LOCATION: Hampstead P.O. NO.: 45814 ACM
SAMPLER(S): Nick Barrett DW CERT NO.:

PSS Work Order #: 1406100S PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used	HCl	HCl	HCl									REMARKS
							Analysis/ Method Required (3) *	BTEX + oxy 8260	Naphthalene	TPH-GRO 8015									
	A/S INF	6/9/14	1700	GW	6	G		✓	✓	✓									
	A/S EFF		1650	"	6	"		✓	✓	✓									
	GAC-1 EFF		1640	"	6	"		✓	✓	✓									

(5)

Relinquished By: (1)	Date	Time	Received By:
	6/9/14	18:23	Parsons
Relinquished By: (2) Parsons	6/10/14	12:00	
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)
*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day ☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA QC SUMM CLP LIKE OTHER
☑ ☐ ☐ ☐ ____

# of Coolers:
Custody Seal: ABs
Ice Present: Yes Temp: 5°C
Shipping Carrier: Client

Special Instructions:

DW COMPLIANCE? YES ☐
EDD FORMAT TYPE: AECOM
STATE RESULTS REPORTED TO: MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER ____

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14061005	**Received By**	Jacob Prucnal
Client Name	AECOM	**Date Received**	06/10/2014 12:00:00 PM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	07/15/2014	**Logged In By**	Jacob Prucnal

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	5
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Nick Barrett
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 3

Total No. of Containers Received 18

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: 06/10/2014

Jacob Prucnal

PM Review and Approval: Amy Friedlander — Date: 06/10/2014

Amy Friedlander

Analytical Report for

AECOM

Certificate of Analysis No.: 14062508

Project Manager: John Canzeri
Project Name : 7-11 Store 32785
Project Location: Hampstead MD
Project ID : 60144916

July 2, 2014

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

July 2, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14062508**
Project Name: 7-11 Store 32785
Project Location: Hampstead MD
Project ID.: 60144916

Dear John Canzeri :

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 **14062508**.

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 July 30, 2014. 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: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14062508

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/25/2014 at 10:30 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14062508-001	GAC2 Final	GROUND WATER	06/24/14 09:40

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14062508
AECOM, Columbia, MD
July 2, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead MD
Project ID: 60144916

Sample ID: GAC2 Final **Date/Time Sampled: 06/24/2014 09:40** **PSS Sample ID: 14062508-001**
Matrix: GROUND WATER **Date/Time Received: 06/25/2014 10:30**

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	06/27/14	06/27/14 12:13	1011

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	06/27/14	06/27/14 16:24	1014
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	06/27/14	06/27/14 16:24	1014
Benzene	ND	ug/L	1.0		1	06/27/14	06/27/14 16:24	1014
Toluene	ND	ug/L	1.0		1	06/27/14	06/27/14 16:24	1014
tert-Amyl ethyl ether	ND	ug/L	10		1	06/27/14	06/27/14 16:24	1014
tert-Butyl ethyl ether	ND	ug/L	10		1	06/27/14	06/27/14 16:24	1014
Diisopropyl ether	ND	ug/L	10		1	06/27/14	06/27/14 16:24	1014
tert-Amyl methyl ether	ND	ug/L	10		1	06/27/14	06/27/14 16:24	1014
tert-Amyl alcohol	ND	ug/L	20		1	06/27/14	06/27/14 16:24	1014
Ethylbenzene	ND	ug/L	1.0		1	06/27/14	06/27/14 16:24	1014
m&p-Xylene	ND	ug/L	2.0		1	06/27/14	06/27/14 16:24	1014
o-Xylene	ND	ug/L	1.0		1	06/27/14	06/27/14 16:24	1014
Naphthalene	ND	ug/L	1.0		1	06/27/14	06/27/14 16:24	1014

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14062508
Project ID: 60144916

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.

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): 14062508
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8015C	GAC2 Final	Initial	14062508-001	1011	W	51007	114921	06/24/2014	06/27/2014 08:00	06/27/2014 12:13
	51007-2-BKS	BKS	51007-2-BKS	1011	W	51007	114921	--------	06/27/2014 08:00	06/27/2014 11:48
	51007-2-BLK	BLK	51007-2-BLK	1011	W	51007	114921	--------	06/27/2014 08:00	06/27/2014 10:56
	TPW4 S	MS	14062415-010 S	1011	W	51007	114921	06/23/2014	06/27/2014 08:00	06/27/2014 17:16
	TPW4 SD	MSD	14062415-010 SD	1011	W	51007	114921	06/23/2014	06/27/2014 08:00	06/27/2014 17:42
SW-846 8260 B	GAC2 Final	Initial	14062508-001	1014	W	51003	114917	06/24/2014	06/27/2014 00:00	06/27/2014 16:24
	51003-1-BKS	BKS	51003-1-BKS	1014	W	51003	114917	--------	06/27/2014 00:00	06/27/2014 08:14
	51003-1-BLK	BLK	51003-1-BLK	1014	W	51003	114917	--------	06/27/2014 00:00	06/27/2014 11:09
	51003-1-BSD	BSD	51003-1-BSD	1014	W	51003	114917	--------	06/27/2014 00:00	06/27/2014 08:49
	GAC2 Final S	MS	14062508-001 S	1014	W	51003	114917	06/24/2014	06/27/2014 00:00	06/27/2014 18:10
	GAC2 Final SD	MSD	14062508-001 SD	1014	W	51003	114917	06/24/2014	06/27/2014 00:00	06/27/2014 18:45

PHASE SEPARATION SCIENCE, INC.

QC Summary 14062508

AECOM
7-11 Store 32785

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114917 Matrix: Ground Water Date Prep: 06/27/2014
PSS Sample ID: 14062508-001

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	104		84-110	%	06/27/14 16:24
Toluene-D8	100		94-109	%	06/27/14 16:24
4-Bromofluorobenzene	110		81-133	%	06/27/14 16:24

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114921 Matrix: Ground Water Date Prep: 06/27/2014
PSS Sample ID: 14062508-001

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	84		65-111	%	06/27/14 12:13

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 14062508

AECOM

7-11 Store 32785

Analytical Method: SW-846 8015C Prep Method: SW5030B

Seq Number: 114921 Matrix: Water Date Prep: 06/27/14

MB Sample Id: 51007-2-BLK LCS Sample Id: 51007-2-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
TPH-GRO (Gasoline Range Organics	<100	5000	4269	85	61-138	ug/L	06/27/14 11:48	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	75		108		65-111	%	06/27/14 11:48

Analytical Method: SW-846 8260 B Prep Method: SW5030B

Seq Number: 114917 Matrix: Water Date Prep: 06/27/14

MB Sample Id: 51003-1-BLK LCS Sample Id: 51003-1-BKS LCSD Sample Id: 51003-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
tert-Butanol	<20.00	50.00	46.52	93	45.74	91	15-150	2	20	ug/L	06/27/14 08:14	
Methyl-t-Butyl Ether	<1.000	50.00	50.48	101	49.45	99	30-168	2	20	ug/L	06/27/14 08:14	
Benzene	<1.000	50.00	53.34	107	51.75	104	77-122	3	20	ug/L	06/27/14 08:14	
Toluene	<1.000	50.00	54.04	108	51.86	104	77-123	4	20	ug/L	06/27/14 08:14	
tert-Amyl ethyl ether	<10.00	50.00	49.56	99	48.51	97	60-121	2	20	ug/L	06/27/14 08:14	
tert-Butyl ethyl ether	<10.00	50.00	49.22	98	48.36	97	62-137	2	20	ug/L	06/27/14 08:14	
Diisopropyl ether	<10.00	50.00	49.67	99	48.60	97	48-146	2	20	ug/L	06/27/14 08:14	
tert-Amyl methyl ether	<10.00	50.00	49.59	99	48.66	97	61-129	2	20	ug/L	06/27/14 08:14	
tert-Amyl alcohol	<20.00	50.00	49.87	100	42.10	84	27-139	17	20	ug/L	06/27/14 08:14	
Ethylbenzene	<1.000	50.00	54.14	108	52.95	106	79-122	2	20	ug/L	06/27/14 08:14	
m&p-Xylene	<2.000	100	100.5	101	98.21	98	78-119	2	20	ug/L	06/27/14 08:14	
o-Xylene	<1.000	50.00	49.13	98	48.41	97	79-123	1	20	ug/L	06/27/14 08:14	
Naphthalene	<1.000	50.00	51.82	104	50.67	101	46-154	2	20	ug/L	06/27/14 08:14	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	LCSD Result	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	101		98		95		84-110	%	06/27/14 08:14
Toluene-D8	98		100		99		94-109	%	06/27/14 08:14
4-Bromofluorobenzene	112		98		98		81-133	%	06/27/14 08:14

PHASE SEPARATION SCIENCE, INC.

QC Summary 14062508

AECOM

7-11 Store 32785

Analytical Method: SW-846 8260 B Prep Method: SW5030B

Seq Number: 114917 Matrix: Ground Water Date Prep: 06/27/14

Parent Sample Id: 14062508-001 MS Sample Id: 14062508-001 S MSD Sample Id: 14062508-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
tert-Butanol	<20.00	50.00	45.60	91	42.37	85	1-183	7	25	ug/L	06/27/14 18:10	
Methyl-t-Butyl Ether	<1.000	50.00	47.04	94	45.01	90	22-182	4	25	ug/L	06/27/14 18:10	
Benzene	<1.000	50.00	25.21	50	49.27	99	75-132	65	25	ug/L	06/27/14 18:10	XF
Toluene	<1.000	50.00	54.03	108	49.37	99	74-132	9	25	ug/L	06/27/14 18:10	
tert-Amyl ethyl ether	<10.00	50.00	46.05	92	42.94	86	48-129	7	25	ug/L	06/27/14 18:10	
tert-Butyl ethyl ether	<10.00	50.00	46.14	92	43.47	87	55-141	6	25	ug/L	06/27/14 18:10	
Diisopropyl ether	<10.00	50.00	46.61	93	43.42	87	49-150	7	25	ug/L	06/27/14 18:10	
tert-Amyl methyl ether	<10.00	50.00	46.37	93	43.40	87	50-139	7	25	ug/L	06/27/14 18:10	
tert-Amyl alcohol	<20.00	50.00	37.32	75	34.50	69	5-149	8	25	ug/L	06/27/14 18:10	
Ethylbenzene	<1.000	50.00	53.93	108	49.77	100	74-129	8	25	ug/L	06/27/14 18:10	
m&p-Xylene	<2.000	100	100.2	100	92.32	92	78-119	8	25	ug/L	06/27/14 18:10	
o-Xylene	<1.000	50.00	47.69	95	43.91	88	80-123	8	25	ug/L	06/27/14 18:10	
Naphthalene	<1.000	50.00	45.13	90	43.14	86	7-137	5	25	ug/L	06/27/14 18:10	

Surrogate	MS Result	MS Flag	MSD Result	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	100		99		84-110	%	06/27/14 18:10
Toluene-D8	100		99		94-109	%	06/27/14 18:10
4-Bromofluorobenzene	100		99		81-133	%	06/27/14 18:10

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: AECOM *OFFICE LOC.: Columbia, MD

*PROJECT MGR: J. Canzeri *PHONE NO.: (240) 525 6516

EMAIL: FAX NO.: ( )

*PROJECT NAME: 7-11 Store 32785 PROJECT NO: 60144916

SITE LOCATION: Hampstead MD P.O. NO.: 45824 AEM

SAMPLER(S): Mike Parsons DW CERT NO.:

PSS Work Order #: 1406 2708 PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used	Analysis/ Method Required (3) * BTEX 8260 + Oxy.	Naph. Hvalene	TPH-GRO 8015	REMARKS
	GAC 2 FINAL	6/24/14	0940	GW	6	G	HCl	✓	✓	✓	

(5)

Relinquished By: (1)	Date	Time	Received By:
M (Parsons)	6/25/14	10:30	Jim
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA ☑ QC SUMM ☐ CLP LIKE ☐ OTHER

# of Coolers: 1

Custody Seal: ABS

Ice Present: Yes Temp: 5°C

Shipping Carrier: Client

Special Instructions:

DW COMPLIANCE? YES ☐

EDD FORMAT TYPE: AECOM

STATE RESULTS REPORTED TO:
MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14062508	**Received By**	Simon Crisp
Client Name	AECOM	**Date Received**	06/25/2014 10:30:00 AM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	07/30/2014	**Logged In By**	Lynn Jackson

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	5
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Mike Parsons
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 1

Total No. of Containers Received 6

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: N L Jackson — Lynn Jackson — Date: 06/25/2014

PM Review and Approval: Amy F Friedlander — Amy Friedlander — Date: 06/25/2014

Analytical Report for

AECOM

Certificate of Analysis No.: 14061006

Project Manager: John Canzeri
Project Name : 7-11 Store 32785
Project Location: Hampstead, MD
Project ID : 60144916

June 17, 2014

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

June 17, 2014

John Canzeri
AECOM
8320 Guilford Road, Ste. L
Columbia, MD 21046

Reference: PSS Work Order(s) No: **14061006**
Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID.: 60144916

Dear John Canzeri :

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 **14061006**.

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 July 15, 2014. 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: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14061006

Project ID: 60144916

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/10/2014 at 12:00 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
14061006-001	GAC-2 Final	GROUND WATER	06/09/14 16:30

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 contaminates, and part 141.3, for the secondary drinking water contaminates.
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)].

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 LOD.
- LOD Limit of Detection. An estimate of the minimum amount of a substance that an analytical process can reliably detect**.** 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

OFFICES:
6630 BALTIMORE NATIONAL PIKE
ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.

CERTIFICATE OF ANALYSIS

No: 14061006
AECOM, Columbia, MD
June 17, 2014

Project Name: 7-11 Store 32785
Project Location: Hampstead, MD
Project ID: 60144916

Sample ID: GAC-2 Final **Date/Time Sampled: 06/09/2014 16:30** **PSS Sample ID: 14061006-001**
Matrix: GROUND WATER **Date/Time Received: 06/10/2014 12:00**

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	06/11/14	06/11/14 15:51	1035

BTEX, Naphthalene + Oxygenates — Analytical Method: SW-846 8260 B — Preparation Method: 5030B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
tert-Butanol	ND	ug/L	20		1	06/11/14	06/11/14 18:32	1011
Methyl-t-Butyl Ether	ND	ug/L	1.0		1	06/11/14	06/11/14 18:32	1011
Benzene	ND	ug/L	1.0		1	06/11/14	06/11/14 18:32	1011
Toluene	ND	ug/L	1.0		1	06/11/14	06/11/14 18:32	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	06/11/14	06/11/14 18:32	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	06/11/14	06/11/14 18:32	1011
Diisopropyl ether	ND	ug/L	10		1	06/11/14	06/11/14 18:32	1011
tert-Amyl methyl ether	ND	ug/L	10		1	06/11/14	06/11/14 18:32	1011
tert-Amyl alcohol	ND	ug/L	20		1	06/11/14	06/11/14 18:32	1011
Ethylbenzene	ND	ug/L	1.0		1	06/11/14	06/11/14 18:32	1011
m&p-Xylene	ND	ug/L	2.0		1	06/11/14	06/11/14 18:32	1011
o-Xylene	ND	ug/L	1.0		1	06/11/14	06/11/14 18:32	1011
Naphthalene	ND	ug/L	1.0		1	06/11/14	06/11/14 18:32	1011

Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Store 32785

Work Order Number(s): 14061006
Project ID: 60144916

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.

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): 14061006
Report Prepared For: AECOM, Columbia, MD
Project Name: 7 Eleven - gen'l
Project Manager: John Canzeri

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SW-846 8015C	GAC-2 Final	Initial	14061006-001	1035	W	50767	114547	06/09/2014	06/11/2014 11:15	06/11/2014 15:51
	50767-2-BKS	BKS	50767-2-BKS	1035	W	50767	114547	--------	06/11/2014 11:15	06/11/2014 13:01
	50767-2-BLK	BLK	50767-2-BLK	1035	W	50767	114547	--------	06/11/2014 11:15	06/11/2014 12:32
	Discharge 061114 S	MS	14061107-001 S	1035	W	50767	114547	06/11/2014	06/11/2014 11:15	06/11/2014 18:22
	Discharge 061114 SD	MSD	14061107-001 SD	1035	W	50767	114547	06/11/2014	06/11/2014 11:15	06/11/2014 18:47
SW-846 8260 B	GAC-2 Final	Initial	14061006-001	1011	W	50747	114506	06/09/2014	06/11/2014 13:12	06/11/2014 18:32
	50747-1-BKS	BKS	50747-1-BKS	1011	W	50747	114506	--------	06/11/2014 13:12	06/11/2014 09:47
	50747-1-BLK	BLK	50747-1-BLK	1011	W	50747	114506	--------	06/11/2014 13:12	06/11/2014 10:57
	602 S	MS	14060529-002 S	1011	W	50747	114506	06/04/2014	06/11/2014 13:12	06/11/2014 13:17
	602 SD	MSD	14060529-002 SD	1011	W	50747	114506	06/04/2014	06/11/2014 13:12	06/11/2014 13:52

PHASE SEPARATION SCIENCE, INC.

QC Summary 14061006

AECOM
7-11 Store 32785

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114506 Matrix: Ground Water Date Prep: 06/11/2014
PSS Sample ID: 14061006-001

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
Dibromofluoromethane	105		84-110	%	06/11/14 18:32
Toluene-D8	104		94-109	%	06/11/14 18:32
4-Bromofluorobenzene	103		81-133	%	06/11/14 18:32

Analytical Method: SW-846 8015C Prep Method: SW5030B
Seq Number: 114547 Matrix: Ground Water Date Prep: 06/11/2014
PSS Sample ID: 14061006-001

Surrogate	%Rec	Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	80		65-111	%	06/11/14 15:51

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 14061006

AECOM
7-11 Store 32785

Analytical Method: SW-846 8015C Prep Method: SW5030
Seq Number: 114547 Matrix: Water Date Prep: 06/11/14
MB Sample Id: 50767-2-BLK LCS Sample Id: 50767-2-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
TPH-GRO (Gasoline Range Organics	<100	5000	4945	99	61-138	ug/L	06/11/14 13:01	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date
a,a,a-Trifluorotoluene	84		89		65-111	%	06/11/14 13:01

Analytical Method: SW-846 8260 B Prep Method: SW5030B
Seq Number: 114506 Matrix: Water Date Prep: 06/11/14
MB Sample Id: 50747-1-BLK LCS Sample Id: 50747-1-BKS

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
tert-Butanol	<20.00	50.00	48.01	96	15-150	ug/L	06/11/14 09:47	
Methyl-t-Butyl Ether	<1.000	50.00	53.18	106	30-168	ug/L	06/11/14 09:47	
Benzene	<1.000	50.00	52.61	105	77-122	ug/L	06/11/14 09:47	
Toluene	<1.000	50.00	53.09	106	77-123	ug/L	06/11/14 09:47	
tert-Amyl ethyl ether	<10.00	50.00	46.10	92	60-121	ug/L	06/11/14 09:47	
tert-Butyl ethyl ether	<10.00	50.00	47.07	94	62-137	ug/L	06/11/14 09:47	
Diisopropyl ether	<10.00	50.00	50.40	101	48-146	ug/L	06/11/14 09:47	
tert-Amyl methyl ether	<10.00	50.00	50.17	100	61-129	ug/L	06/11/14 09:47	
tert-Amyl alcohol	<20.00	50.00	62.30	125	27-139	ug/L	06/11/14 09:47	
Ethylbenzene	<1.000	50.00	48.62	97	79-122	ug/L	06/11/14 09:47	
m&p-Xylene	<2.000	100	95.13	95	78-119	ug/L	06/11/14 09:47	
o-Xylene	<1.000	50.00	47.23	94	79-123	ug/L	06/11/14 09:47	
Naphthalene	<1.000	50.00	46.52	93	46-154	ug/L	06/11/14 09:47	

Surrogate	MB %Rec	MB Flag	LCS Result	LCS Flag	Limits	Units	Analysis Date
Dibromofluoromethane	104		101		84-110	%	06/11/14 09:47
Toluene-D8	104		104		94-109	%	06/11/14 09:47
4-Bromofluorobenzene	106		96		81-133	%	06/11/14 09:47

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: AECOM *OFFICE LOC. Columbia, MD

*PROJECT MGR: J. Canzeri *PHONE NO.: (240) 5656516

EMAIL: FAX NO.: ( )

*PROJECT NAME: 7-11 store 32785 PROJECT NO. 60149116

SITE LOCATION: Hampstead, MD P.O. NO.: 45814 ACM

SAMPLER(S): Nick Barrett DW CERT NO.:

PSS Work Order #: 1406100S PAGE 1 OF 1

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

(2)

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	No. CONTAINERS	SAMPLE TYPE (C = COMP, G = GRAB)	Preservatives Used	HCl	HCl	HCl									REMARKS
							Analysis/ Method Required (3) *	BTEX + oxy 8260	Naphthalene	TPH GRO 8015									
	GAC-2 FINAL	6/9/14	1630	GW	6	G		✓	✓	✓									

(5)

Relinquished By: (1)	Date 6/9/14	Time 18:23	Received By: Parsons
Relinquished By: (2) Parsons	Date 6/10/14	Time 12:00	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

*Requested TAT (One TAT per COC)
☑ 5-Day ☐ 3-Day ☐ 2-Day
☐ Next Day ☐ Emergency ☐ Other

Data Deliverables Required:
COA QC SUMM CLP LIKE OTHER
☑ ☐ ☐ ____

# of Coolers: 1
Custody Seal: ABS
Ice Present: Pres Temp: 5°C
Shipping Carrier: Client

Special Instructions:

DW COMPLIANCE? YES ☐
EDD FORMAT TYPE: AFCOM
STATE RESULTS REPORTED TO: MD ☑ DE ☐ PA ☐ VA ☐ WV ☐ OTHER ____

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

Phase Separation Science, Inc

Sample Receipt Checklist

Work Order #	14061006	**Received By**	Jacob Prucnal
Client Name	AECOM	**Date Received**	06/10/2014 12:00:00 PM
Project Name	7-11 Store 32785	**Delivered By**	Client
Project Number	60144916	**Tracking No**	Not Applicable
Disposal Date	07/15/2014	**Logged In By**	Jacob Prucnal

Shipping Container(s)

No. of Coolers 1

		Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	5
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

Documentation

		Sampler Name	Nick Barrett
COC agrees with sample labels?	Yes	MD DW Cert. No.	N/A
Chain of Custody	Yes		

Sample Container

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

Total No. of Samples Received 1

Total No. of Containers Received 6

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: 06/10/2014

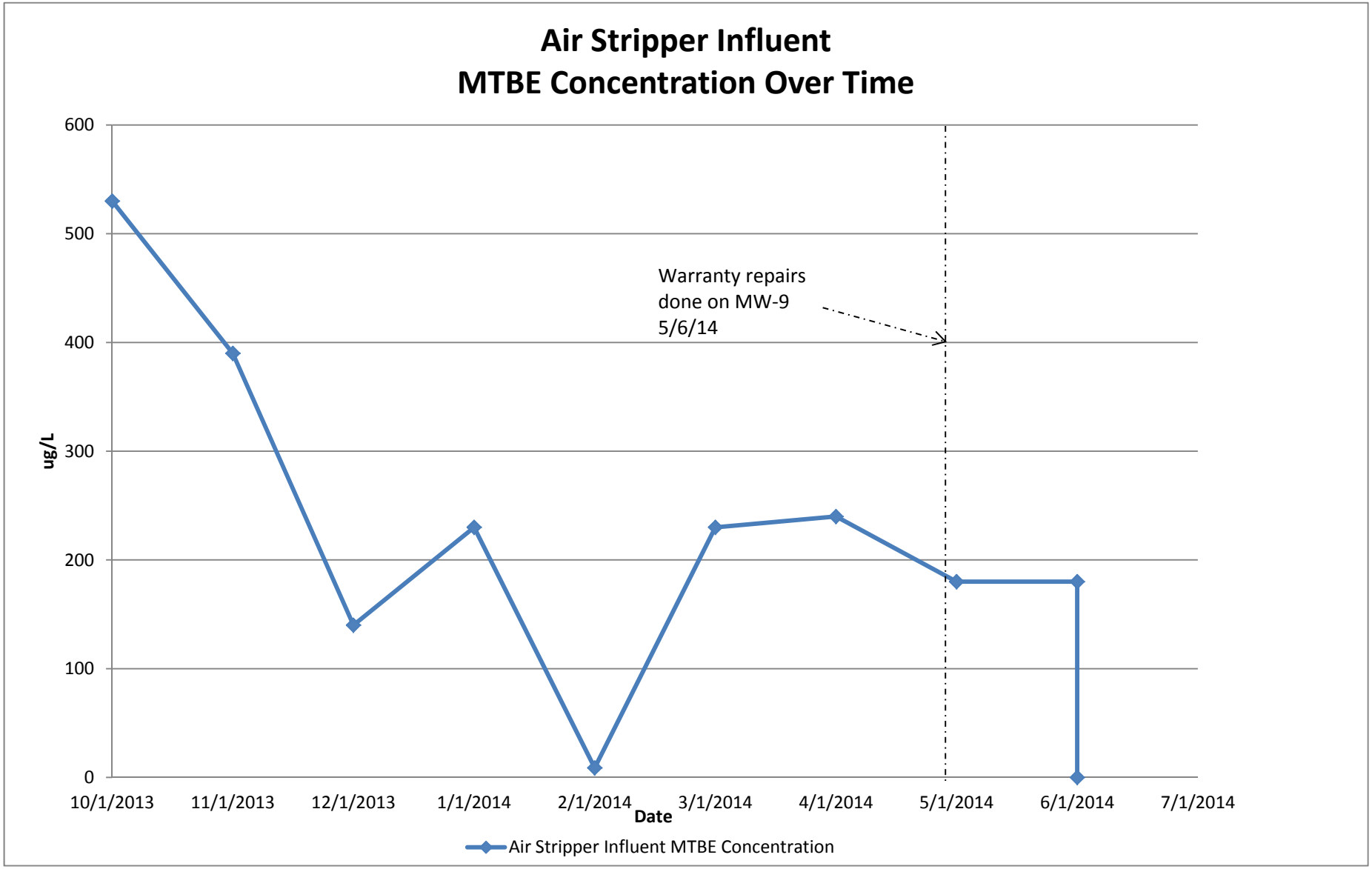
Jacob Prucnal

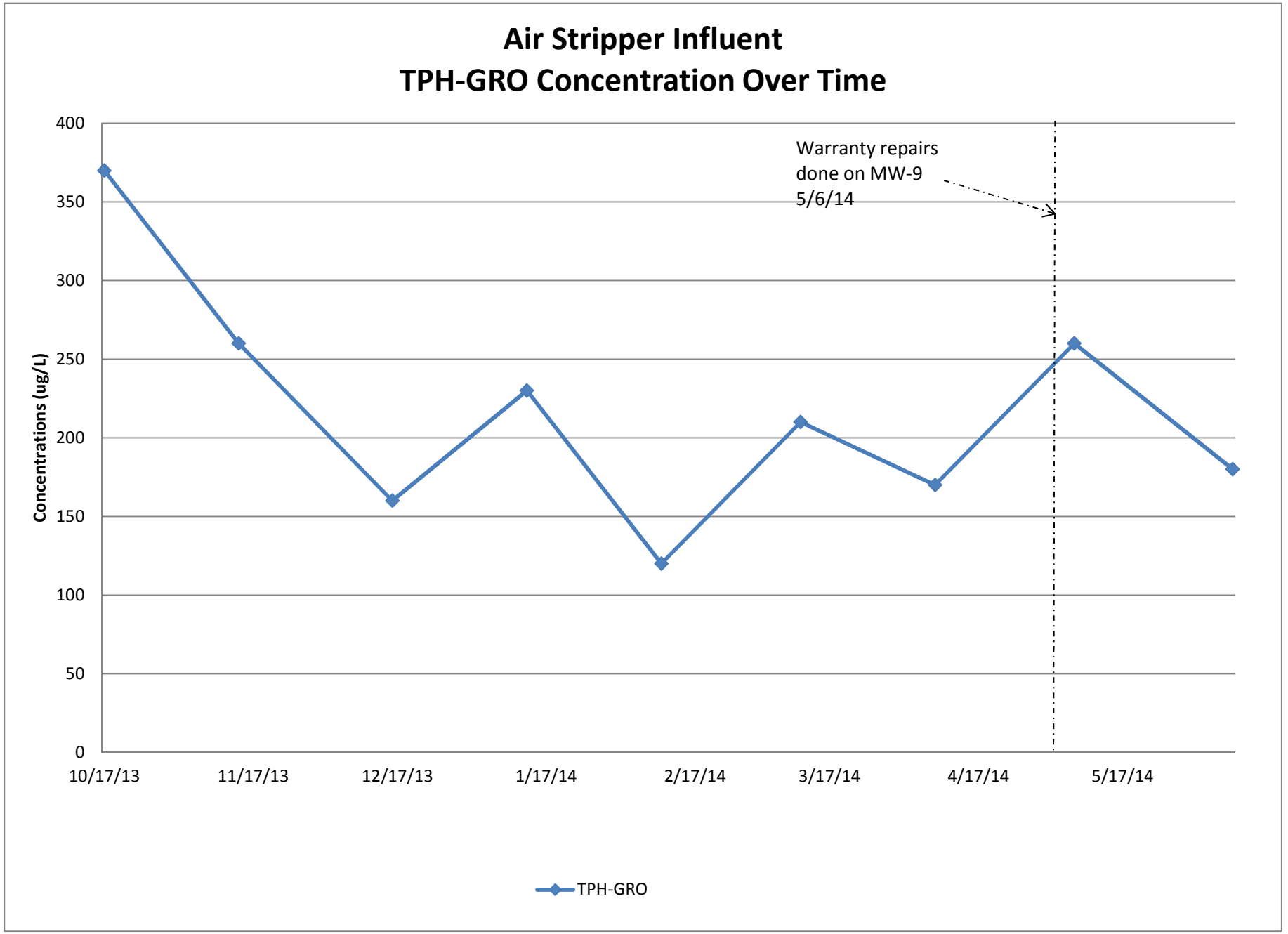
PM Review and Approval: Amy Friedlander — Date: 06/10/2014

Amy Friedlander

ATTACHMENT G

Air Stripper Influent MTBE and TPH-GRO Concentration Graphs-Over-Time


Air Stripper Influent
MTBE Concentration Over Time
600
500
400
300
200
100
0
ug/L
Warranty repairs
done on MW-9
5/6/14
10/1/2013
11/1/2013
12/1/2013
1/1/2014
2/1/2014
3/1/2014
4/1/2014
5/1/2014
6/1/2014
7/1/2014
Date
Air Stripper Influent MTBE Concentration


Air Stripper Influent
TPH-GRO Concentration Over Time
Concentrations (ug/L)
400
350
300
250
200
150
100
50
0
10/17/13
11/17/13
12/17/13
1/17/14
2/17/14
3/17/14
4/17/14
5/17/14
Warranty repairs
done on MW-9
5/6/14
TPH-GRO