

August 22, 2013

Ms. Jeannette DeBartolomeo  
Maryland Department of Environment  
Oil Control Program  
1800 Washington Blvd. Suite 620  
Baltimore, Maryland 21230-1719

AECOM Project: 60144763

**Subject: Bio-Augmentation Pilot Test Report**  
7-Eleven Store No. 22281  
2400 Pleasantville Road  
Fallston, Maryland  
Facility ID No. 0006365  
MDE Case No. 2005-0120HA

Dear Ms. DeBartolomeo,

On behalf of 7-Eleven, Inc. (7-Eleven), AECOM has prepared this subsurface pilot testing summary report for the injection of bio-remediation products to degrade petroleum hydrocarbons, including the fuel oxygenate methyl-tertiary butyl ether (MTBE), at the above-referenced site. This pilot test was performed in accordance with the Revised Bio-Augmentation Pilot Test Work Plan requesting the installation of two shallow injection trenches and a nine-month bio-augmentation testing period which was submitted to the Maryland Department of the Environment (MDE) on January 16, 2012 and was approved on March 6, 2012. The two injection trenches were installed on August 20, 2013. The nine-month bio-augmentation testing period began on September 12, 2012 and was concluded on June 6, 2013.

#### **Introduction**

The site is located within Harford County, Maryland, which has been classified by the MDE as a High Risk Groundwater Use Area (HRGUA). Currently eighteen monitoring wells exist at the site. Sixteen monitoring wells are located on-site and two monitoring wells are located off-site to the north across State Highway 152. Monitoring well HW-1 was destroyed during the October 2008 UST replacement activities. On August 20, 2012, AECOM and Odyssey Environmental Services, Inc. (Odyssey) installed two bio-injection trenches. **Figure 1** is a site map showing the locations of the monitoring wells, bio-injection trenches and other site-related features.

As determined from the historical sampling events, MTBE has consistently been detected in the shallow monitoring wells MW-4A, MW-6, MW-9, MW-10, MW-11, MW-12, MW-13, and HW-3 are above the MDE guidelines of 20 µg/L. MTBE concentrations in the deeper groundwater zone have historically remained below 20 µg/L in monitoring wells MW-1B, MW-3B and MW-4B, with the exception of a detection of 21 µg/L in MW-4B in December 2006. However, MTBE concentrations have ranged from 12 µg/L to 100 µg/L in the deep monitoring well MW-8B.

The objective of this revised bio-augmentation pilot test was to reduce the concentration of petroleum compounds including MTBE in the shallow groundwater by injecting groundwater amended nutrients,

naturally-occurring microorganisms, enzymes and dissolved oxygen. Subsurface conditions within the pilot test area were monitored throughout the proposed nine month testing period.

### **Trench Construction**

Per MDE approval in the letter dated March 6, 2013, included as **Attachment A**, AECOM and Odyssey installed three bio-injection trenches (B-1, B-2 and C) on August 20, 2012. Each trench is three feet wide and approximately 12 to 15 feet bgs and backfilled with pea gravel to approximately 5 feet bgs. A filter fabric was installed on top of the pea gravel in each trench prior to backfilling with clean soil and compacted to approximately 95% compaction to approximately six inches bgs. The top six inches were completed to existing grade (asphalt or landscaping). Access points were installed into each of the trenches during construction for the even distribution of injection fluids. **Figure 1** is a site plan showing the locations of the bio-injection trenches.

### **Field Pilot Testing**

A pilot test of enhanced in-situ bioremediation using periodic injections of Petrozyme™, a biological stimulator, to augment and stimulate the naturally occurring population of hydrocarbon degrading bacteria in the areas of residual dissolved-phase petroleum hydrocarbons detected in monitoring wells north of monitoring well MW-4A. The application of the bio-augmentation technology involved a program of two site visits per month for nine months which began on September 12, 2012 and was concluded on June 6, 2013. Petrozyme™ products and custom blended nutrients (CBN) were mixed with approximately 750 gallons of potable water infused with dissolved oxygen (DO). The solution was then injected equally into each of the three trenches through the trench access points. Six monitoring wells (MW-6, MW-9, MW-10, MW-11, MW-13 and HW-3) were monitored for dissolved oxygen (DO) concentrations prior to the Petrozyme™ injection and again immediately following the injection. A summary of the injection dates and DO concentrations following the injections are included as **Table 1**.

The injectate supports aerobic in-situ microbial degradation of BTEX and MTBE. The end-products of hydrocarbon and BTEX degradation are carbon dioxide ( $\text{CO}_2$ ) and water ( $\text{H}_2\text{O}$ ). The intermediate degradation products for petroleum hydrocarbon constituents (fatty acids, alcohols, etc.) are inert and easily degradable by indigenous bacteria already in the subsurface. No other reaction products or byproducts were formed through these natural biological processes.

### **Summary of Site Activities**

#### **Baseline Monitoring Summary**

An assessment of the subsurface conditions with respect to the current level of biological activity and the potential to enhance the biological degradation of petroleum hydrocarbons was performed prior to the initiation of the proposed bio-augmentation activities on September 12, 2012 and the laboratory results have been used to establish a baseline to which data gathered throughout the pilot test program is compared. The sampling event on September 12, 2013 was performed in accordance with previously established monitoring procedures and includes the collection of groundwater samples from each monitoring well associated with the site. The groundwater samples were analyzed for BTEX, MTBE and fuel oxygenates using EPA Method 8260B, TPH-GRO using EPA Method 8015B.

#### **Test Implementation Monitoring Summary**

Throughout the proposed pilot test program, monitoring of biological, chemical and physical parameters were conducted within the test area. Analysis of this site data resulting from these monitoring activities were performed with respect to baseline conditions to evaluate the

effectiveness of the bio-augmentation test and to identify any opportunities to maximize the efficiency of the bio-augmentation process. All site monitoring activities were performed prior to the initiation of the bio-augmentation activities anticipated for that particular visit.

As detailed in the previous sections, biweekly visits to the site were performed to facilitate the addition of augmented groundwater to the pilot test treatment area. Field measurement of groundwater dissolved oxygen concentration in monitoring wells HW-3, MW-6, MW-9, MW-11, and MW-13 were collected upon arrival at the site during each biweekly visit.

Routine groundwater sampling of all monitoring wells associated with the site was conducted on a quarterly basis to evaluate the distribution of dissolved-phase petroleum hydrocarbons. The quarterly groundwater sampling events were conducted on December 6, 2012, and March 11 and June 6, 2013 in an identical manner to the established sampling regimen as described previously for baseline sampling. A summary of groundwater laboratory data is provided in

**Table 2.** Laboratory analytical reports are included as **Attachment B**. Collection of groundwater samples for evaluation of any changes induced in the biological characteristics within the test area were conducted on February 14, March 11 and June 6, 2013. Groundwater samples were obtained from the same monitoring wells used for baseline sampling (HW-3, MW-6, MW-9, MW-11, and MW-13) and analyzed the groundwater samples for nitrate, nitrite, and orthophosphate. A summary of groundwater laboratory data is provided in **Table 3**. Laboratory analytical reports are included as **Attachment C**.

## Results

The following is an assessment of the efficiency and effectiveness of the bioremediation program.

The injectate supports aerobic in-situ microbial degradation of BTEX and MTBE. The intermediate degradation products for petroleum hydrocarbon constituents (fatty acids, alcohols, etc.) are inert and easily degradable by indigenous bacteria already in the subsurface.

Laboratory data indicates a strong relationship between groundwater DO levels and nutrient levels (mainly nitrate and orthophosphate) and reduction of dissolved-phase petroleum hydrocarbon concentrations in the shallow water-bearing zone in the areas of monitoring wells HW-3, MW-6, MW-9, MW-11, and MW-13. Over the course of the nine-month bio-augmentation pilot study, an overall reduction of petroleum-related hydrocarbon concentrations followed increases in nutrient levels stimulated by the injection of Petrozyme™ products into the shallow aquifer. From September 12, 2012 to June 6, 2013, MTBE concentrations in monitoring wells MW-6 and MW-10 were reduced by approximately 50%. MTBE concentrations in were reduced by 20% in MW-9, 58% in MW-11, 14% in MW-13 and approximately 67% in HW-3. Of the wells in the near vicinity, HW-3 rebounded to 1,100 µg/L in June 2013 after dropping to 500 µg/L in the March 2013 sample. A summary of groundwater laboratory data for monthly groundwater sampling is provided in **Table 2**. Graphs illustrating the decline in MTBE concentrations with relation to the DO levels since the beginning of the bio-augmentation can be seen in **Attachment D**. In addition, graphs illustrating the decline in MTBE concentrations with relation to nitrate levels and to orthophosphate levels are included as **Attachment E** and **Attachment F**, respectively. A summary of groundwater laboratory data of nitrate, nitrite, and orthophosphate is provided in **Table 3**. Laboratory analytical reports are included as **Attachment B**.

## Test Follow-up Monitoring Summary

Currently, the routine site monitoring schedule associated with the evaluation of the distribution of dissolved-phase petroleum hydrocarbons is continuing according to the previously-established schedule. Groundwater samples will be collected quarterly from all monitoring wells associated with the site and analyzed for VOCs, fuel oxygenates and TPH-GRO.

The bio-augmentation of groundwater has shown it can be effective in the remediation of MTBE at this site. The field pilot testing has provided evidence that bio-augmentation products can decrease MTBE concentrations over time. Based on these findings, AECOM on behalf of 7-Eleven requests that the bio-augmentation testing be extended for an additional nine month period beginning September 2013.

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

Yours sincerely,



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Staff Geologist  
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Marie Treiber  
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cc: Harford County Health Department  
7-Eleven Project File

**FIGURE**

FIGURE 1 – Site Plan with Location of Bio-Injection Trenches

**TABLES**

TABLE 1 – Monitoring Well Groundwater Dissolved Oxygen Levels

TABLE 2 – Groundwater Analytical Results (Groundwater Characteristics)

TABLE 3 – Monitoring Well Groundwater Nutrient Analytical

**ATTACHMENTS**

ATTACHMENT A – MDE Approval Letter (March 6, 2013)

ATTACHMENT B – Laboratory Analytical Reports (Quarterly Groundwater Sampling)

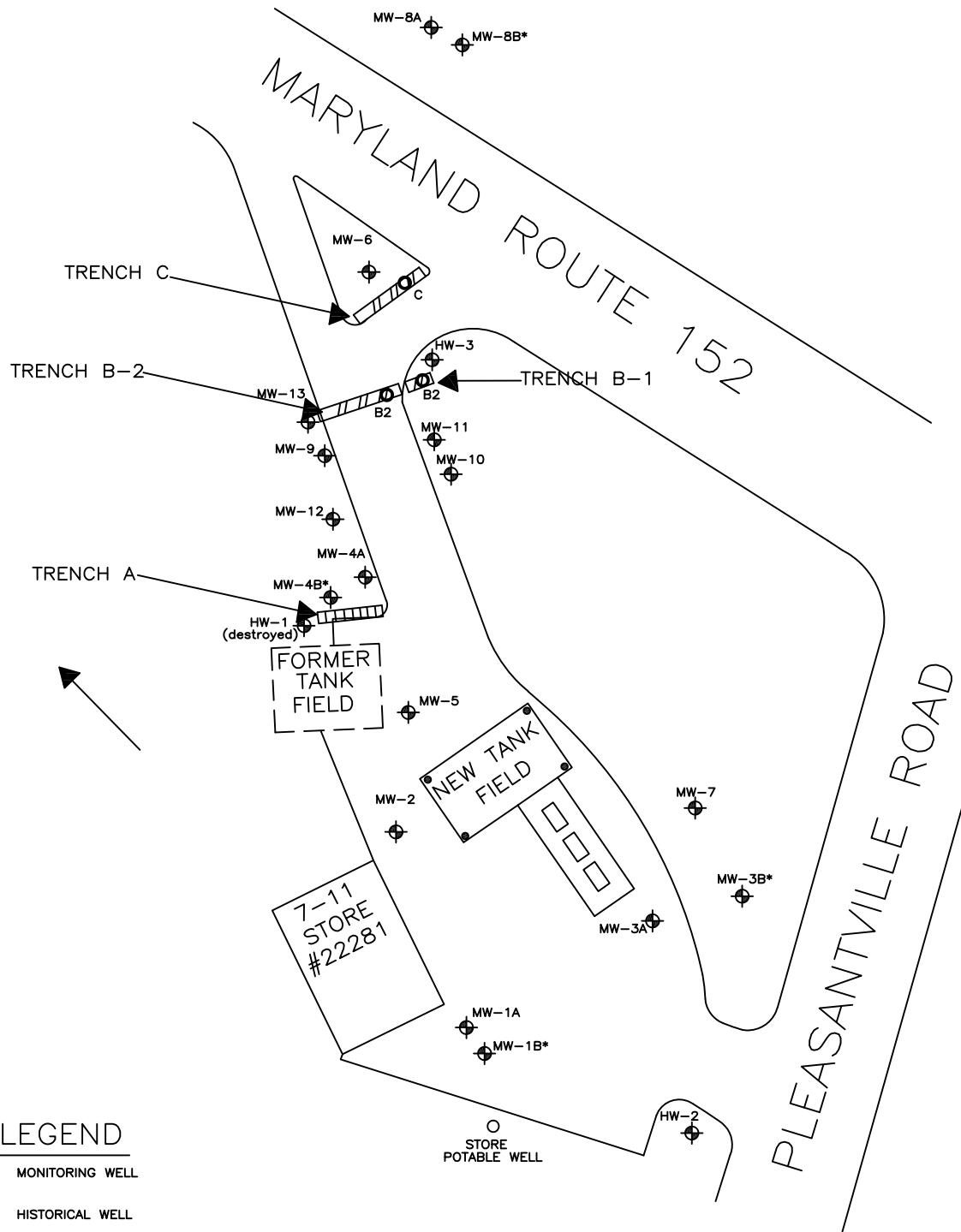
ATTACHMENT C – Laboratory Analytical Reports (Nutrients)

ATTACHMENT D – MTBE Concentration vs. Dissolved Oxygen Graphs

ATTACHMENT E – MTBE Concentrations vs. Nitrate Levels Graphs

ATTACHMENT F – MTBE Concentrations vs. Orthophosphate Levels Graphs

## **FIGURE**



#### LEGEND

- MONITORING WELL
- HW HISTORICAL WELL
- TANK FIELD WELL
- \* DEEP WELL (NOT INCLUDED IN CONTOURS)
- ← GROUNDWATER FLOW DIRECTION
- ▨ TRENCH INSTALLED AUGUST 20, 2012
- ▨ EXISTING TRENCH
- Injection Point

#### SITE PLAN

7-ELEVEN Inc.  
 STORE No. 22281  
 2400 PLEASANTVILLE ROAD  
 FALLSTON, MARYLAND



APPROX. SCALE: FT

40

0

August 2013

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Drawn By: JLT

Reviewed By: NP

Project No.: 60144763

FIGURE 1

AECOM

## **TABLES**

**Table 1**  
**Monitoring Well Groundwater Dissolved Oxygen Levels**  
**7-Eleven Store No. 22281**  
**Fallston, Maryland**

Sample ID	Date	Dissolved Oxygen (mg/L)
MW-6	3/1/12	1.34
	9/12/12	1.44
	1/31/2013	0.94
	2/7/2013	0.7
	2/14/2013	4.31
	3/1/2013	2.93
	3/11/2013	0.9
	3/14/2013	5.9
	4/11/2013	0.25
	4/26/2013	0.28
	5/10/2013	0.32
	5/24/2013	0.58
	6/6/2013	0.77
MW-9	3/1/2012	0.46
	9/12/2012	1.15
	1/31/2013	1.32
	2/7/2013	3.9
	2/14/2013	4.94
	3/1/2013	2.09
	3/11/2013	0.8
	3/14/2013	2.32
	4/11/2013	0.3
	4/26/2013	0.44
	5/10/2013	0.24
	5/24/2013	0.57
	6/6/2013	0.81
MW-10	3/1/2012	4.03
	9/12/2012	1.09
	1/31/2013	1.78
	2/7/2013	1.7
	2/14/2013	1.01
	3/1/2013	2.22
	3/11/2013	0.9
	3/14/2013	1.77
	4/11/2013	0.1
	4/26/2013	0.28
	5/10/2013	0.34
	5/24/2013	0.58
	6/6/2013	0.58

Sample ID	Date	Dissolved Oxygen (mg/L)
MW-11	3/1/2012	9.9
	9/12/2012	1.11
	1/31/2013	1.3
	2/7/2013	1.1
	2/14/2013	1.11
	3/1/2013	2.01
	3/11/2013	0.6
	3/14/2013	10.56
	4/11/2013	0.11
	4/26/2013	0.2
	5/10/2013	0.22
	5/24/2013	0.46
	6/6/2013	0.49
MW-13	3/1/2012	0.48
	9/12/2012	1.11
	1/31/2013	1.71
	2/7/2013	3.1
	2/14/2013	1.38
	3/1/2013	1.78
	3/11/2013	1
	3/14/2013	2.24
	4/11/2013	0.14
	4/26/2013	0.26
	5/10/2013	0.25
	5/24/2013	0.63
	6/6/2013	0.59
HW-3	9/12/2012	1.75
	1/31/2013	4.43
	2/7/2013	0.9
	2/14/2013	4.16
	3/1/2013	2.24
	3/11/2013	0.4
	3/14/2013	8.07
	4/11/2013	0.14
	4/26/2013	0.28
	5/10/2013	0.31
	5/24/2013	0.59
	6/6/2013	0.6

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
7-Eleven Store No. 22281  
Fallston, Maryland

Sample ID	Date	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	BTEX ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	TPH-GRO ( $\mu\text{g/L}$ )	TPH-DRO (mg/L)
MW-1A	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.56
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.50
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	1	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	1	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
MW-1B	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	11	ND@25	ND@25	ND@100	ND@0.5
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	12	ND@25	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	6	ND@25	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	3	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	6	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	6	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
7-Eleven Store No. 22281  
Fallston, Maryland

Sample ID	Date	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	BTEX ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	TPH-GRO ( $\mu\text{g/L}$ )	TPH-DRO (mg/L)
MW-2	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	3	ND@25	ND@25	ND@100	ND@0.56
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	37	ND@25	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	49	28	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	52	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	31	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	27	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	12	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	9	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	5	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	5	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	12/23/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	1.2	ND@20	ND@10	ND@100	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
MW-3A	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	2400	1700	110	2700	ND@0.5
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	260	120	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	37	ND@25	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	3	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	2	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
7-Eleven Store No. 22281  
Fallston, Maryland

Sample ID	Date	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	BTEX ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	TPH-GRO ( $\mu\text{g/L}$ )	TPH-DRO (mg/L)
MW-3B	2/16/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	2/22/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	2.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
 7-Eleven Store No. 22281  
 Fallston, Maryland

Sample ID	Date	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	BTEX ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	TPH-GRO ( $\mu\text{g/L}$ )	TPH-DRO (mg/L)
MW-4A	7/26/05	11	ND@1	ND@1	10	21	31,000	25,000	E 2,200	30,000	ND@0.5
	11/22/05	15	ND@1	ND@1	10	25	42,000	29,000	3,200	NA	NA
	3/16/06	ND@5	ND@5	ND@5	ND@10	0	20,000	9,900	940	2,100	ND@0.5
	6/30/06	14	3	ND@1	12	29	E 3,300	E 3,400	E 560	2,000	LF 0.52
	9/12/06	34	9	ND@1	25	68	20,000	E 21,000	E 630	2,900	ND@0.5
	12/7/06	30	ND@5	ND@5	11	41	27,000	32000	780	3,000	LF 0.72
	3/28/07	8	ND@1	ND@1	6	14	E 37,000	E 41,000	E 490	2,500	0.7
	6/22/07	8	ND@1	ND@1	10	18	E 12,000	E 5,300	E 480	2,500	ND@0.5
	9/25/07	7	ND@1	ND@1	6	13	E 11,000	E 4,500	E 560	1,500	ND@0.5
	12/14/07	7	ND@1	ND@1	6	13	E 7,600	ND@10	E 460	1,700	ND@0.5
	3/14/08	ND@100	ND@100	ND@100	ND@300	ND	15,000	11,000	ND@1,000	20,000	ND@0.5
	6/18/08	ND@50	ND@50	ND@50	ND@150	ND	8,100	4,500	ND@500	1,500	ND@0.5
	9/3/08	7	ND@1	ND@1	ND@3	7	8,200	11,000	460	4,400	ND@0.5
	12/23/08	ND@100	ND@100	ND@100	ND@300	ND	15,000	9,500	ND@1,000	6,000	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	4,900	4,100	130	720	NA
	6/8/09	2	ND@1	ND@1	ND@3	2	5,100	2,900	150	1,600	NA
	9/27/09	3	ND@1	ND@1	1	4	6,600	3,700	220	9,100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	1,500	660	54	1,900	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	1,500	470	55	1,400	NA
	5/6/10	ND@1	ND@1	ND@1	ND@3	ND	150	61	ND@10	120	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	23	ND@20	ND@10	ND@100	NA
	7/31/10	ND@1	ND@1	ND@1	ND@3	ND	35	ND@20	ND@10	ND@100	NA
	8/16/10	ND@1	ND@1	ND@1	ND@3	ND	55	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	740	340	36	1,100	NA
	10/26/10	ND@1	ND@1	ND@1	ND@3	ND	730	210	ND@10	810	NA
	11/23/10	ND@1	ND@1	ND@1	ND@3	ND	870	210	41	850	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	1,400	420	56	1,400	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	860	90	45	850	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	370	86	15	280	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	390	82	18	530	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	220	ND@20	ND@10	200	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	1,100	ND@20	48	1,100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	210	39	ND@10	150	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	150	ND@20	ND@10	150	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	560	120	33	870	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	410	58	17	460	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	400	110	18	490	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	390	97	22	490	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	770	180	28	690	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	660	210	30	760	NA

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
7-Eleven Store No. 22281  
Fallston, Maryland

Sample ID	Date	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	BTEX ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	TPH-GRO ( $\mu\text{g/L}$ )	TPH-DRO (mg/L)
MW-4B	2/16/06	ND@1	ND@1	ND@1	ND@3	ND	16	ND@25	ND@25	ND@100	ND@0.5
	2/22/06	ND@1	ND@1	ND@1	ND@3	ND	16	ND@25	ND@25	ND@100	ND@0.5
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	13	ND@25	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	7	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	6	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	21	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	7	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	3	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	8	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	6	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	5	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	12	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	13	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	18	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	11	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	6	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	13	ND@20	ND@10	ND@100	NA
	7/31/10	ND@1	ND@1	ND@1	ND@3	ND	11	ND@20	ND@10	ND@100	NA
	8/16/10	ND@1	ND@1	ND@1	ND@3	ND	11	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	12	ND@20	ND@10	ND@100	NA
	10/26/10	ND@1	ND@1	ND@1	ND@3	ND	14	ND@20	ND@10	ND@100	NA
	11/23/10	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	5.3	ND@20	ND@10	ND@100	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	3.3	ND@20	ND@10	ND@100	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	3.3	ND@20	ND@10	ND@100	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	1.7	21	ND@10	ND@100	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	2.1	ND@20	ND@10	ND@100	NA

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
7-Eleven Store No. 22281  
Fallston, Maryland

Sample ID	Date	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	BTEX ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	TPH-GRO ( $\mu\text{g/L}$ )	TPH-DRO (mg/L)
MW-5	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	10	ND@25	ND@25	ND@100	ND@0.5
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	15	ND@25	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	<b>76</b>	44	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	11	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	<b>27</b>	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@1	ND@3	ND	15	ND@10	ND@10	ND@100	ND@0.5
	3/28/07	ND@1	ND@1	ND@1	ND@3	ND	3	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	3	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	4	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@1	ND@3	ND	5	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@1	ND@3	ND	7	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	9	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	7	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	<b>32</b>	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	15	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	8	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	5	24	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	3	ND@20	ND@10	ND@100	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	1.7	ND@20	ND@10	ND@100	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	1.5	ND@20	ND@10	ND@100	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	1.4	ND@20	ND@10	ND@100	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	1.5	ND@20	ND@10	ND@100	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	1.1	ND@20	ND@10	ND@100	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	1.1	ND@20	ND@10	ND@100	NA

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
 7-Eleven Store No. 22281  
 Fallston, Maryland

Sample ID	Date	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	BTEX ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	TPH-GRO ( $\mu\text{g/L}$ )	TPH-DRO (mg/L)
MW-6	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	<b>760</b>	560	28	<b>840</b>	ND@0.5
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	<b>1,900</b>	990	77	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	<b>1,300</b>	650	48	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	<b>E 860</b>	59	48	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	<b>1,200</b>	78	52	ND@100	ND@0.5
	12/7/06	ND@10	ND@10	ND@10	ND@30	ND	<b>2,400</b>	140	110	<b>140</b>	ND@0.5
	3/28/07	ND@100	ND@100	ND@100	ND@300	ND	<b>1,100</b>	ND@1,000	ND@1,000	<b>110</b>	ND@0.5
	6/22/07	ND@1	ND@1	ND@1	ND@3	ND	<b>E 1,000</b>	78	62	<b>130</b>	ND@0.5
	9/25/07	ND@1	ND@1	ND@1	ND@3	ND	<b>E 1,200</b>	120	65	<b>150</b>	ND@0.5
	12/14/07	2	ND@1	ND@1	ND@3	2	<b>E 3,800</b>	E 330	E 350	<b>600</b>	ND@0.5
	3/14/08	ND@50	ND@50	ND@50	ND@350	ND	<b>3,000</b>	ND@500	ND@500	<b>3,700</b>	ND@0.5
	6/18/08	ND@10	ND@10	ND@10	ND@30	ND	<b>2,200</b>	ND@200	120	<b>510</b>	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	<b>1,200</b>	210	84	<b>300</b>	ND@0.5
	12/27/08	ND@10	ND@10	ND@10	ND@30	ND	<b>3,600</b>	320	260	<b>1,700</b>	ND@0.5
	3/24/09	ND@10	ND@10	ND@10	ND@30	ND	<b>2,100</b>	230	120	<b>360</b>	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	<b>2,600</b>	230	170	<b>810</b>	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	<b>1,600</b>	170	99	<b>2,300</b>	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	<b>1,200</b>	190	78	<b>1,500</b>	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	<b>330</b>	87	18	<b>330</b>	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	<b>670</b>	210	29	<b>590</b>	NA
	7/31/10	ND@1	ND@1	ND@1	ND@3	ND	<b>1,400</b>	290	71	<b>1,800</b>	NA
	8/16/10	ND@1	ND@1	ND@1	ND@3	ND	<b>1,700</b>	310	84	<b>2,300</b>	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	<b>1,700</b>	750	78	<b>2,000</b>	NA
	10/26/10	ND@1	ND@1	ND@1	ND@3	ND	<b>2,400</b>	900	130	<b>2,800</b>	NA
	11/23/10	ND@1	ND@1	ND@1	ND@3	ND	<b>2,400</b>	940	130	<b>3,400</b>	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	<b>2,200</b>	920	87	<b>2,100</b>	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	<b>2,400</b>	1,200	130	<b>2,400</b>	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	<b>2,300</b>	1,000	99	<b>1,800</b>	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	<b>2,500</b>	800	120	<b>3,500</b>	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	<b>2,200</b>	390	100	<b>2,900</b>	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	<b>1,700</b>	ND@20	75	<b>2,000</b>	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	<b>1,200</b>	350	50	<b>850</b>	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	<b>2,300</b>	630	110	<b>1,600</b>	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	<b>1,300</b>	320	60	<b>1,700</b>	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	<b>1,300</b>	330	53	<b>1,300</b>	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	<b>1,600</b>	490	68	<b>1,400</b>	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	<b>1,400</b>	230	65	<b>1,500</b>	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	<b>810</b>	78	34	<b>660</b>	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	<b>750</b>	48	35	<b>820</b>	NA

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
7-Eleven Store No. 22281  
Fallston, Maryland

Sample ID	Date	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	BTEX ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	TPH-GRO ( $\mu\text{g/L}$ )	TPH-DRO (mg/L)
MW-7	7/26/05	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.56
	11/22/05	ND@1	ND@1	ND@1	ND@3	ND	ND@1	34	ND@25	NA	NA
	3/16/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	6/30/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	9/12/06	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@25	ND@25	ND@100	ND@0.5
	12/7/06	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	<b>0.94</b>
	3/28/07	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	12/23/08	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	1	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	13	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	ND@1	ND@20	ND@10	ND@100	NA

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
7-Eleven Store No. 22281  
Fallston, Maryland

Sample ID	Date	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	BTEX ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	TPH-GRO ( $\mu\text{g/L}$ )	TPH-DRO (mg/L)
MW-8A	3/28/07	ND@1	1	ND@100	ND@3	1	<b>44</b>	ND@10	ND@10	ND@100	ND@0.5
	6/22/07	ND@1	ND@1	ND@100	ND@3	ND	9	ND@10	ND@10	ND@100	ND@0.5
	9/25/07	ND@1	ND@1	ND@100	ND@3	ND	3	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@100	ND@3	ND	ND@1	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@100	ND@3	ND	3	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	ND@0.5
	12/27/08	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	4	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	2	ND@20	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	5	ND@20	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	7	ND@20	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	17	ND@20	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	13	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	<b>24</b>	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	9	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	<b>21</b>	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	<b>30</b>	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	<b>30</b>	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	<b>33</b>	ND@20	ND@10	ND@100	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	<b>32</b>	ND@20	ND@10	ND@100	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	19	ND@20	ND@10	ND@100	NA
	9/12/12	ND@1	2.1	ND@1	ND@3	2.1	<b>43</b>	ND@20	ND@10	ND@100	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	<b>38</b>	ND@20	ND@10	ND@100	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	<b>32</b>	ND@20	ND@10	ND@100	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	<b>28</b>	ND@20	ND@10	ND@100	NA
MW-8B	10/15/07	ND@1	1	ND@1	ND@3	1	14	ND@10	ND@10	ND@100	ND@0.5
	12/14/07	ND@1	ND@1	ND@100	ND@3	ND	15	ND@10	ND@10	ND@100	ND@0.5
	3/14/08	ND@1	ND@1	ND@100	ND@3	ND	16	ND@10	ND@10	ND@100	ND@0.5
	6/18/08	ND@1	ND@1	ND@1	ND@3	ND	<b>24</b>	ND@20		ND@100	ND@0.5
	9/3/08	ND@1	ND@1	ND@1	ND@3	ND	<b>28</b>	ND@20	ND@10	ND@100	ND@0.5
	12/27/08	ND@1	ND@1	ND@1	ND@3	ND	<b>23</b>	ND@20	ND@10	ND@100	ND@0.5
	3/24/09	ND@1	ND@1	ND@1	ND@3	ND	<b>39</b>	ND@20	ND@10	ND@100	NA
	6/8/09	ND@1	ND@1	ND@1	ND@3	ND	<b>64</b>	25	ND@10	ND@100	NA
	9/27/09	ND@1	ND@1	ND@1	ND@3	ND	<b>77</b>	31	ND@10	ND@100	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	<b>93</b>	31	ND@10	ND@100	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	<b>100</b>	33	ND@10	ND@100	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	<b>56</b>	ND@20	ND@10	ND@100	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	<b>65</b>	ND@20	ND@10	ND@100	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	<b>56</b>	ND@20	ND@10	ND@100	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	<b>34</b>	ND@20	ND@10	ND@100	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	<b>29</b>	ND@20	ND@10	ND@100	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	<b>22</b>	ND@20	ND@10	ND@100	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	<b>28</b>	ND@20	ND@10	ND@100	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	<b>22</b>	ND@20	ND@10	ND@100	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	12	ND@20	ND@10	ND@100	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	18	ND@20	ND@10	ND@100	NA
	12/6/12	ND@1	280	ND@1	ND@3	280	15	ND@20	ND@10	<b>670</b>	NA
	3/11/13	ND@1	75	ND@1	ND@3	75	17	ND@20	ND@10	<b>150</b>	NA
	6/6/13	ND@1	2.1	ND@1	ND@3	2.1	17	ND@20	ND@10	ND@100	NA

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MW-9	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	1,800	490	75	1,600	NA
	5/6/10	ND@1	ND@1	ND@1	ND@3	ND	1,200	330	52	1,300	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	990	290	33	910	NA
	7/31/10	ND@1	ND@1	ND@1	ND@3	ND	1,600	480	71	2,100	NA
	8/16/10	ND@1	ND@1	ND@1	ND@3	ND	1,300	350	49	1,600	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	990	340	34	1,100	NA
	10/26/10	ND@1	ND@1	ND@1	ND@3	ND	1,300	500	52	1,400	NA
	11/23/10	ND@1	ND@1	ND@1	ND@3	ND	1,200	360	50	1,300	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	1,400	470	48	1,400	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	1,200	190	57	1,300	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	1,100	340	42	850	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	1,300	320	59	1,800	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	1,200	150	53	1,500	NA
	6/29/11	ND@1	ND@1	ND@1	ND@3	ND	1,600	200	68	1,700	NA
	9/22/11	ND@1	ND@1	ND@1	ND@3	ND	2,200	690	ND@100	1,300	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	2,000	560	95	1,500	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	1,800	790	81	2,300	NA
	6/5/12	1.3	ND@1	ND@1	ND@3	ND	3,900	1,600	160	3,800	NA
	9/12/12	1.1	ND@1	ND@1	ND@3	1.1	2,500	1,200	130	2,700	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	1,600	840	90	1,900	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	2,500	1,100	97	2,000	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	2,000	920	83	2,100	NA
MW-10	3/10/10	6	ND@1	ND@1	11	17	17,000	5,400	810	18,000	NA
	5/6/10	3	ND@1	1	4	8	8,300	2,800	350	10,000	NA
	6/7/10	1	ND@1	ND@1	1	2	4,700	1,700	350	5,200	NA
	7/31/10	1	ND@1	ND@1	2	3	6,600	4,200	330	8,500	NA
	8/16/10	2	ND@1	ND@1	2	4	6,600	3,600	330	9,200	NA
	9/20/10	1	ND@1	ND@1	1	2	5,600	5,700	250	6,900	NA
	10/26/10	1	ND@1	ND@1	1	2	6,100	6,600	280	7,100	NA
	11/23/10	2	ND@1	ND@1	3	5	7,700	4,800	410	9,400	NA
	12/20/10	2	ND@1	ND@1	4	6	11,000	9,600	470	12,000	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	8,300	5,200	530	11,000	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	5,700	4,600	240	5,900	NA
	4/26/11	2	ND@1	ND@1	3	5	5,600	6,000	290	8,000	NA
	5/25/11	2	ND@1	ND@1	3	5	5,800	6,000	270	7,500	NA
	6/29/11	ND@5	ND@5	ND@5	ND@15	ND	4,100	4,400	180	4,800	NA
	9/22/11	ND@20	ND@20	ND@20	ND@60	ND	2,700	1,700	180	1,800	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	2,700	2,900	120	1,900	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	1,100	1,100	51	1,500	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	1,000	920	34	1,100	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	1,000	1,000	41	1,100	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	1,000	1,500	50	1,100	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	880	1,300	37	750	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	520	810	23	660	NA

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
7-Eleven Store No. 22281  
Fallston, Maryland

Sample ID	Date	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Xylenes ( $\mu\text{g/L}$ )	BTEX ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	TPH-GRO ( $\mu\text{g/L}$ )	TPH-DRO (mg/L)
MW-11	1/5/11	6	ND@1	ND@1	14	20	11,000	14,000	660	16,000	NA
	3/22/11	4	ND@1	ND@1	7	11	8,800	9,600	440	10,000	NA
	4/26/11	2	ND@1	ND@1	3	5	5,800	7,200	300	7,600	NA
	5/25/11	1	ND@1	ND@1	1	2	3,900	3,500	200	5,200	NA
	6/29/11	ND@5	ND@5	ND@5	ND@15	ND	4,000	4,300	170	4,400	NA
	9/22/11	ND@20	ND@20	ND@20	ND@60	ND	3,300	2,300	ND@200	1,900	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	2,200	2,700	91	1,500	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	1,100	1,300	51	1,500	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	900	1,100	30	950	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	1,400	2,400	61	1,500	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	1,400	2,800	76	1,500	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	1,100	3,700	47	940	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	590	1,700	25	690	NA
MW-12	1/5/11	ND@1	ND@1	ND@1	ND@3	ND	560	56	20	670	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	420	84	13	340	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	530	94	18	700	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	520	390	17	660	NA
	6/29/11	ND@5	ND@5	ND@5	ND@15	ND	540	110	ND@50	610	NA
	9/22/11	ND@5	ND@5	ND@5	ND@15	ND	380	ND@100	ND@50	270	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	490	88	14	400	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	380	120	12	490	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	240	46	ND@10	300	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	220	61	ND@10	240	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	160	32	ND@10	170	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	160	72	ND@10	130	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	140	ND@20	ND@10	150	NA
MW-13	1/5/11	ND@1	ND@1	ND@1	ND@3	ND	590	70	25	660	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	510	96	19	410	NA
	4/26/11	ND@1	ND@1	ND@1	ND@3	ND	560	99	24	730	NA
	5/25/11	ND@1	ND@1	ND@1	ND@3	ND	700	42	28	880	NA
	6/29/11	ND@5	ND@5	ND@5	ND@15	ND	770	ND@100	ND@50	750	NA
	9/22/11	ND@5	ND@5	ND@5	ND@15	ND	850	170	ND@50	530	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	1,100	92	47	840	NA
	3/1/12	ND@1	ND@1	ND@1	ND@3	ND	1,600	210	82	2,000	NA
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	1,200	130	53	1,400	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	1,000	150	44	1,100	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	770	450	40	900	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	1,000	180	50	940	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	860	290	39	1,000	NA
HW-1	3/16/06	100	880	ND@5	1,690	2,670	3,700	1,800	ND@130	41,000	3.6
	6/30/06	8	E 380	170	E 790	178	62	56	ND@25	2,700	LF/DF 2
	9/12/06										*Not Sampled, Well Dry
	12/7/06										*Not Sampled, Well Dry
	3/28/07										*Not Sampled, Well Dry
	6/13/07										*Not Sampled, Well Dry
	9/25/07										*Not Sampled, Well Dry
	12/14/07										*Not Sampled, Well Dry
	3/14/08										*Not Sampled, Well Dry
	6/18/08										*Not Sampled, Well Dry
	9/3/08										*Not Sampled, Well Dry
	12/23/08										*Not Sampled; well destroyed during 10/08 UST excavation activities

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
7-Eleven Store No. 22281  
Fallston, 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)
HW-2	3/16/06					*Not Sampled, Well Dry					
	6/30/06					*Not Sampled, Well Dry					
	9/12/06					*Not Sampled, Well Dry					
	12/7/06					*Not Sampled, Well Dry					
	3/28/07					*Not Sampled, Well Dry					
	6/13/07					*Not Sampled, Well Dry					
	9/25/07					*Not Sampled, Well Dry					
	12/14/07					*Not Sampled, Well Dry					
	3/14/08					*Not Sampled, Well Dry					
	6/18/08					*Not Sampled, Well Dry					
	9/3/08					*Not Sampled, Well Dry					
	12/23/08					*Not Sampled, Well Dry					
	3/24/09					*Not Sampled, Well Dry					
	6/8/09					*Not Sampled, Well Dry					
	9/27/09					*Not Sampled, Well Dry					
	12/23/09					*Not Sampled, Well Dry					
	3/10/10					*Not Sampled, Well Dry					
	6/7/10					*Not Sampled, Well Dry					
HW-3	1/23/07	2	ND@1	ND@1	ND@3	2	6,600	230	250	510	ND@0.5
	3/28/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/22/07	4	ND@1	ND@1	3	7	5,800	440	380	900	ND@0.5
	9/25/07	6	ND@1	ND@1	4	10	E 7,200	E 730	E 660	1,600	ND@0.5
	12/14/07	4	ND@1	ND@1	2	6	E 6,300	E 470	E 600	1,100	ND@0.5
	3/14/08	ND@50	ND@50	ND@50	ND@350	ND	7,100	ND@500	ND@500	9,000	ND@0.5
	6/18/08	ND@50	ND@50	ND@50	ND@350	ND	7,700	ND@1000	ND@500	1,500	ND@0.5
	9/3/08	5	ND@1	ND@1	3	8	6,500	E 750	E 750	3,100	ND@0.5
	12/27/08	ND@10	ND@10	ND@10	ND@30	ND	7,600	530	590	2,700	ND@0.5
	3/24/09	2	ND@1	ND@1	1	3	9,000	790	660	1,500	NA
	6/8/09	2	ND@1	ND@1	ND@3	2	7,000	490	600	2,500	NA
	9/27/09	1	ND@1	ND@1	ND@3	1	6,600	380	510	10,000	NA
	12/23/09	ND@1	ND@1	ND@1	ND@3	ND	3,800	230	310	4,700	NA
	3/10/10	ND@1	ND@1	ND@1	ND@3	ND	3,400	880	240	4,300	NA
	5/6/10	ND@1	ND@1	ND@1	ND@3	ND	3,000	900	230	4,000	NA
	6/7/10	ND@1	ND@1	ND@1	ND@3	ND	1,400	370	110	1,400	NA
	7/31/10	ND@1	ND@1	ND@1	ND@3	ND	4,900	580	420	7,000	NA
	8/16/10	1	ND@1	ND@1	ND@3	ND	5,900	740	490	8,600	NA
	9/20/10	ND@1	ND@1	ND@1	ND@3	ND	490	54	34	590	NA
	10/26/10	ND@1	ND@1	ND@1	ND@3	ND	3,900	580	330	4,500	NA
	11/23/10	ND@1	ND@1	ND@1	ND@3	ND	4,400	760	350	5,200	NA
	12/20/10	ND@1	ND@1	ND@1	ND@3	ND	6,500	1,200	440	7,400	NA
	2/28/11	ND@1	ND@1	ND@1	ND@3	ND	4,600	930	410	5,900	NA
	3/22/11	ND@1	ND@1	ND@1	ND@3	ND	4,500	1,400	290	4,200	NA
	6/29/11	ND@5	ND@5	ND@5	ND@15	ND	5,600	1,000	330	7,300	NA
	9/22/11	ND@20	ND@20	ND@20	ND@60	ND	3,200	940	ND@200	2,700	NA
	12/8/11	ND@1	ND@1	ND@1	ND@3	ND	3,100	1,100	170	2,800	NA
	3/1/12						Inadvertently Not Sampled*				
	6/5/12	ND@1	ND@1	ND@1	ND@3	ND	3,600	1,200	210	3,900	NA
	9/12/12	ND@1	ND@1	ND@1	ND@3	ND	3,600	1,800	160	3,600	NA
	12/6/12	ND@1	ND@1	ND@1	ND@3	ND	940	460	49	960	NA
	3/11/13	ND@1	ND@1	ND@1	ND@3	ND	500	190	24	510	NA
	6/6/13	ND@1	ND@1	ND@1	ND@3	ND	1100	450	52	1,200	NA
<b>MDE CLEANUP STD</b>		<b>5</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	--	<b>20</b>	--	--	<b>47</b>	<b>0.047</b>
BTEX - Total Benzene, Toluene, Ethylbenzene and Xylenes											
MTBE - methyl tert-butyl ether											
µg/L - micrograms-per-liter											
mg/L - milligrams-per-liter											
* Well not sampled due to insufficient amount of water											
ND@x - not detected above laboratory detection level of x											
ND - not detected											
NA - not analyzed											
E - estimated value, exceeds calibration range of laboratory equipment											
LF - lighter fuel/oil pattern observed in sample											

Table 3  
 Monitoring Well Groundwater Nutrient Analytical  
 7-Eleven Store No. 22281  
 Fallston, Maryland

<b>Sample ID</b>	<b>Date</b>	Nitrate (mg/L)	Nitrite (mg/L)	Orthophosphate (mg/L)
MW-6	2/14/2013	73	0.21	BDL
	3/11/2013	74	0.26	2.02
	6/6/2013	190	0.14	BDL
MW-9	2/14/2013	15	0.15	1.42
	3/11/2013	17	0.2	0.32
	6/6/2013	23	BDL	2.32
MW-11	2/14/2013	7.8	0.17	0.17
	3/11/2013	8.3	0.18	2.19
	6/6/2013	7.9	BDL	0.15
MW-13	2/14/2013	28	0.19	2.44
	3/11/2013	19	0.22	1.02
	6/6/2013	28	BDL	1.87
HW-3	2/14/2013	850	3.3	745
	3/11/2013	880	7.9	746
	6/6/2013	960	3.3	764

mg/L - milligrams per liter

BDL - Below Laboratory Detection Limits

**ATTACHMENT A**

**MDE Approval Letter (March 6, 2013)**



# MARYLAND DEPARTMENT OF THE ENVIRONMENT

Oil Control Program, Suite 620, 1800 Washington Blvd., Baltimore MD 21230-1719

410-537-3442 • 410-537-3092 (fax)

1-800-633-6101

Martin O'Malley  
Governor

Robert M. Summers, Ph.D.  
Secretary

Anthony G. Brown  
Lieutenant Governor

March 6, 2012

Mr. Jose Rios  
Manager, Environmental Services  
7-Eleven, Inc.  
One Arts Plaza  
1722 Routh Street, Suite 1000  
Dallas TX 75201

## RE: PILOT TEST WORK PLAN APPROVAL

**Case No. 2005-0120-HA**  
**Pleasantville 7-Eleven #22281**  
**2400 Pleasantville Road, Fallston**  
**Harford County, Maryland**  
**Facility I.D. No. 6375**

Dear Mr. Rios:

The Oil Control Program recently completed a review of the case file for the above-referenced property, including the *Fourth Quarter 2011 Monitoring and Sampling Report - January 16, 2012*; the *Revised Bio-Augmentation Pilot Test Work Plan - January 16, 2012*; and the *Response to MDE Questions to Revised Bio-Augmentation Pilot Test Work Plan - February 17, 2012*. In September 2008, three 12,000-gallon first-generation gasoline underground storage tanks (USTs) were removed. The USTs were subsequently replaced with the existing second-generation UST system: a 10,000-gallon gasoline; and a 15,000-gallon gasoline. Following UST replacement, the long-term soil vacuum extraction (SVE) pilot test was discontinued; and a bio-augmentation pilot test was implemented from November 2008 through April 2009, utilizing a trench for injection of bio-augmentation materials. Between April 2010 and June 2011, an additional six-month bio-augmentation pilot test was conducted, with direct injection of bio-augmentation materials into wells HW-3, MW-4A, MW-9, and MW-10.

Currently, there are 17 on-site and 2 off-site monitoring wells. Sampling of the monitoring well network in December 2011 detected methyl tertiary-butyl ether (MTBE) at 3,100 parts per billion (ppb) and total petroleum hydrocarbons/gasoline-range organics (TPH/GRO) at 1,900 ppb. The most recent pre-filtration sample collected from the on-site drinking water supply well in October 2011 was below regulatory levels for petroleum constituents. Sampling of the off-site drinking water supply well at 2414 Pleasantville Road (Dental Technology Associates) in December 2011 was non-detect for petroleum constituents.

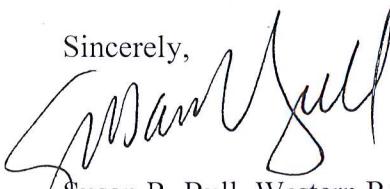
The *Revised Bio-Augmentation Pilot Test Work Plan and Response to MDE Questions* propose an additional 9-month pilot test of bio-augmentation materials. Two additional trenches containing 4-inch diameter injection wells are to be installed. Bio-augmentation materials would be gravity-fed into the injection wells, which would also house iSOC® diffusers. Quarterly sampling events at the subject property would include biological parameters for select monitoring wells. Based on our review, the Department approves the proposal contingent upon the following modifications:

- 1) For the first 90 days after initiating *CAP* activities at the subject property, submit monthly *Update Reports* to the Oil Control Program regarding the progress of remedial activities.
- 2) **No later than January 30, 2013**, submit a *Revised Site Conceptual Model (SCM)* to reflect updated pilot testing and sampling, and address the environmental issues at and around the subject property for our review and approval. A *SCM* compiles all currently known and/or available data for the site and is used to predict the source, fate, and transport of contaminants of concern. Normally created at the beginning of any site investigation, the *SCM* is continually refined with the acquisition of new data until resolution.
- 3) **No later than January 30, 2013**, submit a *Pilot Test Update Report* detailing the results of the bio-augmentation pilot test. Additionally, the report must make recommendations for future actions at the site, including remedial goals and endpoints, and any revisions to the existing *CAP*. After receipt and review of the *Revised SCM* and *Pilot Test Update Report*, the Department will re-evaluate the proposed *CAP*.
- 4) Continue **quarterly (every three months)** sampling of all monitoring wells and tank field monitoring pipes. All samples collected must be analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates, using EPA Method 8260 and for total petroleum hydrocarbons/gasoline-range organics (TPH/GRO) using EPA Method 8015B/C.
- 5) Continue **quarterly** sampling of the on-site drinking water supply well. All samples collected must be analyzed for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2. Since a granular activated carbon (GAC) filtration system is present, samples must be collected pre-, mid-, and post-filtration. **Please ensure that the results of these sampling events (including analytical results) are submitted to the Department in a timely manner.**
- 6) Continue **semi-annual (every six months)** sampling of the drinking water supply well located at 2414 Pleasantville Road (Dental Technology). All samples collected must be analyzed for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2. Since a GAC filtration system is present, samples must be collected pre-, mid-, and post-filtration. Copies of the sampling results must be submitted to the property owner, the Harford County Health Department, and the Oil Control Program.

When submitting documentation to the Oil Control Program, please reference Case No. 2005-0120-HA and provide three hard copies and an electronic copy on a labeled compact disc (CD) to the attention of the case manager at the above letterhead address.

Mr. Jose Rios  
Case No. 2005-0120-HA  
Page Three

If you have any questions, please contact the case manager, Jeannette DeBartolomeo, at 410-537-3427 ([jdebartolomeo@mde.state.md.us](mailto:jdebartolomeo@mde.state.md.us)) or me at 410-537-3499 ([sbull@mde.state.md.us](mailto:sbull@mde.state.md.us)).

Sincerely,  
  
Susan R. Bull, Western Region Section Head  
Remediation and State-Lead Division  
Oil Control Program

JD/nln

cc: Ms. Marie Treiber (AECOM)  
Mr. Peter Smith (Harford County Health Dept.)  
Mr. Andrew B. Miller  
Mr. Christopher H. Ralston  
Mr. Horacio Tablada

**ATTACHMENT B**

**Laboratory Analytical Reports (Quarterly Groundwater Sampling)**

# Analytical Report for

AECOM

**Certificate of Analysis No.: 12091301**

**Project Manager: John Canzeri**

**Project Name : 7-11 Fallston #22281**

**Project Location: Fallston, MD**

**Project ID : 60144763**



**September 20, 2012**

**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.



September 20, 2012

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

Reference: PSS Work Order No: **12091301**

Project Name: 7-11 Fallston #22281  
Project Location: Fallston, MD  
Project ID.: 60144763

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 numbered **12091301**.

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 October 18, 2012. 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.

**Dan Prucnal**  
Laboratory Manager



**Sample Summary**  
**Client Name: AECOM**  
**Project Name: 7-11 Fallston #22281**

**Project ID: 60144763**

**Work Order Number: 12091301**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 09/13/2012 at 08:10 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
12091301-001	MW 1A	GROUND WATER	09/12/2012 11:00
12091301-002	MW 1B	GROUND WATER	09/12/2012 11:20
12091301-003	MW 2	GROUND WATER	09/12/2012 13:00
12091301-004	MW 3A	GROUND WATER	09/12/2012 11:40
12091301-005	MW 3B	GROUND WATER	09/12/2012 12:00
12091301-006	MW 4A	GROUND WATER	09/12/2012 16:00
12091301-007	MW 4B	GROUND WATER	09/12/2012 13:40
12091301-008	MW 5	GROUND WATER	09/12/2012 12:40
12091301-009	MW 6	GROUND WATER	09/12/2012 16:20
12091301-010	MW 7	GROUND WATER	09/12/2012 12:20
12091301-011	MW 8A	GROUND WATER	09/12/2012 15:00
12091301-012	MW 8B	GROUND WATER	09/12/2012 15:10
12091301-013	MW 9	GROUND WATER	09/12/2012 15:50
12091301-014	MW 10	GROUND WATER	09/12/2012 16:10
12091301-015	MW 11	GROUND WATER	09/12/2012 15:10
12091301-016	MW 12	GROUND WATER	09/12/2012 14:10
12091301-017	MW 13	GROUND WATER	09/12/2012 14:40

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 common laboratory contaminants such as acetone, methylene chloride and phthalates, may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: 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].

**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.



## Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Fallston #22281

Project ID: 60144763

Work Order Number: 12091301

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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.

**Sample Receipt:**

All sample receipt conditions were acceptable.

**NELAP accreditation was held for all analyses performed unless noted below. See [www.phaseonline.com](http://www.phaseonline.com) for complete PSS scope of accreditation.**

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 1A</b>	<b>Date/Time Sampled: 09/12/2012 11:00 PSS Sample ID: 12091301-001</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 09/13/12	Analyzed 09/13/12 14:28	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 1A</b>		<b>Date/Time Sampled: 09/12/2012 11:00 PSS Sample ID: 12091301-001</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Chloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Vinyl Chloride		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
tert-Butyl alcohol		ND	ug/L	20		1	09/14/12	09/14/12 19:40	1011
Bromomethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Chloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Acetone		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
Cyclohexane		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	09/14/12	09/14/12 19:40	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Methylene Chloride		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Methyl-t-butyl ether		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
2-Butanone (MEK)		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Bromochloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Chloroform		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Benzene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Methyl Acetate		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
Methylcyclohexane		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
Trichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Carbon Disulfide		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
Bromodichloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 1A</b>		<b>Date/Time Sampled: 09/12/2012 11:00 PSS Sample ID: 12091301-001</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	09/14/12	09/14/12 19:40	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Toluene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
2-Hexanone		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Dibromochloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
Diisopropyl ether		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
tert-Amyl methyl ether		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
tert-Amyl alcohol		ND	ug/L	20		1	09/14/12	09/14/12 19:40	1011
Bromoform		ND	ug/L	5.0		1	09/14/12	09/14/12 19:40	1011
Tetrachloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Chlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Ethylbenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
m,p-Xylenes		ND	ug/L	2.0		1	09/14/12	09/14/12 19:40	1011
Styrene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
o-Xylene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Isopropylbenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	09/14/12	09/14/12 19:40	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
Naphthalene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 19:40	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 1B</b>	<b>Date/Time Sampled: 09/12/2012 11:20 PSS Sample ID: 12091301-002</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 09/13/12	Analyzed 09/13/12 14:54	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 1B	Date/Time Sampled: 09/12/2012 11:20 PSS Sample ID: 12091301-002					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
Dichlorodifluoromethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Chloromethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Vinyl Chloride	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
tert-Butyl alcohol	ND	ug/L	20	1		09/14/12 09/14/12 20:10 1011
Bromomethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Chloroethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Acetone	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
Cyclohexane	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
Trichlorofluoromethane	ND	ug/L	5.0	1		09/14/12 09/14/12 20:10 1011
1,1-Dichloroethene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Methylene Chloride	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Methyl-t-butyl ether	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,1-Dichloroethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
2-Butanone (MEK)	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Bromochloromethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Chloroform	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,2-Dichloroethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Carbon Tetrachloride	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Benzene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,2-Dichloropropane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Methyl Acetate	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
Methylcyclohexane	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
Trichloroethene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Carbon Disulfide	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
Bromodichloromethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 1B	Date/Time Sampled: 09/12/2012 11:20 PSS Sample ID: 12091301-002					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		09/14/12 09/14/12 20:10 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Toluene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
2-Hexanone	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Dibromochloromethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
tert-Amyl ethyl ether	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
tert-Butyl ethyl ether	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
Diisopropyl ether	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
tert-Amyl methyl ether	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
tert-Amyl alcohol	ND	ug/L	20	1		09/14/12 09/14/12 20:10 1011
Bromoform	ND	ug/L	5.0	1		09/14/12 09/14/12 20:10 1011
Tetrachloroethene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Chlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Ethylbenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
m,p-Xylenes	ND	ug/L	2.0	1		09/14/12 09/14/12 20:10 1011
Styrene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
o-Xylene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Isopropylbenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		09/14/12 09/14/12 20:10 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
Naphthalene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 20:10 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 2</b>	<b>Date/Time Sampled: 09/12/2012 13:00 PSS Sample ID: 12091301-003</b>						
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>						
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B					
<hr/>							
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	ND ug/L	100		1	09/13/12	09/13/12 15:19	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 2</b>		<b>Date/Time Sampled: 09/12/2012 13:00 PSS Sample ID: 12091301-003</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Chloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Vinyl Chloride		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
tert-Butyl alcohol		ND	ug/L	20		1	09/14/12	09/14/12 20:39	1011
Bromomethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Chloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Acetone		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
Cyclohexane		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	09/14/12	09/14/12 20:39	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Methylene Chloride		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Methyl-t-butyl ether		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
2-Butanone (MEK)		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Bromochloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Chloroform		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Benzene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Methyl Acetate		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
Methylcyclohexane		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
Trichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Carbon Disulfide		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
Bromodichloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 2</b>		<b>Date/Time Sampled: 09/12/2012 13:00 PSS Sample ID: 12091301-003</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	09/14/12	09/14/12 20:39	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Toluene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
2-Hexanone		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Dibromochloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
Diisopropyl ether		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
tert-Amyl methyl ether		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
tert-Amyl alcohol		ND	ug/L	20		1	09/14/12	09/14/12 20:39	1011
Bromoform		ND	ug/L	5.0		1	09/14/12	09/14/12 20:39	1011
Tetrachloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Chlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Ethylbenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
m,p-Xylenes		ND	ug/L	2.0		1	09/14/12	09/14/12 20:39	1011
Styrene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
o-Xylene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Isopropylbenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	09/14/12	09/14/12 20:39	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
Naphthalene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 20:39	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3A</b>	<b>Date/Time Sampled: 09/12/2012 11:40 PSS Sample ID: 12091301-004</b>						
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>						
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	09/13/12	09/13/12 15:44	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3A</b>		<b>Date/Time Sampled: 09/12/2012 11:40 PSS Sample ID: 12091301-004</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Chloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Vinyl Chloride		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
tert-Butyl alcohol		ND	ug/L	20		1	09/14/12	09/14/12 21:08	1011
Bromomethane		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Chloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Acetone		ND	ug/L	10		1	09/14/12	09/14/12 21:08	1011
Cyclohexane		ND	ug/L	10		1	09/14/12	09/14/12 21:08	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	09/14/12	09/14/12 21:08	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Methylene Chloride		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Methyl-t-butyl ether		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
2-Butanone (MEK)		ND	ug/L	10		1	09/14/12	09/14/12 21:08	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Bromochloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Chloroform		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Benzene		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Methyl Acetate		ND	ug/L	10		1	09/14/12	09/14/12 21:08	1011
Methylcyclohexane		ND	ug/L	10		1	09/14/12	09/14/12 21:08	1011
Trichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
Carbon Disulfide		ND	ug/L	10		1	09/14/12	09/14/12 21:08	1011
Bromodichloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/14/12 21:08	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 3A	Date/Time Sampled: 09/12/2012 11:40 PSS Sample ID: 12091301-004					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		09/14/12 09/14/12 21:08 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
Toluene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
2-Hexanone	ND	ug/L	10	1		09/14/12 09/14/12 21:08 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
Dibromochloromethane	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
tert-Amyl ethyl ether	ND	ug/L	10	1		09/14/12 09/14/12 21:08 1011
tert-Butyl ethyl ether	ND	ug/L	10	1		09/14/12 09/14/12 21:08 1011
Diisopropyl ether	ND	ug/L	10	1		09/14/12 09/14/12 21:08 1011
tert-Amyl methyl ether	ND	ug/L	10	1		09/14/12 09/14/12 21:08 1011
tert-Amyl alcohol	ND	ug/L	20	1		09/14/12 09/14/12 21:08 1011
Bromoform	ND	ug/L	5.0	1		09/14/12 09/14/12 21:08 1011
Tetrachloroethene	1.3	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
Chlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
Ethylbenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
m,p-Xylenes	ND	ug/L	2.0	1		09/14/12 09/14/12 21:08 1011
Styrene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
o-Xylene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
Isopropylbenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		09/14/12 09/14/12 21:08 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
Naphthalene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 21:08 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3B</b>	<b>Date/Time Sampled: 09/12/2012 12:00 PSS Sample ID: 12091301-005</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 09/13/12	Analyzed 09/13/12 16:09	Analyst 1035

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 3B	Date/Time Sampled: 09/12/2012 12:00 PSS Sample ID: 12091301-005					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
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	1	09/14/12 09/14/12 21:38 1011
Chloromethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
tert-Butyl alcohol	ND	ug/L	20	1	1	09/14/12 09/14/12 21:38 1011
Bromomethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Chloroethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Acetone	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
Cyclohexane	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	09/14/12 09/14/12 21:38 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Methylene Chloride	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Methyl-t-butyl ether	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Bromochloromethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Chloroform	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Benzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Methyl Acetate	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
Methylcyclohexane	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
Trichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Carbon Disulfide	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 3B	Date/Time Sampled: 09/12/2012 12:00 PSS Sample ID: 12091301-005					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
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	1	09/14/12 09/14/12 21:38 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Toluene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
2-Hexanone	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
Diisopropyl ether	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
tert-Amyl methyl ether	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	09/14/12 09/14/12 21:38 1011
Bromoform	ND	ug/L	5.0	1	1	09/14/12 09/14/12 21:38 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Chlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Ethylbenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	09/14/12 09/14/12 21:38 1011
Styrene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
o-Xylene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	09/14/12 09/14/12 21:38 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
Naphthalene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 21:38 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 4A</b>	<b>Date/Time Sampled: 09/12/2012 16:00 PSS Sample ID: 12091301-006</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>490</b>	<b>Units</b> ug/L	<b>RL</b> 100

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 4A</b>		<b>Date/Time Sampled: 09/12/2012 16:00 PSS Sample ID: 12091301-006</b>					
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>					
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Chloromethane		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Vinyl Chloride		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
tert-Butyl alcohol		110	ug/L	20	1	1	09/14/12 09/14/12 22:07 1011
Bromomethane		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Chloroethane		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Acetone		ND	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
Cyclohexane		ND	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
Trichlorofluoromethane		ND	ug/L	5.0	1	1	09/14/12 09/14/12 22:07 1011
1,1-Dichloroethene		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Methylene Chloride		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Methyl-t-butyl ether		400	ug/L	10	10	10	09/14/12 09/14/12 22:36 1011
1,1-Dichloroethane		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
2-Butanone (MEK)		ND	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Bromochloromethane		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Chloroform		10	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
1,2-Dichloroethane		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Carbon Tetrachloride		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Benzene		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
1,2-Dichloropropane		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Methyl Acetate		ND	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
Methylcyclohexane		ND	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
Trichloroethene		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Carbon Disulfide		ND	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
Bromodichloromethane		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 4A	Date/Time Sampled: 09/12/2012 16:00 PSS Sample ID: 12091301-006					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
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	1	09/14/12 09/14/12 22:07 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Toluene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
2-Hexanone	ND	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
Diisopropyl ether	ND	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
tert-Amyl methyl ether	18	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	09/14/12 09/14/12 22:07 1011
Bromoform	ND	ug/L	5.0	1	1	09/14/12 09/14/12 22:07 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Chlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Ethylbenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	09/14/12 09/14/12 22:07 1011
Styrene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
o-Xylene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	09/14/12 09/14/12 22:07 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
Naphthalene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	09/14/12 09/14/12 22:07 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 4B</b>	<b>Date/Time Sampled: 09/12/2012 13:40 PSS Sample ID: 12091301-007</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 09/13/12	Analyzed 09/13/12 17:00	Analyst 1035

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 4B	Date/Time Sampled: 09/12/2012 13:40 PSS Sample ID: 12091301-007							
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10							
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	1	09/14/12	09/14/12 23:06	1011
Chloromethane	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
Vinyl Chloride	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
tert-Butyl alcohol	ND	ug/L	20	1	1	09/14/12	09/14/12 23:06	1011
Bromomethane	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
Chloroethane	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
Acetone	ND	ug/L	10	1	1	09/14/12	09/14/12 23:06	1011
Cyclohexane	ND	ug/L	10	1	1	09/14/12	09/14/12 23:06	1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	09/14/12	09/14/12 23:06	1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
Methylene Chloride	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
Methyl-t-butyl ether	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
2-Butanone (MEK)	ND	ug/L	10	1	1	09/14/12	09/14/12 23:06	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
Bromochloromethane	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
Chloroform	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
Benzene	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
Methyl Acetate	ND	ug/L	10	1	1	09/14/12	09/14/12 23:06	1011
Methylcyclohexane	ND	ug/L	10	1	1	09/14/12	09/14/12 23:06	1011
Trichloroethene	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
Carbon Disulfide	ND	ug/L	10	1	1	09/14/12	09/14/12 23:06	1011
Bromodichloromethane	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	09/14/12	09/14/12 23:06	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 4B	Date/Time Sampled: 09/12/2012 13:40 PSS Sample ID: 12091301-007					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		09/14/12 09/14/12 23:06 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
Toluene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
2-Hexanone	ND	ug/L	10	1		09/14/12 09/14/12 23:06 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
Dibromochloromethane	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
tert-Amyl ethyl ether	ND	ug/L	10	1		09/14/12 09/14/12 23:06 1011
tert-Butyl ethyl ether	ND	ug/L	10	1		09/14/12 09/14/12 23:06 1011
Diisopropyl ether	ND	ug/L	10	1		09/14/12 09/14/12 23:06 1011
tert-Amyl methyl ether	ND	ug/L	10	1		09/14/12 09/14/12 23:06 1011
tert-Amyl alcohol	ND	ug/L	20	1		09/14/12 09/14/12 23:06 1011
Bromoform	ND	ug/L	5.0	1		09/14/12 09/14/12 23:06 1011
Tetrachloroethene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
Chlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
Ethylbenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
m,p-Xylenes	ND	ug/L	2.0	1		09/14/12 09/14/12 23:06 1011
Styrene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
o-Xylene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
Isopropylbenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		09/14/12 09/14/12 23:06 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
Naphthalene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/14/12 23:06 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 5</b>	<b>Date/Time Sampled: 09/12/2012 12:40 PSS Sample ID: 12091301-008</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 09/13/12	Analyzed 09/13/12 17:25	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 5</b>		<b>Date/Time Sampled: 09/12/2012 12:40 PSS Sample ID: 12091301-008</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Chloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Vinyl Chloride		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
tert-Butyl alcohol		ND	ug/L	20		1	09/14/12	09/14/12 23:36	1011
Bromomethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Chloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Acetone		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
Cyclohexane		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	09/14/12	09/14/12 23:36	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Methylene Chloride		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Methyl-t-butyl ether		1.4	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
2-Butanone (MEK)		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Bromochloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Chloroform		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Benzene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Methyl Acetate		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
Methylcyclohexane		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
Trichloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Carbon Disulfide		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
Bromodichloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011

**OFFICES:**  
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**BALTIMORE, MD 21228**  
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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 5</b>		<b>Date/Time Sampled: 09/12/2012 12:40 PSS Sample ID: 12091301-008</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	09/14/12	09/14/12 23:36	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Toluene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
2-Hexanone		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Dibromochloromethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
Diisopropyl ether		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
tert-Amyl methyl ether		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
tert-Amyl alcohol		ND	ug/L	20		1	09/14/12	09/14/12 23:36	1011
Bromoform		ND	ug/L	5.0		1	09/14/12	09/14/12 23:36	1011
Tetrachloroethene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Chlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Ethylbenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
m,p-Xylenes		ND	ug/L	2.0		1	09/14/12	09/14/12 23:36	1011
Styrene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
o-Xylene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Isopropylbenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	09/14/12	09/14/12 23:36	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
Naphthalene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/14/12 23:36	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 6</b>	<b>Date/Time Sampled: 09/12/2012 16:20 PSS Sample ID: 12091301-009</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
<hr/>			
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>1,400</b>	<b>Units</b> ug/L	<b>RL</b> 100
		<b>Flag</b> 1	<b>Dil</b>
		<b>Prepared</b> 09/13/12	<b>Analyzed</b> 09/13/12 17:51
			<b>Analyst</b> 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 6</b>		<b>Date/Time Sampled: 09/12/2012 16:20 PSS Sample ID: 12091301-009</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Chloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Vinyl Chloride		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
tert-Butyl alcohol		490	ug/L	200		10	09/14/12	09/15/12 05:28	1011
Bromomethane		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Chloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Acetone		ND	ug/L	10		1	09/14/12	09/15/12 04:58	1011
Cyclohexane		ND	ug/L	10		1	09/14/12	09/15/12 04:58	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	09/14/12	09/15/12 04:58	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Methylene Chloride		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Methyl-t-butyl ether		1,600	ug/L	10		10	09/14/12	09/15/12 05:28	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
2-Butanone (MEK)		ND	ug/L	10		1	09/14/12	09/15/12 04:58	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Bromochloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Chloroform		2.4	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Benzene		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Methyl Acetate		ND	ug/L	10		1	09/14/12	09/15/12 04:58	1011
Methylcyclohexane		ND	ug/L	10		1	09/14/12	09/15/12 04:58	1011
Trichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
Carbon Disulfide		ND	ug/L	10		1	09/14/12	09/15/12 04:58	1011
Bromodichloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/15/12 04:58	1011

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 6</b>		<b>Date/Time Sampled: 09/12/2012 16:20</b>				<b>PSS Sample ID: 12091301-009</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B				Preparation Method: 5030B		
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	09/14/12	09/15/12 04:58
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
Toluene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
2-Hexanone		ND	ug/L	10	1	1	09/14/12	09/15/12 04:58
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
Dibromochloromethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
tert-Amyl ethyl ether		ND	ug/L	10	1	1	09/14/12	09/15/12 04:58
tert-Butyl ethyl ether		ND	ug/L	10	1	1	09/14/12	09/15/12 04:58
Diisopropyl ether		ND	ug/L	10	1	1	09/14/12	09/15/12 04:58
tert-Amyl methyl ether		<b>68</b>	ug/L	10	1	1	09/14/12	09/15/12 04:58
tert-Amyl alcohol		ND	ug/L	20	1	1	09/14/12	09/15/12 04:58
Bromoform		ND	ug/L	5.0	1	1	09/14/12	09/15/12 04:58
Tetrachloroethene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
Chlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
Ethylbenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
m,p-Xylenes		ND	ug/L	2.0	1	1	09/14/12	09/15/12 04:58
Styrene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
o-Xylene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
Isopropylbenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	09/14/12	09/15/12 04:58
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
Naphthalene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 04:58

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 7</b>	<b>Date/Time Sampled: 09/12/2012 12:20 PSS Sample ID: 12091301-010</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 09/14/12	Analyzed 09/14/12 13:18	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 7</b>		<b>Date/Time Sampled: 09/12/2012 12:20</b>				<b>PSS Sample ID: 12091301-010</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Chloromethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Vinyl Chloride		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
tert-Butyl alcohol		ND	ug/L	20	1	1	09/14/12	09/15/12 05:57
Bromomethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Chloroethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Acetone		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
Cyclohexane		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
Trichlorofluoromethane		ND	ug/L	5.0	1	1	09/14/12	09/15/12 05:57
1,1-Dichloroethene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Methylene Chloride		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Methyl-t-butyl ether		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,1-Dichloroethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
2-Butanone (MEK)		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Bromochloromethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Chloroform		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,2-Dichloroethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Carbon Tetrachloride		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Benzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,2-Dichloropropane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Methyl Acetate		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
Methylcyclohexane		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
Trichloroethene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Carbon Disulfide		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
Bromodichloromethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 7</b>		<b>Date/Time Sampled: 09/12/2012 12:20</b>				<b>PSS Sample ID: 12091301-010</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	09/14/12	09/15/12 05:57
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Toluene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
2-Hexanone		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Dibromochloromethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
tert-Amyl ethyl ether		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
tert-Butyl ethyl ether		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
Diisopropyl ether		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
tert-Amyl methyl ether		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
tert-Amyl alcohol		ND	ug/L	20	1	1	09/14/12	09/15/12 05:57
Bromoform		ND	ug/L	5.0	1	1	09/14/12	09/15/12 05:57
Tetrachloroethene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Chlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Ethylbenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
m,p-Xylenes		ND	ug/L	2.0	1	1	09/14/12	09/15/12 05:57
Styrene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
o-Xylene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Isopropylbenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	09/14/12	09/15/12 05:57
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
Naphthalene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	09/14/12	09/15/12 05:57

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 8A</b>	<b>Date/Time Sampled: 09/12/2012 15:00 PSS Sample ID: 12091301-011</b>						
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>						
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B					
<hr/>							
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	ND ug/L	100		1	09/14/12	09/14/12 13:43	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 8A	Date/Time Sampled: 09/12/2012 15:00 PSS Sample ID: 12091301-011					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
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	1	09/14/12 09/15/12 06:26 1011
Chloromethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
tert-Butyl alcohol	ND	ug/L	20	1	1	09/14/12 09/15/12 06:26 1011
Bromomethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
Chloroethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
Acetone	ND	ug/L	10	1	1	09/14/12 09/15/12 06:26 1011
Cyclohexane	ND	ug/L	10	1	1	09/14/12 09/15/12 06:26 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	09/14/12 09/15/12 06:26 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
Methylene Chloride	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
Methyl-t-butyl ether	43	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	09/14/12 09/15/12 06:26 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
Bromochloromethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
Chloroform	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
Benzene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
Methyl Acetate	ND	ug/L	10	1	1	09/14/12 09/15/12 06:26 1011
Methylcyclohexane	ND	ug/L	10	1	1	09/14/12 09/15/12 06:26 1011
Trichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
Carbon Disulfide	ND	ug/L	10	1	1	09/14/12 09/15/12 06:26 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 06:26 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 8A</b>		<b>Date/Time Sampled: 09/12/2012 15:00 PSS Sample ID: 12091301-011</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	09/14/12	09/15/12 06:26	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
Toluene		<b>2.1</b>	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
2-Hexanone		ND	ug/L	10		1	09/14/12	09/15/12 06:26	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
Dibromochloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	09/14/12	09/15/12 06:26	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	09/14/12	09/15/12 06:26	1011
Diisopropyl ether		ND	ug/L	10		1	09/14/12	09/15/12 06:26	1011
tert-Amyl methyl ether		ND	ug/L	10		1	09/14/12	09/15/12 06:26	1011
tert-Amyl alcohol		ND	ug/L	20		1	09/14/12	09/15/12 06:26	1011
Bromoform		ND	ug/L	5.0		1	09/14/12	09/15/12 06:26	1011
Tetrachloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
Chlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
Ethylbenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
m,p-Xylenes		ND	ug/L	2.0		1	09/14/12	09/15/12 06:26	1011
Styrene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
o-Xylene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
Isopropylbenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	09/14/12	09/15/12 06:26	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
Naphthalene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:26	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 8B</b>	<b>Date/Time Sampled: 09/12/2012 15:10 PSS Sample ID: 12091301-012</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100

Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
ND	ug/L	100		1	09/14/12	09/14/12 14:08	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 8B</b>		<b>Date/Time Sampled: 09/12/2012 15:10 PSS Sample ID: 12091301-012</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Chloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Vinyl Chloride		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
tert-Butyl alcohol		ND	ug/L	20		1	09/14/12	09/15/12 06:56	1011
Bromomethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Chloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Acetone		ND	ug/L	10		1	09/14/12	09/15/12 06:56	1011
Cyclohexane		ND	ug/L	10		1	09/14/12	09/15/12 06:56	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	09/14/12	09/15/12 06:56	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Methylene Chloride		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Methyl-t-butyl ether		18	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
2-Butanone (MEK)		ND	ug/L	10		1	09/14/12	09/15/12 06:56	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Bromochloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Chloroform		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Benzene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Methyl Acetate		ND	ug/L	10		1	09/14/12	09/15/12 06:56	1011
Methylcyclohexane		ND	ug/L	10		1	09/14/12	09/15/12 06:56	1011
Trichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
Carbon Disulfide		ND	ug/L	10		1	09/14/12	09/15/12 06:56	1011
Bromodichloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/15/12 06:56	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 8B	Date/Time Sampled: 09/12/2012 15:10 PSS Sample ID: 12091301-012					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		09/14/12 09/15/12 06:56
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
Toluene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
2-Hexanone	ND	ug/L	10	1		09/14/12 09/15/12 06:56
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
Dibromochloromethane	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
tert-Amyl ethyl ether	ND	ug/L	10	1		09/14/12 09/15/12 06:56
tert-Butyl ethyl ether	ND	ug/L	10	1		09/14/12 09/15/12 06:56
Diisopropyl ether	ND	ug/L	10	1		09/14/12 09/15/12 06:56
tert-Amyl methyl ether	ND	ug/L	10	1		09/14/12 09/15/12 06:56
tert-Amyl alcohol	ND	ug/L	20	1		09/14/12 09/15/12 06:56
Bromoform	ND	ug/L	5.0	1		09/14/12 09/15/12 06:56
Tetrachloroethene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
Chlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
Ethylbenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
m,p-Xylenes	ND	ug/L	2.0	1		09/14/12 09/15/12 06:56
Styrene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
o-Xylene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
Isopropylbenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
1,3-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
1,4-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
1,2-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		09/14/12 09/15/12 06:56
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
Naphthalene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 06:56

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 9</b>	<b>Date/Time Sampled: 09/12/2012 15:50 PSS Sample ID: 12091301-013</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>2,700</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 9</b>		<b>Date/Time Sampled: 09/12/2012 15:50 PSS Sample ID: 12091301-013</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Chloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Vinyl Chloride		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
tert-Butyl alcohol	1,200	ug/L	400		20		09/14/12	09/15/12 07:54	1011
Bromomethane		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Chloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Acetone		ND	ug/L	10		1	09/14/12	09/15/12 07:25	1011
Cyclohexane		ND	ug/L	10		1	09/14/12	09/15/12 07:25	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	09/14/12	09/15/12 07:25	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Methylene Chloride		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Methyl-t-butyl ether	2,500	ug/L	20		20		09/14/12	09/15/12 07:54	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
2-Butanone (MEK)		ND	ug/L	10		1	09/14/12	09/15/12 07:25	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Bromochloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Chloroform	4.1	ug/L	1.0		1		09/14/12	09/15/12 07:25	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Benzene	1.1	ug/L	1.0		1		09/14/12	09/15/12 07:25	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Methyl Acetate		ND	ug/L	10		1	09/14/12	09/15/12 07:25	1011
Methylcyclohexane		ND	ug/L	10		1	09/14/12	09/15/12 07:25	1011
Trichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
Carbon Disulfide		ND	ug/L	10		1	09/14/12	09/15/12 07:25	1011
Bromodichloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/15/12 07:25	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 9	Date/Time Sampled: 09/12/2012 15:50 PSS Sample ID: 12091301-013					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
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		09/14/12 09/15/12 07:25 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
Toluene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
2-Hexanone	ND	ug/L	10	1		09/14/12 09/15/12 07:25 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
Dibromochloromethane	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
tert-Amyl ethyl ether	ND	ug/L	10	1		09/14/12 09/15/12 07:25 1011
tert-Butyl ethyl ether	ND	ug/L	10	1		09/14/12 09/15/12 07:25 1011
Diisopropyl ether	12	ug/L	10	1		09/14/12 09/15/12 07:25 1011
tert-Amyl methyl ether	130	ug/L	10	1		09/14/12 09/15/12 07:25 1011
tert-Amyl alcohol	ND	ug/L	20	1		09/14/12 09/15/12 07:25 1011
Bromoform	ND	ug/L	5.0	1		09/14/12 09/15/12 07:25 1011
Tetrachloroethene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
Chlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
Ethylbenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
m,p-Xylenes	ND	ug/L	2.0	1		09/14/12 09/15/12 07:25 1011
Styrene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
o-Xylene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
Isopropylbenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		09/14/12 09/15/12 07:25 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
Naphthalene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 07:25 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 10</b>	<b>Date/Time Sampled: 09/12/2012 16:10 PSS Sample ID: 12091301-014</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>1,100</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 10</b>		<b>Date/Time Sampled: 09/12/2012 16:10 PSS Sample ID: 12091301-014</b>					
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>					
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Chloromethane		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Vinyl Chloride		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
tert-Butyl alcohol		1,000	ug/L	200	10	10	09/14/12 09/17/12 18:58 1011
Bromomethane		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Chloroethane		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Acetone		ND	ug/L	10	1	1	09/14/12 09/15/12 08:24 1011
Cyclohexane		ND	ug/L	10	1	1	09/14/12 09/15/12 08:24 1011
Trichlorofluoromethane		ND	ug/L	5.0	1	1	09/14/12 09/15/12 08:24 1011
1,1-Dichloroethene		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Methylene Chloride		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Methyl-t-butyl ether		1,000	ug/L	10	10	10	09/14/12 09/17/12 18:58 1011
1,1-Dichloroethane		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
2-Butanone (MEK)		ND	ug/L	10	1	1	09/14/12 09/15/12 08:24 1011
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Bromochloromethane		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Chloroform		21	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
1,2-Dichloroethane		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Carbon Tetrachloride		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Benzene		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
1,2-Dichloropropane		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Methyl Acetate		ND	ug/L	10	1	1	09/14/12 09/15/12 08:24 1011
Methylcyclohexane		ND	ug/L	10	1	1	09/14/12 09/15/12 08:24 1011
Trichloroethene		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
Carbon Disulfide		ND	ug/L	10	1	1	09/14/12 09/15/12 08:24 1011
Bromodichloromethane		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:24 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 10	Date/Time Sampled: 09/12/2012 16:10 PSS Sample ID: 12091301-014					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		09/14/12 09/15/12 08:24
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
Toluene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
2-Hexanone	ND	ug/L	10	1		09/14/12 09/15/12 08:24
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
Dibromochloromethane	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
tert-Amyl ethyl ether	ND	ug/L	10	1		09/14/12 09/15/12 08:24
tert-Butyl ethyl ether	ND	ug/L	10	1		09/14/12 09/15/12 08:24
Diisopropyl ether	ND	ug/L	10	1		09/14/12 09/15/12 08:24
tert-Amyl methyl ether	41	ug/L	10	1		09/14/12 09/15/12 08:24
tert-Amyl alcohol	24	ug/L	20	1		09/14/12 09/15/12 08:24
Bromoform	ND	ug/L	5.0	1		09/14/12 09/15/12 08:24
Tetrachloroethene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
Chlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
Ethylbenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
m,p-Xylenes	ND	ug/L	2.0	1		09/14/12 09/15/12 08:24
Styrene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
o-Xylene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
Isopropylbenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
1,3-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
1,4-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
1,2-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		09/14/12 09/15/12 08:24
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
Naphthalene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 08:24

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 11</b>	<b>Date/Time Sampled: 09/12/2012 15:10 PSS Sample ID: 12091301-015</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>1,500</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 11	Date/Time Sampled: 09/12/2012 15:10 PSS Sample ID: 12091301-015					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
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	1	09/14/12 09/15/12 08:53 1011
Chloromethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
tert-Butyl alcohol	2,400	ug/L	400	20	20	09/14/12 09/17/12 19:28 1011
Bromomethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
Chloroethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
Acetone	ND	ug/L	10	1	1	09/14/12 09/15/12 08:53 1011
Cyclohexane	ND	ug/L	10	1	1	09/14/12 09/15/12 08:53 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	09/14/12 09/15/12 08:53 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
Methylene Chloride	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
Methyl-t-butyl ether	1,400	ug/L	20	20	20	09/14/12 09/17/12 19:28 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	09/14/12 09/15/12 08:53 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
Bromochloromethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
Chloroform	16	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
Benzene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
Methyl Acetate	ND	ug/L	10	1	1	09/14/12 09/15/12 08:53 1011
Methylcyclohexane	ND	ug/L	10	1	1	09/14/12 09/15/12 08:53 1011
Trichloroethene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
Carbon Disulfide	ND	ug/L	10	1	1	09/14/12 09/15/12 08:53 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	09/14/12 09/15/12 08:53 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 11</b>		<b>Date/Time Sampled: 09/12/2012 15:10 PSS Sample ID: 12091301-015</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	09/14/12	09/15/12 08:53	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
Toluene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
2-Hexanone		ND	ug/L	10		1	09/14/12	09/15/12 08:53	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
Dibromochloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	09/14/12	09/15/12 08:53	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	09/14/12	09/15/12 08:53	1011
Diisopropyl ether		ND	ug/L	10		1	09/14/12	09/15/12 08:53	1011
tert-Amyl methyl ether		61	ug/L	10		1	09/14/12	09/15/12 08:53	1011
tert-Amyl alcohol		67	ug/L	20		1	09/14/12	09/15/12 08:53	1011
Bromoform		ND	ug/L	5.0		1	09/14/12	09/15/12 08:53	1011
Tetrachloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
Chlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
Ethylbenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
m,p-Xylenes		ND	ug/L	2.0		1	09/14/12	09/15/12 08:53	1011
Styrene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
o-Xylene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
Isopropylbenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	09/14/12	09/15/12 08:53	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
Naphthalene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 08:53	1011

**OFFICES:**  
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FAX 410-788-8723

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 12</b>	<b>Date/Time Sampled: 09/12/2012 14:10 PSS Sample ID: 12091301-016</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>240</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 12</b>		<b>Date/Time Sampled: 09/12/2012 14:10 PSS Sample ID: 12091301-016</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Chloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Vinyl Chloride		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
tert-Butyl alcohol		<b>61</b>	ug/L	20		1	09/14/12	09/15/12 09:23	1011
Bromomethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Chloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Acetone		ND	ug/L	10		1	09/14/12	09/15/12 09:23	1011
Cyclohexane		ND	ug/L	10		1	09/14/12	09/15/12 09:23	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	09/14/12	09/15/12 09:23	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Methylene Chloride		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Methyl-t-butyl ether		<b>220</b>	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
2-Butanone (MEK)		ND	ug/L	10		1	09/14/12	09/15/12 09:23	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Bromochloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Chloroform		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Benzene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Methyl Acetate		ND	ug/L	10		1	09/14/12	09/15/12 09:23	1011
Methylcyclohexane		ND	ug/L	10		1	09/14/12	09/15/12 09:23	1011
Trichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
Carbon Disulfide		ND	ug/L	10		1	09/14/12	09/15/12 09:23	1011
Bromodichloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:23	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 12	Date/Time Sampled: 09/12/2012 14:10 PSS Sample ID: 12091301-016					
Matrix: GROUND WATER	Date/Time Received: 09/13/2012 08:10					
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		09/14/12 09/15/12 09:23 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
Toluene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
2-Hexanone	ND	ug/L	10	1		09/14/12 09/15/12 09:23 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
Dibromochloromethane	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
tert-Amyl ethyl ether	ND	ug/L	10	1		09/14/12 09/15/12 09:23 1011
tert-Butyl ethyl ether	ND	ug/L	10	1		09/14/12 09/15/12 09:23 1011
Diisopropyl ether	ND	ug/L	10	1		09/14/12 09/15/12 09:23 1011
tert-Amyl methyl ether	ND	ug/L	10	1		09/14/12 09/15/12 09:23 1011
tert-Amyl alcohol	ND	ug/L	20	1		09/14/12 09/15/12 09:23 1011
Bromoform	ND	ug/L	5.0	1		09/14/12 09/15/12 09:23 1011
Tetrachloroethene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
Chlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
Ethylbenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
m,p-Xylenes	ND	ug/L	2.0	1		09/14/12 09/15/12 09:23 1011
Styrene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
o-Xylene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
Isopropylbenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		09/14/12 09/15/12 09:23 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
Naphthalene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		09/14/12 09/15/12 09:23 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 13</b>	<b>Date/Time Sampled: 09/12/2012 14:40 PSS Sample ID: 12091301-017</b>						
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/13/2012 08:10</b>						
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B					
<hr/>							
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	1,100 ug/L	100		1	09/14/12	09/14/12 16:15	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 13</b>		<b>Date/Time Sampled: 09/12/2012 14:40 PSS Sample ID: 12091301-017</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Chloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Vinyl Chloride		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
tert-Butyl alcohol		150	ug/L	20		1	09/14/12	09/15/12 09:52	1011
Bromomethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Chloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Acetone		ND	ug/L	10		1	09/14/12	09/15/12 09:52	1011
Cyclohexane		ND	ug/L	10		1	09/14/12	09/15/12 09:52	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	09/14/12	09/15/12 09:52	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Methylene Chloride		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Methyl-t-butyl ether		1,000	ug/L	10		10	09/14/12	09/17/12 19:57	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
2-Butanone (MEK)		ND	ug/L	10		1	09/14/12	09/15/12 09:52	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Bromochloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Chloroform		1.3	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Benzene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Methyl Acetate		ND	ug/L	10		1	09/14/12	09/15/12 09:52	1011
Methylcyclohexane		ND	ug/L	10		1	09/14/12	09/15/12 09:52	1011
Trichloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Carbon Disulfide		ND	ug/L	10		1	09/14/12	09/15/12 09:52	1011
Bromodichloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091301  
**AECOM, Columbia, MD**  
September 20, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 13</b>		<b>Date/Time Sampled: 09/12/2012 14:40 PSS Sample ID: 12091301-017</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 09/13/2012 08:10</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	09/14/12	09/15/12 09:52	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Toluene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
2-Hexanone		ND	ug/L	10		1	09/14/12	09/15/12 09:52	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Dibromochloromethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	09/14/12	09/15/12 09:52	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	09/14/12	09/15/12 09:52	1011
Diisopropyl ether		ND	ug/L	10		1	09/14/12	09/15/12 09:52	1011
tert-Amyl methyl ether		44	ug/L	10		1	09/14/12	09/15/12 09:52	1011
tert-Amyl alcohol		ND	ug/L	20		1	09/14/12	09/15/12 09:52	1011
Bromoform		ND	ug/L	5.0		1	09/14/12	09/15/12 09:52	1011
Tetrachloroethene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Chlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Ethylbenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
m,p-Xylenes		ND	ug/L	2.0		1	09/14/12	09/15/12 09:52	1011
Styrene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
o-Xylene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Isopropylbenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	09/14/12	09/15/12 09:52	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
Naphthalene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	09/14/12	09/15/12 09:52	1011



# SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

## PHASE SEPARATION SCIENCE, INC.

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

① *CLIENT: <u>Affcon</u>		*OFFICE LOC. <u>C 01 Wm b. g. m)</u>		PSS Work Order #: <u>12091301</u>		PAGE <u>1</u> OF <u>2</u>	
*PROJECT MGR: <u>John on 2111</u>		*PHONE NO.: <u>(410) 565-0501</u>		Matrix Codes: <u>SW=Surface Wtr</u> <u>DW=Drinking Wtr</u> <u>GW=Ground Wtr</u> <u>WW=Waste Wtr</u> <u>O=Oil</u> <u>S=Soil</u> <u>L=Liquid</u> <u>SOL=Solid</u> <u>A=Air</u> <u>W=Wipe</u>			
EMAIL:	FAX NO.:	( )		Preservatives Used	<u>b/c l</u>	<u>b/c</u>	
*PROJECT NAME: <u>7-11 Fallston #22287</u>		PROJECT NO.: <u>60144703</u>		Sample Type	<u>C</u>	<u>T</u>	
SITE LOCATION: <u>Fallston, MD</u>		P.O. NO.:		Analysis Method Required	<u>3</u>	<u>*</u>	
SAMPLER(S): <u>Nick Barrett</u>		DW CERT NO.:		C = COMP	<u>1/15/11</u>	<u>2/6/11</u>	
② LAB NO.		*SAMPLE IDENTIFICATION		MATRIX (See Codes)	<u>E</u>	<u>R</u>	REMARKS
MW 1A		9/12/12		9/12/12	<u>G</u>	<u>G</u>	
MW 1B		11:20		11:20	<u>G</u>	<u>G</u>	
MW 2		13:00		13:00	<u>G</u>	<u>G</u>	
MW 3A		11:40		11:40	<u>G</u>	<u>G</u>	
MW 3B		12:00		12:00	<u>G</u>	<u>G</u>	
MW 4A		16:00		16:00	<u>G</u>	<u>G</u>	
MW 4B		13:46		13:46	<u>G</u>	<u>G</u>	
MW 5		12:46		12:46	<u>G</u>	<u>G</u>	
MW 6		16:10		16:10	<u>G</u>	<u>G</u>	
MW 7		12:20		12:20	<u>G</u>	<u>G</u>	
③ Relinquished By: <u>John</u>		Date: <u>9/13/12</u>	Time: <u>0800</u>	Received By: <u>John Hallamby</u>	Time: <u>0800</u>	Received By: <u>John Hallamby</u>	* Requested TAT (One TAT per COC) <input checked="" type="checkbox"/> 5-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> Next Day <input type="checkbox"/> 2-Day <input type="checkbox"/> Emergency <input type="checkbox"/> Other
Relinquished By: (2)		Date	Time	Received By	Time	Received By	# of Coolers: <u>1</u>
Relinquished By: (3)		Date	Time	Received By	Time	Received By	Custody Seal: <u>None</u>
Relinquished By: (4)		Date	Time	Received By:			Ice Present: <u>Yes</u> Temp: <u>40C</u> Shipping Carrier: <u>client</u>
							Special Instructions:
							STATE RESULTS REPORTED TO: <input checked="" type="checkbox"/> EDD FORMATTED <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> DE <input type="checkbox"/> PA <input type="checkbox"/> VA <input type="checkbox"/> WV <input type="checkbox"/> OTHER

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723  
The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary. \* = REQUIRED



# SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

## PHASE SEPARATION SCIENCE, INC.

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

① *CLIENT: <u>AECOM</u>		*OFFICE LOC. <u>(C) UTM 619, MD</u>		PSS Work Order #: <u>12091301</u>		PAGE <u>2</u> OF <u>2</u>	
*PROJECT MGR: <u>John Conzetti</u>		*PHONE NO.: <u>(443) 565-6501</u>		Matrix Codes: <u>SW=Surface Wtr DW=Drinking Wtr GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil L=liquid SOL=Solid A=Air WI=Wipe</u>			
EMAIL:	FAX NO.: ( )	No. C O N T A I N E R S	SAMPLE TYPE	Preservatives Used	Analysis Method Required	REMARKS	
*PROJECT NAME: <u>7-11 Feg 11/15 +en #22281</u>		PROJECT NO.: <u>601/44763</u>		C = COMP	③ * <u>SO 2011/2</u>		
SITE LOCATION: <u>Falls Church, VA</u>		P.O. NO.: <u></u>		N E G = GRAB	<u>2019-10-29</u>		
SAMPLER(S): <u>Victor Bryant</u>		DW CERT NO.: <u></u>		S	<u>2019-10-29</u>		
② LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)			
	<u>MW 8A</u>	<u>9/12/12</u>	<u>15:00</u>	<u>G W</u>	<u>G</u>	<u>V</u>	<u>V</u>
	<u>MW 8B</u>	<u></u>	<u>15:10</u>	<u>G</u>	<u>G</u>	<u>V</u>	<u>V</u>
	<u>MW 9</u>	<u></u>	<u>15:50</u>	<u>G</u>	<u>G</u>	<u>V</u>	<u>V</u>
	<u>MW 10</u>	<u></u>	<u>16:10</u>	<u>G</u>	<u>G</u>	<u>V</u>	<u>V</u>
	<u>MW 11</u>	<u></u>	<u>15:16</u>	<u>G</u>	<u>G</u>	<u>V</u>	<u>V</u>
	<u>MW 12</u>	<u></u>	<u>14:10</u>	<u>G</u>	<u>G</u>	<u>V</u>	<u>V</u>
	<u>MW 13</u>	<u></u>	<u>14:48</u>	<u>G</u>	<u>G</u>	<u>V</u>	<u>V</u>
④ *Requested TAT (One TAT per COC) <input checked="" type="checkbox"/> 5-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> 2-Day <input type="checkbox"/> Next Day <input type="checkbox"/> Emergency <input type="checkbox"/> Other Data Deliverables Required: <input checked="" type="checkbox"/> COA <input type="checkbox"/> QC SUMM <input type="checkbox"/> CLP LIKE <input type="checkbox"/> OTHER							
Relinquished By: (4)	Date <u>13/12/2010</u>	Time <u>0810</u>	Received By: <u>John Holland</u>	# of Coolers: <u>1</u>			
Relinquished By: (2)	Date	Time	Received By:	Custody Seal: <u>None</u>			
Relinquished By: (3)	Date	Time	Received By:	Ice Present: <u>Yes</u> Temp: <u>40C</u>			
Relinquished By: (4)	Date	Time	Received By:	Shipping Carrier: <u>Chen</u>			
Special Instructions:				STATE RESULTS REPORTED TO: <input checked="" type="checkbox"/> MD <input type="checkbox"/> DE <input type="checkbox"/> VA <input type="checkbox"/> WV <input type="checkbox"/> OTHER			



# Phase Separation Science, Inc

## Sample Receipt Checklist

Work Order #	12091301	Received By	Amy Friedlander
Client Name	AECOM	Date Received	09/13/2012 08:10:00 AM
Project Name	7-11 Fallston #22281	Delivered By	Client
Project Number	60144763	Tracking No	Not Applicable
Disposal Date	10/18/2012	Logged In By	Rachel Davis

### Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	4
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

### Documentation

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

### Sample Container

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

Total No. of Samples Received 17

Total No. of Containers Received 102

### 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

### 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:

Rachel Davis

Date: 09/13/2012

PM Review and Approval:

Amy Friedlander

Date: 09/13/2012

# Analytical Report for

AECOM

**Certificate of Analysis No.: 12091827**

**Project Manager: John Canzeri**

**Project Name : 7-11 Fallston #22281**

**Project Location: Fallston**

**Project ID : 60144763**



**September 25, 2012**

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

**OFFICES:**  
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FAX 410-788-8723

# PHASE SEPARATION SCIENCE, INC.



September 25, 2012

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

Reference: PSS Work Order No: **12091827**  
Project Name: 7-11 Fallston #22281  
Project Location: Fallston  
Project ID.: 60144763

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 numbered **12091827**.

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 October 23, 2012. 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.

**Dan Prucnal**  
Laboratory Manager



# Sample Summary

**Client Name: AECOM**  
**Project Name: 7-11 Fallston #22281**

**Project ID: 60144763**

**Work Order Number: 12091827**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 09/18/2012 at 04:20 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
12091827-001	HW 3	GROUND WATER	09/18/2012 12:30

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 common laboratory contaminants such as acetone, methylene chloride and phthalates, may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. The following analytical results are never reported on a dry weight basis: 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.

**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.



## Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Fallston #22281

Project ID: 60144763

Work Order Number: 12091827

---

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.

**Sample Receipt:**

All sample receipt conditions were acceptable.

**NELAP accreditation was held for all analyses performed unless noted below. See [www.phaseonline.com](http://www.phaseonline.com) for complete PSS scope of accreditation.**

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FAX 410-788-8723

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091827  
**AECOM, Columbia, MD**  
September 25, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston

Project ID: 60144763

<b>Sample ID: HW 3</b>	<b>Date/Time Sampled: 09/18/2012 12:30 PSS Sample ID: 12091827-001</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 09/18/2012 16:20</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>3,600</b>	<b>Units</b> ug/L	<b>RL</b> 100

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091827  
**AECOM, Columbia, MD**  
September 25, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston

Project ID: 60144763

Sample ID: HW 3	Date/Time Sampled: 09/18/2012 12:30 PSS Sample ID: 12091827-001					
Matrix: GROUND WATER	Date/Time Received: 09/18/2012 16:20					
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	1	09/20/12 09/20/12 18:12 1011
Chloromethane	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
tert-Butyl alcohol	1,800	ug/L	400	20	20	09/20/12 09/20/12 18:41 1011
Bromomethane	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
Chloroethane	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
Acetone	ND	ug/L	10	1	1	09/20/12 09/20/12 18:12 1011
Cyclohexane	ND	ug/L	10	1	1	09/20/12 09/20/12 18:12 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	09/20/12 09/20/12 18:12 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
Methylene Chloride	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
Methyl-t-butyl ether	3,600	ug/L	20	20	20	09/20/12 09/20/12 18:41 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	09/20/12 09/20/12 18:12 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
Bromochloromethane	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
Chloroform	9.6	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
Benzene	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
Methyl Acetate	ND	ug/L	10	1	1	09/20/12 09/20/12 18:12 1011
Methylcyclohexane	ND	ug/L	10	1	1	09/20/12 09/20/12 18:12 1011
Trichloroethene	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
Carbon Disulfide	ND	ug/L	10	1	1	09/20/12 09/20/12 18:12 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	09/20/12 09/20/12 18:12 1011

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12091827  
**AECOM, Columbia, MD**  
September 25, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston

Project ID: 60144763

Sample ID: HW 3	Date/Time Sampled: 09/18/2012 12:30 PSS Sample ID: 12091827-001				
Matrix: GROUND WATER	Date/Time Received: 09/18/2012 16:20				
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B	
	Result	Units	RL	Flag	Dil
4-Methyl-2-Pentanone	ND	ug/L	5.0	1	09/20/12 09/20/12 18:12 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
Toluene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
2-Hexanone	ND	ug/L	10	1	09/20/12 09/20/12 18:12 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
Dibromochloromethane	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	09/20/12 09/20/12 18:12 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	09/20/12 09/20/12 18:12 1011
Diisopropyl ether	13	ug/L	10	1	09/20/12 09/20/12 18:12 1011
tert-Amyl methyl ether	160	ug/L	10	1	09/20/12 09/20/12 18:12 1011
tert-Amyl alcohol	44	ug/L	20	1	09/20/12 09/20/12 18:12 1011
Bromoform	ND	ug/L	5.0	1	09/20/12 09/20/12 18:12 1011
Tetrachloroethene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
Chlorobenzene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
Ethylbenzene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
m,p-Xylenes	ND	ug/L	2.0	1	09/20/12 09/20/12 18:12 1011
Styrene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
o-Xylene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
Isopropylbenzene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	09/20/12 09/20/12 18:12 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
Naphthalene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	09/20/12 09/20/12 18:12 1011



## **SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM**

PHASE SEPARATION SCIENCE, INC.

[www.phaseonline.com](http://www.phaseonline.com)  
email: [info@phaseonline.com](mailto:info@phaseonline.com)



# Phase Separation Science, Inc

## Sample Receipt Checklist

Work Order #	12091827	Received By	Rachel Davis
Client Name	AECOM	Date Received	09/18/2012 04:20:00 PM
Project Name	7-11 Fallston #22281	Delivered By	Client
Project Number	60144763	Tracking No	Not Applicable
Disposal Date	10/23/2012	Logged In By	Rachel Davis

### Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	4
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

### Documentation

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

### Sample Container

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

Total No. of Samples Received 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

### 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:

Rachel Davis

Date: 09/18/2012

PM Review and Approval:

Amy Friedlander

Date: 09/19/2012

# Analytical Report for

AECOM

Certificate of Analysis No.: 12120715

Project Manager: John Canzeri

Project Name : 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID : 60144763



December 14, 2012  
Phase Separation Science, Inc.  
6630 Baltimore National Pike  
Baltimore, MD 21228  
Phone: (410) 747-8770  
Fax: (410) 788-8723

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# PHASE SEPARATION SCIENCE, INC.



December 14, 2012

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

Reference: PSS Work Order(s) No: **12120715**

Project Name: 7-11 Fallston #22281  
Project Location: Fallston, MD  
Project ID.: 60144763

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 **12120715**.

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 January 11, 2013. 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.

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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 Fallston #22281**

**Work Order Number(s): 12120715**

**Project ID: 60144763**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 12/07/2012 at 12:30 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
12120715-001	MW1A	GROUND WATER	12/06/12 12:40
12120715-002	MW1B	GROUND WATER	12/06/12 12:30
12120715-003	MW2	GROUND WATER	12/06/12 13:45
12120715-004	MW3A	GROUND WATER	12/06/12 12:50
12120715-005	MW3B	GROUND WATER	12/06/12 13:00
12120715-006	MW4A	GROUND WATER	12/06/12 16:15
12120715-007	MW4B	GROUND WATER	12/06/12 17:00
12120715-008	MW5	GROUND WATER	12/06/12 14:00
12120715-009	MW6	GROUND WATER	12/06/12 16:00
12120715-010	MW7	GROUND WATER	12/06/12 13:10
12120715-011	MW8A	GROUND WATER	12/06/12 15:20
12120715-012	MW8B	GROUND WATER	12/06/12 15:30
12120715-013	MW9	GROUND WATER	12/06/12 16:25
12120715-014	MW10	GROUND WATER	12/06/12 16:20
12120715-015	MW11	GROUND WATER	12/06/12 16:30
12120715-016	MW12	GROUND WATER	12/06/12 16:45
12120715-017	MW13	GROUND WATER	12/06/12 16:40
12120715-018	HW3	GROUND WATER	12/06/12 16:35

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. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminants, and part 141.3, for the secondary drinking water contaminants.
5. The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for non-potable water samples tested for compliance for Virginia Pollution Discharge Elimination System (VPDES) permits and Virginia Pollutant Abatement (VPA) permits, have a maximum holding time of 15 minutes established by 40CFR136.3.



# Sample Summary

**Client Name: AECOM**

**Project Name: 7-11 Fallston #22281**

**Work Order Number(s): 12120715**

**Project ID: 60144763**

**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.



## Case Narrative Summary

Client Name: AECOM

Project Name: 7-11 Fallston #22281

Work Order Number(s): 12120715

Project ID: 60144763

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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.

**Sample Receipt:**

All sample receipt conditions were acceptable.

**NELAP accreditation was held for all analyses performed unless noted below. See [www.phaseonline.com](http://www.phaseonline.com) for complete PSS scope of accreditation.**

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW1A</b>	<b>Date/Time Sampled: 12/06/2012 12:40 PSS Sample ID: 12120715-001</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 12/08/12	Analyzed 12/08/12 17:48	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW1A	Date/Time Sampled: 12/06/2012 12:40 PSS Sample ID: 12120715-001					
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
Dichlorodifluoromethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Chloromethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
tert-Butyl alcohol	ND	ug/L	20	1	1	12/12/12 12/12/12 21:28 1011
Bromomethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Chloroethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Acetone	ND	ug/L	10	1	1	12/12/12 12/12/12 21:28 1011
Cyclohexane	ND	ug/L	10	1	1	12/12/12 12/12/12 21:28 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	12/12/12 12/12/12 21:28 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Methylene Chloride	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Methyl-t-butyl ether	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	12/12/12 12/12/12 21:28 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Bromochloromethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Chloroform	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Benzene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Methyl Acetate	ND	ug/L	10	1	1	12/12/12 12/12/12 21:28 1011
Methylcyclohexane	ND	ug/L	10	1	1	12/12/12 12/12/12 21:28 1011
Trichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
Carbon Disulfide	ND	ug/L	10	1	1	12/12/12 12/12/12 21:28 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:28 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW1A	Date/Time Sampled: 12/06/2012 12:40 PSS Sample ID: 12120715-001					
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		12/12/12 12/12/12 21:28
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
Toluene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
2-Hexanone	ND	ug/L	10	1		12/12/12 12/12/12 21:28
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
Dibromochloromethane	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
tert-Amyl ethyl ether	ND	ug/L	10	1		12/12/12 12/12/12 21:28
tert-Butyl ethyl ether	ND	ug/L	10	1		12/12/12 12/12/12 21:28
Diisopropyl ether	ND	ug/L	10	1		12/12/12 12/12/12 21:28
tert-Amyl methyl ether	ND	ug/L	10	1		12/12/12 12/12/12 21:28
tert-Amyl alcohol	ND	ug/L	20	1		12/12/12 12/12/12 21:28
Bromoform	ND	ug/L	5.0	1		12/12/12 12/12/12 21:28
Tetrachloroethene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
Chlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
Ethylbenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
m,p-Xylenes	ND	ug/L	2.0	1		12/12/12 12/12/12 21:28
Styrene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
o-Xylene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
Isopropylbenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		12/12/12 12/12/12 21:28
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
Naphthalene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:28

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW1B</b>	<b>Date/Time Sampled: 12/06/2012 12:30 PSS Sample ID: 12120715-002</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 12/08/12	Analyzed 12/08/12 18:13	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW1B	Date/Time Sampled: 12/06/2012 12:30 PSS Sample ID: 12120715-002					
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
Dichlorodifluoromethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Chloromethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
tert-Butyl alcohol	ND	ug/L	20	1	1	12/12/12 12/12/12 21:58 1011
Bromomethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Chloroethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Acetone	ND	ug/L	10	1	1	12/12/12 12/12/12 21:58 1011
Cyclohexane	ND	ug/L	10	1	1	12/12/12 12/12/12 21:58 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	12/12/12 12/12/12 21:58 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Methylene Chloride	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Methyl-t-butyl ether	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	12/12/12 12/12/12 21:58 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Bromochloromethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Chloroform	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Benzene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Methyl Acetate	ND	ug/L	10	1	1	12/12/12 12/12/12 21:58 1011
Methylcyclohexane	ND	ug/L	10	1	1	12/12/12 12/12/12 21:58 1011
Trichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
Carbon Disulfide	ND	ug/L	10	1	1	12/12/12 12/12/12 21:58 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	12/12/12 12/12/12 21:58 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW1B	Date/Time Sampled: 12/06/2012 12:30 PSS Sample ID: 12120715-002					
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		12/12/12 12/12/12 21:58
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
Toluene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
2-Hexanone	ND	ug/L	10	1		12/12/12 12/12/12 21:58
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
Dibromochloromethane	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
tert-Amyl ethyl ether	ND	ug/L	10	1		12/12/12 12/12/12 21:58
tert-Butyl ethyl ether	ND	ug/L	10	1		12/12/12 12/12/12 21:58
Diisopropyl ether	ND	ug/L	10	1		12/12/12 12/12/12 21:58
tert-Amyl methyl ether	ND	ug/L	10	1		12/12/12 12/12/12 21:58
tert-Amyl alcohol	ND	ug/L	20	1		12/12/12 12/12/12 21:58
Bromoform	ND	ug/L	5.0	1		12/12/12 12/12/12 21:58
Tetrachloroethene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
Chlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
Ethylbenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
m,p-Xylenes	ND	ug/L	2.0	1		12/12/12 12/12/12 21:58
Styrene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
o-Xylene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
Isopropylbenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		12/12/12 12/12/12 21:58
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
Naphthalene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/12/12 21:58

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW2</b>	<b>Date/Time Sampled: 12/06/2012 13:45 PSS Sample ID: 12120715-003</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 12/08/12	Analyzed 12/08/12 18:39	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW2</b>		<b>Date/Time Sampled: 12/06/2012 13:45 PSS Sample ID: 12120715-003</b>					
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>					
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Chloromethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Vinyl Chloride		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
tert-Butyl alcohol		ND	ug/L	20	1	1	12/12/12 12/12/12 22:27 1011
Bromomethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Chloroethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Acetone		ND	ug/L	10	1	1	12/12/12 12/12/12 22:27 1011
Cyclohexane		ND	ug/L	10	1	1	12/12/12 12/12/12 22:27 1011
Trichlorofluoromethane		ND	ug/L	5.0	1	1	12/12/12 12/12/12 22:27 1011
1,1-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Methylene Chloride		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Methyl-t-butyl ether		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
1,1-Dichloroethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
2-Butanone (MEK)		ND	ug/L	10	1	1	12/12/12 12/12/12 22:27 1011
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Bromochloromethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Chloroform		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
1,2-Dichloroethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Carbon Tetrachloride		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Benzene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
1,2-Dichloropropane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Methyl Acetate		ND	ug/L	10	1	1	12/12/12 12/12/12 22:27 1011
Methylcyclohexane		ND	ug/L	10	1	1	12/12/12 12/12/12 22:27 1011
Trichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
Carbon Disulfide		ND	ug/L	10	1	1	12/12/12 12/12/12 22:27 1011
Bromodichloromethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:27 1011

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW2</b>		<b>Date/Time Sampled: 12/06/2012 13:45 PSS Sample ID: 12120715-003</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	12/12/12	12/12/12 22:27	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
Toluene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
2-Hexanone		ND	ug/L	10		1	12/12/12	12/12/12 22:27	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
Dibromochloromethane		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	12/12/12	12/12/12 22:27	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	12/12/12	12/12/12 22:27	1011
Diisopropyl ether		ND	ug/L	10		1	12/12/12	12/12/12 22:27	1011
tert-Amyl methyl ether		ND	ug/L	10		1	12/12/12	12/12/12 22:27	1011
tert-Amyl alcohol		ND	ug/L	20		1	12/12/12	12/12/12 22:27	1011
Bromoform		ND	ug/L	5.0		1	12/12/12	12/12/12 22:27	1011
Tetrachloroethene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
Chlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
Ethylbenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
m,p-Xylenes		ND	ug/L	2.0		1	12/12/12	12/12/12 22:27	1011
Styrene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
o-Xylene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
Isopropylbenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	12/12/12	12/12/12 22:27	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
Naphthalene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:27	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW3A</b>	<b>Date/Time Sampled: 12/06/2012 12:50 PSS Sample ID: 12120715-004</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 12/08/12	Analyzed 12/08/12 19:04	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW3A</b>		<b>Date/Time Sampled: 12/06/2012 12:50 PSS Sample ID: 12120715-004</b>					
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>					
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Chloromethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Vinyl Chloride		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
tert-Butyl alcohol		ND	ug/L	20	1	1	12/12/12 12/12/12 22:57 1011
Bromomethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Chloroethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Acetone		ND	ug/L	10	1	1	12/12/12 12/12/12 22:57 1011
Cyclohexane		ND	ug/L	10	1	1	12/12/12 12/12/12 22:57 1011
Trichlorofluoromethane		ND	ug/L	5.0	1	1	12/12/12 12/12/12 22:57 1011
1,1-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Methylene Chloride		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Methyl-t-butyl ether		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
1,1-Dichloroethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
2-Butanone (MEK)		ND	ug/L	10	1	1	12/12/12 12/12/12 22:57 1011
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Bromochloromethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Chloroform		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
1,2-Dichloroethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Carbon Tetrachloride		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Benzene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
1,2-Dichloropropane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Methyl Acetate		ND	ug/L	10	1	1	12/12/12 12/12/12 22:57 1011
Methylcyclohexane		ND	ug/L	10	1	1	12/12/12 12/12/12 22:57 1011
Trichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
Carbon Disulfide		ND	ug/L	10	1	1	12/12/12 12/12/12 22:57 1011
Bromodichloromethane		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	12/12/12 12/12/12 22:57 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW3A</b>		<b>Date/Time Sampled: 12/06/2012 12:50 PSS Sample ID: 12120715-004</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	12/12/12	12/12/12 22:57	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
Toluene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
2-Hexanone		ND	ug/L	10		1	12/12/12	12/12/12 22:57	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
Dibromochloromethane		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	12/12/12	12/12/12 22:57	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	12/12/12	12/12/12 22:57	1011
Diisopropyl ether		ND	ug/L	10		1	12/12/12	12/12/12 22:57	1011
tert-Amyl methyl ether		ND	ug/L	10		1	12/12/12	12/12/12 22:57	1011
tert-Amyl alcohol		ND	ug/L	20		1	12/12/12	12/12/12 22:57	1011
Bromoform		ND	ug/L	5.0		1	12/12/12	12/12/12 22:57	1011
Tetrachloroethene		<b>1.2</b>	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
Chlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
Ethylbenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
m,p-Xylenes		ND	ug/L	2.0		1	12/12/12	12/12/12 22:57	1011
Styrene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
o-Xylene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
Isopropylbenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	12/12/12	12/12/12 22:57	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
Naphthalene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/12/12 22:57	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW3B</b>	<b>Date/Time Sampled: 12/06/2012 13:00 PSS Sample ID: 12120715-005</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 12/08/12	Analyzed 12/08/12 19:29	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW3B</b>		<b>Date/Time Sampled: 12/06/2012 13:00 PSS Sample ID: 12120715-005</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Chloromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Vinyl Chloride		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
tert-Butyl alcohol		ND	ug/L	20		1	12/12/12	12/13/12 03:49	1011
Bromomethane		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Chloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Acetone		ND	ug/L	10		1	12/12/12	12/13/12 03:49	1011
Cyclohexane		ND	ug/L	10		1	12/12/12	12/13/12 03:49	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	12/12/12	12/13/12 03:49	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Methylene Chloride		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Methyl-t-butyl ether		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
2-Butanone (MEK)		ND	ug/L	10		1	12/12/12	12/13/12 03:49	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Bromochloromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Chloroform		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Benzene		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Methyl Acetate		ND	ug/L	10		1	12/12/12	12/13/12 03:49	1011
Methylcyclohexane		ND	ug/L	10		1	12/12/12	12/13/12 03:49	1011
Trichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
Carbon Disulfide		ND	ug/L	10		1	12/12/12	12/13/12 03:49	1011
Bromodichloromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	12/12/12	12/13/12 03:49	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW3B	Date/Time Sampled: 12/06/2012 13:00 PSS Sample ID: 12120715-005					
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		12/12/12 12/13/12 03:49
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
Toluene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
2-Hexanone	ND	ug/L	10	1		12/12/12 12/13/12 03:49
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
Dibromochloromethane	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
tert-Amyl ethyl ether	ND	ug/L	10	1		12/12/12 12/13/12 03:49
tert-Butyl ethyl ether	ND	ug/L	10	1		12/12/12 12/13/12 03:49
Diisopropyl ether	ND	ug/L	10	1		12/12/12 12/13/12 03:49
tert-Amyl methyl ether	ND	ug/L	10	1		12/12/12 12/13/12 03:49
tert-Amyl alcohol	ND	ug/L	20	1		12/12/12 12/13/12 03:49
Bromoform	ND	ug/L	5.0	1		12/12/12 12/13/12 03:49
Tetrachloroethene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
Chlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
Ethylbenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
m,p-Xylenes	ND	ug/L	2.0	1		12/12/12 12/13/12 03:49
Styrene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
o-Xylene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
Isopropylbenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		12/12/12 12/13/12 03:49
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
Naphthalene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 03:49

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW4A</b>	<b>Date/Time Sampled: 12/06/2012 16:15 PSS Sample ID: 12120715-006</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>490</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW4A</b>		<b>Date/Time Sampled: 12/06/2012 16:15 PSS Sample ID: 12120715-006</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Chloromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Vinyl Chloride		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
tert-Butyl alcohol		97	ug/L	20		1	12/12/12	12/13/12 06:15	1011
Bromomethane		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Chloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Acetone		ND	ug/L	10		1	12/12/12	12/13/12 06:15	1011
Cyclohexane		ND	ug/L	10		1	12/12/12	12/13/12 06:15	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	12/12/12	12/13/12 06:15	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Methylene Chloride		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Methyl-t-butyl ether		390	ug/L	10		10	12/12/12	12/13/12 06:44	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
2-Butanone (MEK)		ND	ug/L	10		1	12/12/12	12/13/12 06:15	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Bromochloromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Chloroform		12	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Benzene		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Methyl Acetate		ND	ug/L	10		1	12/12/12	12/13/12 06:15	1011
Methylcyclohexane		ND	ug/L	10		1	12/12/12	12/13/12 06:15	1011
Trichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
Carbon Disulfide		ND	ug/L	10		1	12/12/12	12/13/12 06:15	1011
Bromodichloromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	12/12/12	12/13/12 06:15	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW4A	Date/Time Sampled: 12/06/2012 16:15 PSS Sample ID: 12120715-006							
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30							
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	1	12/12/12	12/13/12 06:15	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
Toluene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
2-Hexanone	ND	ug/L	10	1	1	12/12/12	12/13/12 06:15	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
Dibromochloromethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	12/12/12	12/13/12 06:15	1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	12/12/12	12/13/12 06:15	1011
Diisopropyl ether	ND	ug/L	10	1	1	12/12/12	12/13/12 06:15	1011
tert-Amyl methyl ether	22	ug/L	10	1	1	12/12/12	12/13/12 06:15	1011
tert-Amyl alcohol	ND	ug/L	20	1	1	12/12/12	12/13/12 06:15	1011
Bromoform	ND	ug/L	5.0	1	1	12/12/12	12/13/12 06:15	1011
Tetrachloroethene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
Chlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
Ethylbenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
m,p-Xylenes	ND	ug/L	2.0	1	1	12/12/12	12/13/12 06:15	1011
Styrene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
o-Xylene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
Isopropylbenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	12/12/12	12/13/12 06:15	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
Naphthalene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 06:15	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW4B</b>	<b>Date/Time Sampled: 12/06/2012 17:00 PSS Sample ID: 12120715-007</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	Result: ND Units: ug/L	RL: 100 Flag: 1	Prepared: 12/08/12 Analyzed: 12/08/12 20:20 Analyst: 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW4B	Date/Time Sampled: 12/06/2012 17:00 PSS Sample ID: 12120715-007							
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30							
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	1	12/12/12	12/13/12 07:14	1011
Chloromethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Vinyl Chloride	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
tert-Butyl alcohol	ND	ug/L	20	1	1	12/12/12	12/13/12 07:14	1011
Bromomethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Chloroethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Acetone	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
Cyclohexane	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	12/12/12	12/13/12 07:14	1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Methylene Chloride	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Methyl-t-butyl ether	1.1	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
2-Butanone (MEK)	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Bromochloromethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Chloroform	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Benzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Methyl Acetate	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
Methylcyclohexane	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
Trichloroethene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Carbon Disulfide	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
Bromodichloromethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW4B	Date/Time Sampled: 12/06/2012 17:00 PSS Sample ID: 12120715-007							
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30							
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	1	12/12/12	12/13/12 07:14	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Toluene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
2-Hexanone	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Dibromochloromethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
Diisopropyl ether	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
tert-Amyl methyl ether	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
tert-Amyl alcohol	ND	ug/L	20	1	1	12/12/12	12/13/12 07:14	1011
Bromoform	ND	ug/L	5.0	1	1	12/12/12	12/13/12 07:14	1011
Tetrachloroethene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Chlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Ethylbenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
m,p-Xylenes	ND	ug/L	2.0	1	1	12/12/12	12/13/12 07:14	1011
Styrene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
o-Xylene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Isopropylbenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	12/12/12	12/13/12 07:14	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
Naphthalene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	12/12/12	12/13/12 07:14	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW5</b>	<b>Date/Time Sampled: 12/06/2012 14:00 PSS Sample ID: 12120715-008</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 12/08/12	Analyzed 12/08/12 20:45	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW5	Date/Time Sampled: 12/06/2012 14:00 PSS Sample ID: 12120715-008					
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
Dichlorodifluoromethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Chloromethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Vinyl Chloride	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
tert-Butyl alcohol	ND	ug/L	20	1	1	12/12/12 12/13/12 07:42
Bromomethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Chloroethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Acetone	ND	ug/L	10	1	1	12/12/12 12/13/12 07:42
Cyclohexane	ND	ug/L	10	1	1	12/12/12 12/13/12 07:42
Trichlorofluoromethane	ND	ug/L	5.0	1	1	12/12/12 12/13/12 07:42
1,1-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Methylene Chloride	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Methyl-t-butyl ether	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
1,1-Dichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
2-Butanone (MEK)	ND	ug/L	10	1	1	12/12/12 12/13/12 07:42
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Bromochloromethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Chloroform	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
1,2-Dichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Carbon Tetrachloride	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Benzene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
1,2-Dichloropropane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Methyl Acetate	ND	ug/L	10	1	1	12/12/12 12/13/12 07:42
Methylcyclohexane	ND	ug/L	10	1	1	12/12/12 12/13/12 07:42
Trichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
Carbon Disulfide	ND	ug/L	10	1	1	12/12/12 12/13/12 07:42
Bromodichloromethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 07:42

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW5	Date/Time Sampled: 12/06/2012 14:00 PSS Sample ID: 12120715-008				
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30				
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B	
	Result	Units	RL	Flag	Dil
4-Methyl-2-Pentanone	ND	ug/L	5.0	1	12/12/12 12/13/12 07:42 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
Toluene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
2-Hexanone	ND	ug/L	10	1	12/12/12 12/13/12 07:42 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
Dibromochloromethane	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	12/12/12 12/13/12 07:42 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	12/12/12 12/13/12 07:42 1011
Diisopropyl ether	ND	ug/L	10	1	12/12/12 12/13/12 07:42 1011
tert-Amyl methyl ether	ND	ug/L	10	1	12/12/12 12/13/12 07:42 1011
tert-Amyl alcohol	ND	ug/L	20	1	12/12/12 12/13/12 07:42 1011
Bromoform	ND	ug/L	5.0	1	12/12/12 12/13/12 07:42 1011
Tetrachloroethene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
Chlorobenzene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
Ethylbenzene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
m,p-Xylenes	ND	ug/L	2.0	1	12/12/12 12/13/12 07:42 1011
Styrene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
o-Xylene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
Isopropylbenzene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	12/12/12 12/13/12 07:42 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
Naphthalene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	12/12/12 12/13/12 07:42 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW6</b>	<b>Date/Time Sampled: 12/06/2012 16:00 PSS Sample ID: 12120715-009</b>						
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>						
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B					
<hr/>							
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
TPH-GRO (Gasoline Range Organics)	1,500 ug/L	100		1	12/08/12	12/08/12 21:10	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW6</b>		<b>Date/Time Sampled: 12/06/2012 16:00</b>				<b>PSS Sample ID: 12120715-009</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Chloromethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Vinyl Chloride		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
tert-Butyl alcohol		230	ug/L	20	1	1	12/12/12	12/13/12 08:12
Bromomethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Chloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Acetone		ND	ug/L	10	1	1	12/12/12	12/13/12 08:12
Cyclohexane		ND	ug/L	10	1	1	12/12/12	12/13/12 08:12
Trichlorofluoromethane		ND	ug/L	5.0	1	1	12/12/12	12/13/12 08:12
1,1-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Methylene Chloride		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Methyl-t-butyl ether		1,400	ug/L	10	10	10	12/12/12	12/13/12 08:40
1,1-Dichloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
2-Butanone (MEK)		ND	ug/L	10	1	1	12/12/12	12/13/12 08:12
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Bromochloromethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Chloroform		4.8	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
1,2-Dichloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Carbon Tetrachloride		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Benzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
1,2-Dichloropropane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Methyl Acetate		ND	ug/L	10	1	1	12/12/12	12/13/12 08:12
Methylcyclohexane		ND	ug/L	10	1	1	12/12/12	12/13/12 08:12
Trichloroethene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Carbon Disulfide		ND	ug/L	10	1	1	12/12/12	12/13/12 08:12
Bromodichloromethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW6</b>		<b>Date/Time Sampled: 12/06/2012 16:00</b>				<b>PSS Sample ID: 12120715-009</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	12/12/12	12/13/12 08:12
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Toluene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
2-Hexanone		ND	ug/L	10	1	1	12/12/12	12/13/12 08:12
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Dibromochloromethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
tert-Amyl ethyl ether		ND	ug/L	10	1	1	12/12/12	12/13/12 08:12
tert-Butyl ethyl ether		ND	ug/L	10	1	1	12/12/12	12/13/12 08:12
Diisopropyl ether		ND	ug/L	10	1	1	12/12/12	12/13/12 08:12
tert-Amyl methyl ether		<b>65</b>	ug/L	10	1	1	12/12/12	12/13/12 08:12
tert-Amyl alcohol		ND	ug/L	20	1	1	12/12/12	12/13/12 08:12
Bromoform		ND	ug/L	5.0	1	1	12/12/12	12/13/12 08:12
Tetrachloroethene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Chlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Ethylbenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
m,p-Xylenes		ND	ug/L	2.0	1	1	12/12/12	12/13/12 08:12
Styrene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
o-Xylene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Isopropylbenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	12/12/12	12/13/12 08:12
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
Naphthalene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 08:12

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW7</b>	<b>Date/Time Sampled: 12/06/2012 13:10 PSS Sample ID: 12120715-010</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 12/08/12	Analyzed 12/08/12 21:36	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW7</b>		<b>Date/Time Sampled: 12/06/2012 13:10 PSS Sample ID: 12120715-010</b>					
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>					
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Chloromethane		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Vinyl Chloride		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
tert-Butyl alcohol		ND	ug/L	20	1	1	12/12/12 12/13/12 09:10 1011
Bromomethane		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Chloroethane		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Acetone		ND	ug/L	10	1	1	12/12/12 12/13/12 09:10 1011
Cyclohexane		ND	ug/L	10	1	1	12/12/12 12/13/12 09:10 1011
Trichlorofluoromethane		ND	ug/L	5.0	1	1	12/12/12 12/13/12 09:10 1011
1,1-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Methylene Chloride		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Methyl-t-butyl ether		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
1,1-Dichloroethane		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
2-Butanone (MEK)		ND	ug/L	10	1	1	12/12/12 12/13/12 09:10 1011
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Bromochloromethane		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Chloroform		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
1,2-Dichloroethane		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Carbon Tetrachloride		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Benzene		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
1,2-Dichloropropane		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Methyl Acetate		ND	ug/L	10	1	1	12/12/12 12/13/12 09:10 1011
Methylcyclohexane		ND	ug/L	10	1	1	12/12/12 12/13/12 09:10 1011
Trichloroethene		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
Carbon Disulfide		ND	ug/L	10	1	1	12/12/12 12/13/12 09:10 1011
Bromodichloromethane		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:10 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW7	Date/Time Sampled: 12/06/2012 13:10 PSS Sample ID: 12120715-010					
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		12/12/12 12/13/12 09:10
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
Toluene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
2-Hexanone	ND	ug/L	10	1		12/12/12 12/13/12 09:10
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
Dibromochloromethane	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
tert-Amyl ethyl ether	ND	ug/L	10	1		12/12/12 12/13/12 09:10
tert-Butyl ethyl ether	ND	ug/L	10	1		12/12/12 12/13/12 09:10
Diisopropyl ether	ND	ug/L	10	1		12/12/12 12/13/12 09:10
tert-Amyl methyl ether	ND	ug/L	10	1		12/12/12 12/13/12 09:10
tert-Amyl alcohol	ND	ug/L	20	1		12/12/12 12/13/12 09:10
Bromoform	ND	ug/L	5.0	1		12/12/12 12/13/12 09:10
Tetrachloroethene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
Chlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
Ethylbenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
m,p-Xylenes	ND	ug/L	2.0	1		12/12/12 12/13/12 09:10
Styrene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
o-Xylene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
Isopropylbenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		12/12/12 12/13/12 09:10
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
Naphthalene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:10

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW8A</b>	<b>Date/Time Sampled: 12/06/2012 15:20 PSS Sample ID: 12120715-011</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 12/08/12	Analyzed 12/08/12 22:01	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW8A	Date/Time Sampled: 12/06/2012 15:20 PSS Sample ID: 12120715-011					
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
Dichlorodifluoromethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Chloromethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Vinyl Chloride	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
tert-Butyl alcohol	ND	ug/L	20	1	1	12/12/12 12/13/12 09:39
Bromomethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Chloroethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Acetone	ND	ug/L	10	1	1	12/12/12 12/13/12 09:39
Cyclohexane	ND	ug/L	10	1	1	12/12/12 12/13/12 09:39
Trichlorofluoromethane	ND	ug/L	5.0	1	1	12/12/12 12/13/12 09:39
1,1-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Methylene Chloride	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Methyl-t-butyl ether	38	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
1,1-Dichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
2-Butanone (MEK)	ND	ug/L	10	1	1	12/12/12 12/13/12 09:39
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Bromochloromethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Chloroform	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
1,2-Dichloroethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Carbon Tetrachloride	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Benzene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
1,2-Dichloropropane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Methyl Acetate	ND	ug/L	10	1	1	12/12/12 12/13/12 09:39
Methylcyclohexane	ND	ug/L	10	1	1	12/12/12 12/13/12 09:39
Trichloroethene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
Carbon Disulfide	ND	ug/L	10	1	1	12/12/12 12/13/12 09:39
Bromodichloromethane	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	12/12/12 12/13/12 09:39

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW8A	Date/Time Sampled: 12/06/2012 15:20 PSS Sample ID: 12120715-011					
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		12/12/12 12/13/12 09:39
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
Toluene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
2-Hexanone	ND	ug/L	10	1		12/12/12 12/13/12 09:39
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
Dibromochloromethane	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
tert-Amyl ethyl ether	ND	ug/L	10	1		12/12/12 12/13/12 09:39
tert-Butyl ethyl ether	ND	ug/L	10	1		12/12/12 12/13/12 09:39
Diisopropyl ether	ND	ug/L	10	1		12/12/12 12/13/12 09:39
tert-Amyl methyl ether	ND	ug/L	10	1		12/12/12 12/13/12 09:39
tert-Amyl alcohol	ND	ug/L	20	1		12/12/12 12/13/12 09:39
Bromoform	ND	ug/L	5.0	1		12/12/12 12/13/12 09:39
Tetrachloroethene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
Chlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
Ethylbenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
m,p-Xylenes	ND	ug/L	2.0	1		12/12/12 12/13/12 09:39
Styrene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
o-Xylene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
Isopropylbenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		12/12/12 12/13/12 09:39
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
Naphthalene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/12/12 12/13/12 09:39

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW8B</b>	<b>Date/Time Sampled: 12/06/2012 15:30 PSS Sample ID: 12120715-012</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>670</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW8B</b>		<b>Date/Time Sampled: 12/06/2012 15:30 PSS Sample ID: 12120715-012</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Chloromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Vinyl Chloride		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
tert-Butyl alcohol		ND	ug/L	20		1	12/12/12	12/13/12 10:08	1011
Bromomethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Chloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Acetone		16	ug/L	10		1	12/12/12	12/13/12 10:08	1011
Cyclohexane		ND	ug/L	10		1	12/12/12	12/13/12 10:08	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	12/12/12	12/13/12 10:08	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Methylene Chloride		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Methyl-t-butyl ether		15	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
2-Butanone (MEK)		ND	ug/L	10		1	12/12/12	12/13/12 10:08	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Bromochloromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Chloroform		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Benzene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Methyl Acetate		ND	ug/L	10		1	12/12/12	12/13/12 10:08	1011
Methylcyclohexane		ND	ug/L	10		1	12/12/12	12/13/12 10:08	1011
Trichloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Carbon Disulfide		ND	ug/L	10		1	12/12/12	12/13/12 10:08	1011
Bromodichloromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW8B</b>		<b>Date/Time Sampled: 12/06/2012 15:30 PSS Sample ID: 12120715-012</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	12/12/12	12/13/12 10:08	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Toluene		<b>280</b>	ug/L	10		10	12/12/12	12/13/12 18:11	1011
2-Hexanone		ND	ug/L	10		1	12/12/12	12/13/12 10:08	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Dibromochloromethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	12/12/12	12/13/12 10:08	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	12/12/12	12/13/12 10:08	1011
Diisopropyl ether		ND	ug/L	10		1	12/12/12	12/13/12 10:08	1011
tert-Amyl methyl ether		ND	ug/L	10		1	12/12/12	12/13/12 10:08	1011
tert-Amyl alcohol		ND	ug/L	20		1	12/12/12	12/13/12 10:08	1011
Bromoform		ND	ug/L	5.0		1	12/12/12	12/13/12 10:08	1011
Tetrachloroethene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Chlorobenzene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Ethylbenzene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
m,p-Xylenes		ND	ug/L	2.0		1	12/12/12	12/13/12 10:08	1011
Styrene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
o-Xylene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Isopropylbenzene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	12/12/12	12/13/12 10:08	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
Naphthalene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	12/12/12	12/13/12 10:08	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW9</b>	Date/Time Sampled: 12/06/2012 16:25	PSS Sample ID: 12120715-013
<b>Matrix: GROUND WATER</b>	Date/Time Received: 12/07/2012 12:30	
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B
TPH-GRO (Gasoline Range Organics)	<b>Result</b>	<b>Units</b>
<hr/>		
	<b>1,900</b>	ug/L
	100	1
	12/08/12	12/08/12 22:52
		1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW9</b>		<b>Date/Time Sampled: 12/06/2012 16:25</b>				<b>PSS Sample ID: 12120715-013</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Chloromethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Vinyl Chloride		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
tert-Butyl alcohol		840	ug/L	200	10	10	12/12/12	12/13/12 18:40
Bromomethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Chloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Acetone		ND	ug/L	10	1	1	12/12/12	12/13/12 10:37
Cyclohexane		ND	ug/L	10	1	1	12/12/12	12/13/12 10:37
Trichlorofluoromethane		ND	ug/L	5.0	1	1	12/12/12	12/13/12 10:37
1,1-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Methylene Chloride		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Methyl-t-butyl ether		1,600	ug/L	10	10	10	12/12/12	12/13/12 18:40
1,1-Dichloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
2-Butanone (MEK)		ND	ug/L	10	1	1	12/12/12	12/13/12 10:37
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Bromochloromethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Chloroform		3.3	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
1,2-Dichloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Carbon Tetrachloride		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Benzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
1,2-Dichloropropane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Methyl Acetate		ND	ug/L	10	1	1	12/12/12	12/13/12 10:37
Methylcyclohexane		ND	ug/L	10	1	1	12/12/12	12/13/12 10:37
Trichloroethene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Carbon Disulfide		ND	ug/L	10	1	1	12/12/12	12/13/12 10:37
Bromodichloromethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW9</b>		<b>Date/Time Sampled: 12/06/2012 16:25</b>				<b>PSS Sample ID: 12120715-013</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	12/12/12	12/13/12 10:37
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Toluene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
2-Hexanone		ND	ug/L	10	1	1	12/12/12	12/13/12 10:37
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Dibromochloromethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
tert-Amyl ethyl ether		ND	ug/L	10	1	1	12/12/12	12/13/12 10:37
tert-Butyl ethyl ether		ND	ug/L	10	1	1	12/12/12	12/13/12 10:37
Diisopropyl ether		ND	ug/L	10	1	1	12/12/12	12/13/12 10:37
tert-Amyl methyl ether		90	ug/L	10	1	1	12/12/12	12/13/12 10:37
tert-Amyl alcohol		ND	ug/L	20	1	1	12/12/12	12/13/12 10:37
Bromoform		ND	ug/L	5.0	1	1	12/12/12	12/13/12 10:37
Tetrachloroethene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Chlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Ethylbenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
m,p-Xylenes		ND	ug/L	2.0	1	1	12/12/12	12/13/12 10:37
Styrene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
o-Xylene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Isopropylbenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	12/12/12	12/13/12 10:37
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
Naphthalene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	12/12/12	12/13/12 10:37

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW10</b>	<b>Date/Time Sampled: 12/06/2012 16:20 PSS Sample ID: 12120715-014</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>1,100</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW10</b>		<b>Date/Time Sampled: 12/06/2012 16:20</b>				<b>PSS Sample ID: 12120715-014</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Chloromethane		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Vinyl Chloride		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
tert-Butyl alcohol	1,500	ug/L	200	10	10	10	12/13/12	12/13/12 19:10
Bromomethane		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Chloroethane		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Acetone		ND	ug/L	10	1	1	12/13/12	12/13/12 21:36
Cyclohexane		ND	ug/L	10	1	1	12/13/12	12/13/12 21:36
Trichlorofluoromethane		ND	ug/L	5.0	1	1	12/13/12	12/13/12 21:36
1,1-Dichloroethene		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Methylene Chloride		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Methyl-t-butyl ether	1,000	ug/L	10	10	10	10	12/13/12	12/13/12 19:10
1,1-Dichloroethane		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
2-Butanone (MEK)		ND	ug/L	10	1	1	12/13/12	12/13/12 21:36
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Bromochloromethane		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Chloroform	23	ug/L	1.0	1	1	1	12/13/12	12/13/12 21:36
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
1,2-Dichloroethane		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Carbon Tetrachloride		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Benzene		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
1,2-Dichloropropane		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Methyl Acetate		ND	ug/L	10	1	1	12/13/12	12/13/12 21:36
Methylcyclohexane		ND	ug/L	10	1	1	12/13/12	12/13/12 21:36
Trichloroethene		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
Carbon Disulfide		ND	ug/L	10	1	1	12/13/12	12/13/12 21:36
Bromodichloromethane		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW10</b>	<b>Date/Time Sampled: 12/06/2012 16:20 PSS Sample ID: 12120715-014</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B				Preparation Method: 5030B			
	<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone	ND	ug/L	5.0	1	1	12/13/12	12/13/12 21:36	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
Toluene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
2-Hexanone	ND	ug/L	10	1	1	12/13/12	12/13/12 21:36	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
Dibromochloromethane	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	12/13/12	12/13/12 21:36	1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	12/13/12	12/13/12 21:36	1011
Diisopropyl ether	ND	ug/L	10	1	1	12/13/12	12/13/12 21:36	1011
tert-Amyl methyl ether	50	ug/L	10	1	1	12/13/12	12/13/12 21:36	1011
tert-Amyl alcohol	53	ug/L	20	1	1	12/13/12	12/13/12 21:36	1011
Bromoform	ND	ug/L	5.0	1	1	12/13/12	12/13/12 21:36	1011
Tetrachloroethene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
Chlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
Ethylbenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
m,p-Xylenes	ND	ug/L	2.0	1	1	12/13/12	12/13/12 21:36	1011
Styrene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
o-Xylene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
Isopropylbenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	12/13/12	12/13/12 21:36	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
Naphthalene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:36	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW11</b>	<b>Date/Time Sampled: 12/06/2012 16:30 PSS Sample ID: 12120715-015</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>1,500</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW11</b>		<b>Date/Time Sampled: 12/06/2012 16:30 PSS Sample ID: 12120715-015</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Chloromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Vinyl Chloride		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
tert-Butyl alcohol	<b>2,800</b>	ug/L		1,000		50	12/13/12	12/14/12 15:01	1011
Bromomethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Chloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Acetone		ND	ug/L	10		1	12/13/12	12/13/12 22:06	1011
Cyclohexane		ND	ug/L	10		1	12/13/12	12/13/12 22:06	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	12/13/12	12/13/12 22:06	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Methylene Chloride		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Methyl-t-butyl ether	<b>1,400</b>	ug/L		10		10	12/13/12	12/13/12 19:39	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
2-Butanone (MEK)		ND	ug/L	10		1	12/13/12	12/13/12 22:06	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Bromochloromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Chloroform	<b>20</b>	ug/L		1.0		1	12/13/12	12/13/12 22:06	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Benzene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Methyl Acetate		ND	ug/L	10		1	12/13/12	12/13/12 22:06	1011
Methylcyclohexane		ND	ug/L	10		1	12/13/12	12/13/12 22:06	1011
Trichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
Carbon Disulfide		ND	ug/L	10		1	12/13/12	12/13/12 22:06	1011
Bromodichloromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:06	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW11	Date/Time Sampled: 12/06/2012 16:30 PSS Sample ID: 12120715-015					
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		12/13/12 12/13/12 22:06
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
Toluene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
2-Hexanone	ND	ug/L	10	1		12/13/12 12/13/12 22:06
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
Dibromochloromethane	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
tert-Amyl ethyl ether	ND	ug/L	10	1		12/13/12 12/13/12 22:06
tert-Butyl ethyl ether	ND	ug/L	10	1		12/13/12 12/13/12 22:06
Diisopropyl ether	ND	ug/L	10	1		12/13/12 12/13/12 22:06
tert-Amyl methyl ether	76	ug/L	10	1		12/13/12 12/13/12 22:06
tert-Amyl alcohol	150	ug/L	20	1		12/13/12 12/13/12 22:06
Bromoform	ND	ug/L	5.0	1		12/13/12 12/13/12 22:06
Tetrachloroethene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
Chlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
Ethylbenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
m,p-Xylenes	ND	ug/L	2.0	1		12/13/12 12/13/12 22:06
Styrene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
o-Xylene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
Isopropylbenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		12/13/12 12/13/12 22:06
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
Naphthalene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:06

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW12</b>	<b>Date/Time Sampled: 12/06/2012 16:45 PSS Sample ID: 12120715-016</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>170</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW12</b>		<b>Date/Time Sampled: 12/06/2012 16:45 PSS Sample ID: 12120715-016</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Chloromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Vinyl Chloride		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
tert-Butyl alcohol		32	ug/L	20		1	12/13/12	12/13/12 21:07	1011
Bromomethane		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Chloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Acetone		ND	ug/L	10		1	12/13/12	12/13/12 21:07	1011
Cyclohexane		ND	ug/L	10		1	12/13/12	12/13/12 21:07	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	12/13/12	12/13/12 21:07	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Methylene Chloride		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Methyl-t-butyl ether		160	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
2-Butanone (MEK)		ND	ug/L	10		1	12/13/12	12/13/12 21:07	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Bromochloromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Chloroform		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Benzene		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Methyl Acetate		ND	ug/L	10		1	12/13/12	12/13/12 21:07	1011
Methylcyclohexane		ND	ug/L	10		1	12/13/12	12/13/12 21:07	1011
Trichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
Carbon Disulfide		ND	ug/L	10		1	12/13/12	12/13/12 21:07	1011
Bromodichloromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	12/13/12	12/13/12 21:07	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW12</b>	<b>Date/Time Sampled: 12/06/2012 16:45 PSS Sample ID: 12120715-016</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B				Preparation Method: 5030B			
	<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone	ND	ug/L	5.0	1	1	12/13/12	12/13/12 21:07	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
Toluene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
2-Hexanone	ND	ug/L	10	1	1	12/13/12	12/13/12 21:07	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
Dibromochloromethane	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	12/13/12	12/13/12 21:07	1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	12/13/12	12/13/12 21:07	1011
Diisopropyl ether	ND	ug/L	10	1	1	12/13/12	12/13/12 21:07	1011
tert-Amyl methyl ether	ND	ug/L	10	1	1	12/13/12	12/13/12 21:07	1011
tert-Amyl alcohol	ND	ug/L	20	1	1	12/13/12	12/13/12 21:07	1011
Bromoform	ND	ug/L	5.0	1	1	12/13/12	12/13/12 21:07	1011
Tetrachloroethene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
Chlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
Ethylbenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
m,p-Xylenes	ND	ug/L	2.0	1	1	12/13/12	12/13/12 21:07	1011
Styrene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
o-Xylene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
Isopropylbenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	12/13/12	12/13/12 21:07	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
Naphthalene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	12/13/12	12/13/12 21:07	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW13</b>	<b>Date/Time Sampled: 12/06/2012 16:40 PSS Sample ID: 12120715-017</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>900</b>	<b>Units</b> ug/L	<b>RL</b> 100

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW13</b>		<b>Date/Time Sampled: 12/06/2012 16:40 PSS Sample ID: 12120715-017</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Chloromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Vinyl Chloride		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
tert-Butyl alcohol		<b>450</b>	ug/L	200		10	12/13/12	12/13/12 20:08	1011
Bromomethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Chloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Acetone		ND	ug/L	10		1	12/13/12	12/13/12 22:35	1011
Cyclohexane		ND	ug/L	10		1	12/13/12	12/13/12 22:35	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	12/13/12	12/13/12 22:35	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Methylene Chloride		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Methyl-t-butyl ether		<b>770</b>	ug/L	10		10	12/13/12	12/13/12 20:08	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
2-Butanone (MEK)		ND	ug/L	10		1	12/13/12	12/13/12 22:35	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Bromochloromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Chloroform		<b>1.2</b>	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Benzene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Methyl Acetate		ND	ug/L	10		1	12/13/12	12/13/12 22:35	1011
Methylcyclohexane		ND	ug/L	10		1	12/13/12	12/13/12 22:35	1011
Trichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
Carbon Disulfide		ND	ug/L	10		1	12/13/12	12/13/12 22:35	1011
Bromodichloromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	12/13/12	12/13/12 22:35	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW13	Date/Time Sampled: 12/06/2012 16:40 PSS Sample ID: 12120715-017					
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		12/13/12 12/13/12 22:35
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
1,1,2-Trichloroethane	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
Toluene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
2-Hexanone	ND	ug/L	10	1		12/13/12 12/13/12 22:35
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
Dibromochloromethane	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
tert-Amyl ethyl ether	ND	ug/L	10	1		12/13/12 12/13/12 22:35
tert-Butyl ethyl ether	ND	ug/L	10	1		12/13/12 12/13/12 22:35
Diisopropyl ether	ND	ug/L	10	1		12/13/12 12/13/12 22:35
tert-Amyl methyl ether	40	ug/L	10	1		12/13/12 12/13/12 22:35
tert-Amyl alcohol	ND	ug/L	20	1		12/13/12 12/13/12 22:35
Bromoform	ND	ug/L	5.0	1		12/13/12 12/13/12 22:35
Tetrachloroethene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
Chlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
Ethylbenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
m,p-Xylenes	ND	ug/L	2.0	1		12/13/12 12/13/12 22:35
Styrene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
o-Xylene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
Isopropylbenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
1,3-Dichlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
1,4-Dichlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
1,2-Dichlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		12/13/12 12/13/12 22:35
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
Naphthalene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		12/13/12 12/13/12 22:35

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: HW3</b>	<b>Date/Time Sampled: 12/06/2012 16:35 PSS Sample ID: 12120715-018</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 12/07/2012 12:30</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>960</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: HW3</b>		<b>Date/Time Sampled: 12/06/2012 16:35 PSS Sample ID: 12120715-018</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 12/07/2012 12:30</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Chloromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Vinyl Chloride		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
tert-Butyl alcohol		460	ug/L	200		10	12/13/12	12/13/12 20:38	1011
Bromomethane		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Chloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Acetone		ND	ug/L	10		1	12/13/12	12/13/12 23:04	1011
Cyclohexane		ND	ug/L	10		1	12/13/12	12/13/12 23:04	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	12/13/12	12/13/12 23:04	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Methylene Chloride		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Methyl-t-butyl ether		940	ug/L	10		10	12/13/12	12/13/12 20:38	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
2-Butanone (MEK)		ND	ug/L	10		1	12/13/12	12/13/12 23:04	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Bromochloromethane		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Chloroform		16	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Benzene		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Methyl Acetate		ND	ug/L	10		1	12/13/12	12/13/12 23:04	1011
Methylcyclohexane		ND	ug/L	10		1	12/13/12	12/13/12 23:04	1011
Trichloroethene		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
Carbon Disulfide		ND	ug/L	10		1	12/13/12	12/13/12 23:04	1011
Bromodichloromethane		2.1	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	12/13/12	12/13/12 23:04	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 12120715  
**AECOM, Columbia, MD**  
 December 14, 2012

Project Name: 7-11 Fallston #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: HW3	Date/Time Sampled: 12/06/2012 16:35 PSS Sample ID: 12120715-018				
Matrix: GROUND WATER	Date/Time Received: 12/07/2012 12:30				
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B	
	Result	Units	RL	Flag	Dil
4-Methyl-2-Pentanone	ND	ug/L	5.0	1	12/13/12 12/13/12 23:04 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
Toluene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
2-Hexanone	ND	ug/L	10	1	12/13/12 12/13/12 23:04 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
Dibromochloromethane	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	12/13/12 12/13/12 23:04 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	12/13/12 12/13/12 23:04 1011
Diisopropyl ether	ND	ug/L	10	1	12/13/12 12/13/12 23:04 1011
tert-Amyl methyl ether	49	ug/L	10	1	12/13/12 12/13/12 23:04 1011
tert-Amyl alcohol	ND	ug/L	20	1	12/13/12 12/13/12 23:04 1011
Bromoform	ND	ug/L	5.0	1	12/13/12 12/13/12 23:04 1011
Tetrachloroethene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
Chlorobenzene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
Ethylbenzene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
m,p-Xylenes	ND	ug/L	2.0	1	12/13/12 12/13/12 23:04 1011
Styrene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
o-Xylene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
Isopropylbenzene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	12/13/12 12/13/12 23:04 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
Naphthalene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	12/13/12 12/13/12 23:04 1011



## **SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM**

# PHASE SEPARATION SCIENCE, INC.

[www.phaseonline.com](http://www.phaseonline.com)  
email: [info@phaseonline.com](mailto:info@phaseonline.com)

① *CLIENT: AE COM		*OFFICE LOC. (C/L/M/B/S, MN)		PSS Work Order #: 12120715		PAGE 1 OF 2
*PROJECT MGR: John Conner		*PHONE NO.: 0441 565-6501		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=Wide		
EMAIL:	FAX NO.:	( )	PROJECT NO.: 47G3	No. C	SAMPLE TYPE	Preservatives Used
*PROJECT NAME: 741 Fallston #2281		P.O. NO.:	C = COMP	O N T A I -	Analysis Method Required	14C 14L HCL
SITE LOCATION: Fallston, MD		SAMPLER(S): Nick Barnes	G = GRAB	E R S	REMARKS	219-7411 520-511124
DW CERT NO.:		*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	
② LAB NO.	MW 1A	12/6/2	12:40	5hr	C G	
	MW 1B		12:30		C	
	MW 2		13:45		C	
	MW 3A		13:50		C	
	MW 3B		13:00		C	
	MW 4A		16:15		C	
	MW 4B		17:00		C	
	MW 5		14:00		C	
	MW 6		16:00		C	
	MW 7		13:10		C	
④ Relinquished By: (4)		Date: 12/12	Time: 12:30	Received By: John Barnes	# of Coolers: 1	
					<input checked="" type="checkbox"/> 5-Day	<input type="checkbox"/> 3-Day
					<input type="checkbox"/> Next Day	<input type="checkbox"/> Emergency
⑤ Relinquished By: (2)		Date:	Time:	Received By:	Custody Seal: ASS	
					<input checked="" type="checkbox"/> COA QC-SUMM CLP LIKE	<input type="checkbox"/> OTHER
Relinquished By: (3)		Date:	Time:	Received By:	Ice Present: YES Temp: 3°C	
Relinquished By: (4)		Date:	Time:	Received By:	Shipping Carrier: Client	
Relinquished By: (5)		Date:	Time:	Received By:	Special Instructions:	
DW COMPLIANCE?		EDD FORMAT TYPE	STATE RESULTS REPORTED TO:			
YES <input type="checkbox"/>		A/E cert	MD <input type="checkbox"/>	DE <input type="checkbox"/>	VA <input type="checkbox"/>	WI=Wide <input type="checkbox"/>
NO <input type="checkbox"/>		Other	OTHER <input type="checkbox"/>	OTHER <input type="checkbox"/>	OTHER <input type="checkbox"/>	OTHER <input type="checkbox"/>



# SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

## PHASE SEPARATION SCIENCE, INC.

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

① *CLIENT: <u>AECOM</u>		*OFFICE LOC. <u>(010) 965-6501</u>		PSS Work Order #: <u>12120715</u>		PAGE <u>2</u> OF <u>2</u>	
*PROJECT MGR: <u>JChen</u> (sn201)		*PHONE NO.: <u>(240) 565-6501</u>		Matrix Codes: SW=Surface Wtr DW=Drinking Wtr GW=Ground Wtr MW=Waste Wtr O=Oil S=Soil L=Liquid		soL=Solid A=Air WI=Wire	
EMAIL:	FAX NO.: ( )	No. C	SAMPLE TYPE	Preservatives Used	Analytical Method Required		
*PROJECT NAME: <u>7-11 Fallston</u> PROJECT NO.: <u>60144763</u>		N	T	H/C	H/C		
SITE LOCATION: <u>Fallston, MD</u>		A	A	③ C = COMP			
SAMPLER(S): <u>Vicki Bontz</u>		I	I	* * G = GRAB			
DW CERT NO.:		E	R	REMARKS			
② LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	S		
MW 8A	<u>1/2/07/07</u>	<u>15:30</u>	<u>6W</u>	<u>6</u>	<u>5</u>		
MW 8B	<u>1/2/07/07</u>	<u>15:30</u>	<u>6</u>	<u>6</u>	<u>5</u>		
MW 9	<u>1/2/07/07</u>	<u>16:25</u>	<u>6</u>	<u>6</u>	<u>5</u>		
MW 10	<u>1/2/07/07</u>	<u>16:30</u>	<u>6</u>	<u>6</u>	<u>5</u>		
MW 11	<u>1/2/07/07</u>	<u>16:30</u>	<u>6</u>	<u>6</u>	<u>5</u>		
MW 12	<u>1/2/07/07</u>	<u>16:45</u>	<u>6</u>	<u>6</u>	<u>5</u>		
MW 13	<u>1/2/07/07</u>	<u>16:40</u>	<u>6</u>	<u>6</u>	<u>5</u>		
MW 14	<u>1/2/07/07</u>	<u>16:35</u>	<u>6</u>	<u>6</u>	<u>5</u>		
④ Relinquished By: <u>John Deen</u>		Date <u>1/7/12</u>	Time <u>1230</u>	Received By: <u>John Deen</u>	*Requested TAT (One TAT per COC) <input checked="" type="checkbox"/> 5-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> Next Day <input type="checkbox"/> 2-Day <input type="checkbox"/> Emergency <input type="checkbox"/> Other		
Relinquished By: (2)		Date	Time	Received By:	Data Delivers Required: <input checked="" type="checkbox"/> COA <input type="checkbox"/> QC SUMM <input type="checkbox"/> CLP LIKE <input type="checkbox"/> OTHER		
Relinquished By: (3)		Date	Time	Received By:	Special Instructions:		
Relinquished By: (4)		Date	Time	Received By:	DW COMPLIANCE? YES <input type="checkbox"/>	EDD FORMAT TYPE <u>Excel</u>	STATE RESULTS REPORTED TO: MD <input checked="" type="checkbox"/> DE <input type="checkbox"/> VA <input type="checkbox"/> WV <input type="checkbox"/> OTHER

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723  
The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary. \* = REQUIRED



# Phase Separation Science, Inc

## Sample Receipt Checklist

Work Order #	12120715	Received By	Rachel Davis
Client Name	AECOM	Date Received	12/07/2012 12:30:00 PM
Project Name	7-11 Fallston #22281	Delivered By	Client
Project Number	60144763	Tracking No	Not Applicable
Disposal Date	01/11/2013	Logged In By	Rachel Davis

### Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	3
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

### Documentation

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

### Sample Container

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

Total No. of Samples Received 18

Total No. of Containers Received 108

### 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

### 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:

Rachel Davis

Date: 12/07/2012

PM Review and Approval:

Amy Friedlander

Date: 12/08/2012

# Analytical Report for

AECOM

Certificate of Analysis No.: 13031120

Project Manager: John Canzeri

Project Name : 7-11 Store 22281

Project Location: Fallston, MD

Project ID : 60144763



March 18, 2013  
Phase Separation Science, Inc.  
6630 Baltimore National Pike  
Baltimore, MD 21228  
Phone: (410) 747-8770  
Fax: (410) 788-8723

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# PHASE SEPARATION SCIENCE, INC.



March 18, 2013

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

Reference: PSS Work Order(s) No: **13031120**

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID.: 60144763

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 **13031120**.

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 April 15, 2013. 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 22281**

**Work Order Number(s): 13031120**

**Project ID: 60144763**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 03/11/2013 at 03:21 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
13031120-001	MW 1A	GROUND WATER	03/11/13 11:30
13031120-002	MW 1B	GROUND WATER	03/11/13 11:40
13031120-003	MW 2	GROUND WATER	03/11/13 10:20
13031120-004	MW 3A	GROUND WATER	03/11/13 11:50
13031120-005	MW 3B	GROUND WATER	03/11/13 12:00
13031120-006	MW 4A	GROUND WATER	03/11/13 10:37
13031120-007	MW 4B	GROUND WATER	03/11/13 11:15
13031120-008	MW 5	GROUND WATER	03/11/13 09:50
13031120-009	MW 6	GROUND WATER	03/11/13 13:50
13031120-010	MW 7	GROUND WATER	03/11/13 12:10
13031120-011	MW 8A	GROUND WATER	03/11/13 13:30
13031120-012	MW 8B	GROUND WATER	03/11/13 13:45
13031120-013	MW 9	GROUND WATER	03/11/13 11:40
13031120-014	MW 10	GROUND WATER	03/11/13 12:45
13031120-015	MW 11	GROUND WATER	03/11/13 13:05
13031120-016	MW 12	GROUND WATER	03/11/13 11:05
13031120-017	MW 13	GROUND WATER	03/11/13 12:15
13031120-018	HW 3	GROUND WATER	03/11/13 13:30

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. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminants, and part 141.3, for the secondary drinking water contaminants.
5. The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for non-potable water samples tested for compliance for Virginia Pollution Discharge Elimination System (VDPES) permits and Virginia Pollutant Abatement (VPA) permits, have a maximum holding time of 15 minutes established by 40CFR136.3.



# Sample Summary

**Client Name: AECOM**  
**Project Name: 7-11 Store 22281**

**Work Order Number(s): 13031120**

**Project ID: 60144763**

**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.



## Case Narrative Summary

**Client Name: AECOM**

**Project Name: 7-11 Store 22281**

Work Order Number(s): 13031120

Project ID: 60144763

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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.

**Sample Receipt:**

All sample receipt conditions were acceptable.

**General Comments:**

Sample " 2414 Pleasantville Road" cancelled per client email.

**NELAP accreditation was held for all analyses performed unless noted below. See [www.phaseonline.com](http://www.phaseonline.com) for complete PSS scope of accreditation.**

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 1A</b>	<b>Date/Time Sampled: 03/11/2013 11:30 PSS Sample ID: 13031120-001</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 03/12/13	Analyzed 03/12/13 13:33	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 1A</b>		<b>Date/Time Sampled: 03/11/2013 11:30 PSS Sample ID: 13031120-001</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Chloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Vinyl Chloride		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
tert-Butyl alcohol		ND	ug/L	20		1	03/14/13	03/15/13 02:29	1011
Bromomethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Chloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Acetone		ND	ug/L	10		1	03/14/13	03/15/13 02:29	1011
Cyclohexane		ND	ug/L	10		1	03/14/13	03/15/13 02:29	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	03/14/13	03/15/13 02:29	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Methylene Chloride		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Methyl-t-butyl ether		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
2-Butanone (MEK)		ND	ug/L	10		1	03/14/13	03/15/13 02:29	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Bromochloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Chloroform		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Benzene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Methyl Acetate		ND	ug/L	10		1	03/14/13	03/15/13 02:29	1011
Methylcyclohexane		ND	ug/L	10		1	03/14/13	03/15/13 02:29	1011
Trichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
Carbon Disulfide		ND	ug/L	10		1	03/14/13	03/15/13 02:29	1011
Bromodichloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:29	1011

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 1A	Date/Time Sampled: 03/11/2013 11:30 PSS Sample ID: 13031120-001					
Matrix: GROUND WATER	Date/Time Received: 03/11/2013 15:21					
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	1	03/14/13 03/15/13 02:29 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
Toluene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
2-Hexanone	ND	ug/L	10	1	1	03/14/13 03/15/13 02:29 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 02:29 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 02:29 1011
Diisopropyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 02:29 1011
tert-Amyl methyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 02:29 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	03/14/13 03/15/13 02:29 1011
Bromoform	ND	ug/L	5.0	1	1	03/14/13 03/15/13 02:29 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
Chlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
Ethylbenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	03/14/13 03/15/13 02:29 1011
Styrene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
o-Xylene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	03/14/13 03/15/13 02:29 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
Naphthalene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:29 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 1B</b>	<b>Date/Time Sampled: 03/11/2013 11:40 PSS Sample ID: 13031120-002</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 03/12/13	Analyzed 03/12/13 13:58	Analyst 1035

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 1B</b>		<b>Date/Time Sampled: 03/11/2013 11:40 PSS Sample ID: 13031120-002</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Chloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Vinyl Chloride		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
tert-Butyl alcohol		ND	ug/L	20		1	03/14/13	03/15/13 02:58	1011
Bromomethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Chloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Acetone		ND	ug/L	10		1	03/14/13	03/15/13 02:58	1011
Cyclohexane		ND	ug/L	10		1	03/14/13	03/15/13 02:58	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	03/14/13	03/15/13 02:58	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Methylene Chloride		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Methyl-t-butyl ether		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
2-Butanone (MEK)		ND	ug/L	10		1	03/14/13	03/15/13 02:58	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Bromochloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Chloroform		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Benzene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Methyl Acetate		ND	ug/L	10		1	03/14/13	03/15/13 02:58	1011
Methylcyclohexane		ND	ug/L	10		1	03/14/13	03/15/13 02:58	1011
Trichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
Carbon Disulfide		ND	ug/L	10		1	03/14/13	03/15/13 02:58	1011
Bromodichloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	03/14/13	03/15/13 02:58	1011

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 1B	Date/Time Sampled: 03/11/2013 11:40 PSS Sample ID: 13031120-002					
Matrix: GROUND WATER	Date/Time Received: 03/11/2013 15:21					
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	1	03/14/13 03/15/13 02:58 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
Toluene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
2-Hexanone	ND	ug/L	10	1	1	03/14/13 03/15/13 02:58 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 02:58 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 02:58 1011
Diisopropyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 02:58 1011
tert-Amyl methyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 02:58 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	03/14/13 03/15/13 02:58 1011
Bromoform	ND	ug/L	5.0	1	1	03/14/13 03/15/13 02:58 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
Chlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
Ethylbenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	03/14/13 03/15/13 02:58 1011
Styrene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
o-Xylene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	03/14/13 03/15/13 02:58 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
Naphthalene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 02:58 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 2</b>	<b>Date/Time Sampled: 03/11/2013 10:20 PSS Sample ID: 13031120-003</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 03/12/13	Analyzed 03/12/13 14:24	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 2</b>		<b>Date/Time Sampled: 03/11/2013 10:20</b>				<b>PSS Sample ID: 13031120-003</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Chloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Vinyl Chloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
tert-Butyl alcohol		ND	ug/L	20	1	1	03/14/13	03/15/13 03:27
Bromomethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Chloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Acetone		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
Cyclohexane		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
Trichlorofluoromethane		ND	ug/L	5.0	1	1	03/14/13	03/15/13 03:27
1,1-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Methylene Chloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Methyl-t-butyl ether		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,1-Dichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
2-Butanone (MEK)		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Bromochloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Chloroform		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,2-Dichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Carbon Tetrachloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Benzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,2-Dichloropropane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Methyl Acetate		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
Methylcyclohexane		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
Trichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Carbon Disulfide		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
Bromodichloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 2</b>		<b>Date/Time Sampled: 03/11/2013 10:20</b>				<b>PSS Sample ID: 13031120-003</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	03/14/13	03/15/13 03:27
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Toluene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
2-Hexanone		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Dibromochloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
tert-Amyl ethyl ether		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
tert-Butyl ethyl ether		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
Diisopropyl ether		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
tert-Amyl methyl ether		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
tert-Amyl alcohol		ND	ug/L	20	1	1	03/14/13	03/15/13 03:27
Bromoform		ND	ug/L	5.0	1	1	03/14/13	03/15/13 03:27
Tetrachloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Chlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Ethylbenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
m,p-Xylenes		ND	ug/L	2.0	1	1	03/14/13	03/15/13 03:27
Styrene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
o-Xylene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Isopropylbenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	03/14/13	03/15/13 03:27
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
Naphthalene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 03:27

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3A</b>	<b>Date/Time Sampled: 03/11/2013 11:50 PSS Sample ID: 13031120-004</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 03/12/13	Analyzed 03/12/13 14:49	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3A</b>		<b>Date/Time Sampled: 03/11/2013 11:50 PSS Sample ID: 13031120-004</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Chloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Vinyl Chloride		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
tert-Butyl alcohol		ND	ug/L	20		1	03/14/13	03/15/13 03:57	1011
Bromomethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Chloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Acetone		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
Cyclohexane		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	03/14/13	03/15/13 03:57	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Methylene Chloride		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Methyl-t-butyl ether		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
2-Butanone (MEK)		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Bromochloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Chloroform		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Benzene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Methyl Acetate		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
Methylcyclohexane		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
Trichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Carbon Disulfide		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
Bromodichloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3A</b>		<b>Date/Time Sampled: 03/11/2013 11:50 PSS Sample ID: 13031120-004</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	03/14/13	03/15/13 03:57	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Toluene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
2-Hexanone		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Dibromochloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
Diisopropyl ether		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
tert-Amyl methyl ether		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
tert-Amyl alcohol		ND	ug/L	20		1	03/14/13	03/15/13 03:57	1011
Bromoform		ND	ug/L	5.0		1	03/14/13	03/15/13 03:57	1011
Tetrachloroethene		1.1	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Chlorobenzene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Ethylbenzene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
m,p-Xylenes		ND	ug/L	2.0		1	03/14/13	03/15/13 03:57	1011
Styrene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
o-Xylene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Isopropylbenzene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	03/14/13	03/15/13 03:57	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
Naphthalene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	03/14/13	03/15/13 03:57	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3B</b>	<b>Date/Time Sampled: 03/11/2013 12:00 PSS Sample ID: 13031120-005</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 03/12/13	Analyzed 03/12/13 15:15	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3B</b>		<b>Date/Time Sampled: 03/11/2013 12:00</b>				<b>PSS Sample ID: 13031120-005</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Chloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Vinyl Chloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
tert-Butyl alcohol		ND	ug/L	20	1	1	03/14/13	03/15/13 04:26
Bromomethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Chloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Acetone		ND	ug/L	10	1	1	03/14/13	03/15/13 04:26
Cyclohexane		ND	ug/L	10	1	1	03/14/13	03/15/13 04:26
Trichlorofluoromethane		ND	ug/L	5.0	1	1	03/14/13	03/15/13 04:26
1,1-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Methylene Chloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Methyl-t-butyl ether		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
1,1-Dichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
2-Butanone (MEK)		ND	ug/L	10	1	1	03/14/13	03/15/13 04:26
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Bromochloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Chloroform		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
1,2-Dichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Carbon Tetrachloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Benzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
1,2-Dichloropropane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Methyl Acetate		ND	ug/L	10	1	1	03/14/13	03/15/13 04:26
Methylcyclohexane		ND	ug/L	10	1	1	03/14/13	03/15/13 04:26
Trichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
Carbon Disulfide		ND	ug/L	10	1	1	03/14/13	03/15/13 04:26
Bromodichloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:26

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 3B	Date/Time Sampled: 03/11/2013 12:00 PSS Sample ID: 13031120-005							
Matrix: GROUND WATER	Date/Time Received: 03/11/2013 15:21							
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	03/14/13	03/15/13 04:26	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
Toluene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
2-Hexanone	ND	ug/L	10		1	03/14/13	03/15/13 04:26	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
Dibromochloromethane	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	03/14/13	03/15/13 04:26	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	03/14/13	03/15/13 04:26	1011
Diisopropyl ether	ND	ug/L	10		1	03/14/13	03/15/13 04:26	1011
tert-Amyl methyl ether	ND	ug/L	10		1	03/14/13	03/15/13 04:26	1011
tert-Amyl alcohol	ND	ug/L	20		1	03/14/13	03/15/13 04:26	1011
Bromoform	ND	ug/L	5.0		1	03/14/13	03/15/13 04:26	1011
Tetrachloroethene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
Chlorobenzene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
Ethylbenzene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
m,p-Xylenes	ND	ug/L	2.0		1	03/14/13	03/15/13 04:26	1011
Styrene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
o-Xylene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
Isopropylbenzene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	03/14/13	03/15/13 04:26	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
Naphthalene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	03/14/13	03/15/13 04:26	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 4A</b>	<b>Date/Time Sampled: 03/11/2013 10:37</b>	<b>PSS Sample ID: 13031120-006</b>					
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>						
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)	690 ug/L	100		1	03/12/13	03/12/13 15:40	1035

**OFFICES:**  
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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 4A</b>		<b>Date/Time Sampled: 03/11/2013 10:37</b>				<b>PSS Sample ID: 13031120-006</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Chloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Vinyl Chloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
tert-Butyl alcohol		180	ug/L	20	1	1	03/14/13	03/15/13 04:55
Bromomethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Chloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Acetone		ND	ug/L	10	1	1	03/14/13	03/15/13 04:55
Cyclohexane		ND	ug/L	10	1	1	03/14/13	03/15/13 04:55
Trichlorofluoromethane		ND	ug/L	5.0	1	1	03/14/13	03/15/13 04:55
1,1-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Methylene Chloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Methyl-t-butyl ether		770	ug/L	10	10	10	03/14/13	03/16/13 03:32
1,1-Dichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
2-Butanone (MEK)		ND	ug/L	10	1	1	03/14/13	03/15/13 04:55
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Bromochloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Chloroform		8.9	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
1,2-Dichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Carbon Tetrachloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Benzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
1,2-Dichloropropane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Methyl Acetate		ND	ug/L	10	1	1	03/14/13	03/15/13 04:55
Methylcyclohexane		ND	ug/L	10	1	1	03/14/13	03/15/13 04:55
Trichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
Carbon Disulfide		ND	ug/L	10	1	1	03/14/13	03/15/13 04:55
Bromodichloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 04:55

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 4A	Date/Time Sampled: 03/11/2013 10:37 PSS Sample ID: 13031120-006					
Matrix: GROUND WATER	Date/Time Received: 03/11/2013 15:21					
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	1	03/14/13 03/15/13 04:55 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
Toluene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
2-Hexanone	ND	ug/L	10	1	1	03/14/13 03/15/13 04:55 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 04:55 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 04:55 1011
Diisopropyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 04:55 1011
tert-Amyl methyl ether	28	ug/L	10	1	1	03/14/13 03/15/13 04:55 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	03/14/13 03/15/13 04:55 1011
Bromoform	ND	ug/L	5.0	1	1	03/14/13 03/15/13 04:55 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
Chlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
Ethylbenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	03/14/13 03/15/13 04:55 1011
Styrene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
o-Xylene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	03/14/13 03/15/13 04:55 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
Naphthalene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 04:55 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 4B</b>	<b>Date/Time Sampled: 03/11/2013 11:15 PSS Sample ID: 13031120-007</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 03/12/13	Analyzed 03/12/13 16:05	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 4B</b>		<b>Date/Time Sampled: 03/11/2013 11:15</b>				<b>PSS Sample ID: 13031120-007</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Chloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Vinyl Chloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
tert-Butyl alcohol		21	ug/L	20	1	1	03/14/13	03/15/13 05:24
Bromomethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Chloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Acetone		ND	ug/L	10	1	1	03/14/13	03/15/13 05:24
Cyclohexane		ND	ug/L	10	1	1	03/14/13	03/15/13 05:24
Trichlorofluoromethane		ND	ug/L	5.0	1	1	03/14/13	03/15/13 05:24
1,1-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Methylene Chloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Methyl-t-butyl ether		1.7	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
1,1-Dichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
2-Butanone (MEK)		ND	ug/L	10	1	1	03/14/13	03/15/13 05:24
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Bromochloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Chloroform		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
1,2-Dichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Carbon Tetrachloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Benzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
1,2-Dichloropropane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Methyl Acetate		ND	ug/L	10	1	1	03/14/13	03/15/13 05:24
Methylcyclohexane		ND	ug/L	10	1	1	03/14/13	03/15/13 05:24
Trichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
Carbon Disulfide		ND	ug/L	10	1	1	03/14/13	03/15/13 05:24
Bromodichloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:24

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 4B	Date/Time Sampled: 03/11/2013 11:15 PSS Sample ID: 13031120-007					
Matrix: GROUND WATER	Date/Time Received: 03/11/2013 15:21					
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	1	03/14/13 03/15/13 05:24 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
Toluene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
2-Hexanone	ND	ug/L	10	1	1	03/14/13 03/15/13 05:24 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 05:24 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 05:24 1011
Diisopropyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 05:24 1011
tert-Amyl methyl ether	ND	ug/L	10	1	1	03/14/13 03/15/13 05:24 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	03/14/13 03/15/13 05:24 1011
Bromoform	ND	ug/L	5.0	1	1	03/14/13 03/15/13 05:24 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
Chlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
Ethylbenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	03/14/13 03/15/13 05:24 1011
Styrene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
o-Xylene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	03/14/13 03/15/13 05:24 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
Naphthalene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:24 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 5</b>	<b>Date/Time Sampled: 03/11/2013 09:50</b>	<b>PSS Sample ID: 13031120-008</b>
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>	
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B
TPH-GRO (Gasoline Range Organics)	Result      Units ND      ug/L	RL    Flag    Dil 100      1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 5</b>		<b>Date/Time Sampled: 03/11/2013 09:50</b>				<b>PSS Sample ID: 13031120-008</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Chloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Vinyl Chloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
tert-Butyl alcohol		ND	ug/L	20	1	1	03/14/13	03/15/13 05:53
Bromomethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Chloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Acetone		ND	ug/L	10	1	1	03/14/13	03/15/13 05:53
Cyclohexane		ND	ug/L	10	1	1	03/14/13	03/15/13 05:53
Trichlorofluoromethane		ND	ug/L	5.0	1	1	03/14/13	03/15/13 05:53
1,1-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Methylene Chloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Methyl-t-butyl ether		1.1	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
1,1-Dichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
2-Butanone (MEK)		ND	ug/L	10	1	1	03/14/13	03/15/13 05:53
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Bromochloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Chloroform		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
1,2-Dichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Carbon Tetrachloride		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Benzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
1,2-Dichloropropane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Methyl Acetate		ND	ug/L	10	1	1	03/14/13	03/15/13 05:53
Methylcyclohexane		ND	ug/L	10	1	1	03/14/13	03/15/13 05:53
Trichloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
Carbon Disulfide		ND	ug/L	10	1	1	03/14/13	03/15/13 05:53
Bromodichloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 05:53

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 5</b>		<b>Date/Time Sampled: 03/11/2013 09:50</b>			<b>PSS Sample ID: 13031120-008</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>					
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	03/14/13 03/15/13 05:53
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
Toluene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
2-Hexanone		ND	ug/L	10	1	1	03/14/13 03/15/13 05:53
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
Dibromochloromethane		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
tert-Amyl ethyl ether		ND	ug/L	10	1	1	03/14/13 03/15/13 05:53
tert-Butyl ethyl ether		ND	ug/L	10	1	1	03/14/13 03/15/13 05:53
Diisopropyl ether		ND	ug/L	10	1	1	03/14/13 03/15/13 05:53
tert-Amyl methyl ether		ND	ug/L	10	1	1	03/14/13 03/15/13 05:53
tert-Amyl alcohol		ND	ug/L	20	1	1	03/14/13 03/15/13 05:53
Bromoform		ND	ug/L	5.0	1	1	03/14/13 03/15/13 05:53
Tetrachloroethene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
Chlorobenzene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
Ethylbenzene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
m,p-Xylenes		ND	ug/L	2.0	1	1	03/14/13 03/15/13 05:53
Styrene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
o-Xylene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
Isopropylbenzene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	03/14/13 03/15/13 05:53
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
Naphthalene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	03/14/13 03/15/13 05:53

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FAX 410-788-8723

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID:</b> MW 6	<b>Date/Time Sampled:</b> 03/11/2013 13:50	<b>PSS Sample ID:</b> 13031120-009						
<b>Matrix:</b> GROUND WATER	<b>Date/Time Received:</b> 03/11/2013 15:21							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
	<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
TPH-GRO (Gasoline Range Organics)	660	ug/L	100		1	03/12/13	03/12/13 16:56	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 6</b>		<b>Date/Time Sampled: 03/11/2013 13:50 PSS Sample ID: 13031120-009</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Chloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Vinyl Chloride		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
tert-Butyl alcohol		78	ug/L	20		1	03/14/13	03/15/13 06:23	1011
Bromomethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Chloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Acetone		ND	ug/L	10		1	03/14/13	03/15/13 06:23	1011
Cyclohexane		ND	ug/L	10		1	03/14/13	03/15/13 06:23	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	03/14/13	03/15/13 06:23	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Methylene Chloride		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Methyl-t-butyl ether		810	ug/L	10		10	03/14/13	03/16/13 04:02	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
2-Butanone (MEK)		ND	ug/L	10		1	03/14/13	03/15/13 06:23	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Bromochloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Chloroform		2.7	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Benzene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Methyl Acetate		ND	ug/L	10		1	03/14/13	03/15/13 06:23	1011
Methylcyclohexane		ND	ug/L	10		1	03/14/13	03/15/13 06:23	1011
Trichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
Carbon Disulfide		ND	ug/L	10		1	03/14/13	03/15/13 06:23	1011
Bromodichloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:23	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 6</b>		<b>Date/Time Sampled: 03/11/2013 13:50</b>				<b>PSS Sample ID: 13031120-009</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	03/14/13	03/15/13 06:23
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
Toluene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
2-Hexanone		ND	ug/L	10	1	1	03/14/13	03/15/13 06:23
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
Dibromochloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
tert-Amyl ethyl ether		ND	ug/L	10	1	1	03/14/13	03/15/13 06:23
tert-Butyl ethyl ether		ND	ug/L	10	1	1	03/14/13	03/15/13 06:23
Diisopropyl ether		ND	ug/L	10	1	1	03/14/13	03/15/13 06:23
tert-Amyl methyl ether		34	ug/L	10	1	1	03/14/13	03/15/13 06:23
tert-Amyl alcohol		ND	ug/L	20	1	1	03/14/13	03/15/13 06:23
Bromoform		ND	ug/L	5.0	1	1	03/14/13	03/15/13 06:23
Tetrachloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
Chlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
Ethylbenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
m,p-Xylenes		ND	ug/L	2.0	1	1	03/14/13	03/15/13 06:23
Styrene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
o-Xylene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
Isopropylbenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	03/14/13	03/15/13 06:23
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
Naphthalene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:23

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 7</b>	<b>Date/Time Sampled: 03/11/2013 12:10 PSS Sample ID: 13031120-010</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 03/12/13	Analyzed 03/12/13 17:22	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 7</b>		<b>Date/Time Sampled: 03/11/2013 12:10 PSS Sample ID: 13031120-010</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Chloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Vinyl Chloride		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
tert-Butyl alcohol		ND	ug/L	20		1	03/14/13	03/15/13 06:52	1011
Bromomethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Chloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Acetone		ND	ug/L	10		1	03/14/13	03/15/13 06:52	1011
Cyclohexane		ND	ug/L	10		1	03/14/13	03/15/13 06:52	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	03/14/13	03/15/13 06:52	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Methylene Chloride		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Methyl-t-butyl ether		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
2-Butanone (MEK)		ND	ug/L	10		1	03/14/13	03/15/13 06:52	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Bromochloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Chloroform		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Benzene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Methyl Acetate		ND	ug/L	10		1	03/14/13	03/15/13 06:52	1011
Methylcyclohexane		ND	ug/L	10		1	03/14/13	03/15/13 06:52	1011
Trichloroethene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
Carbon Disulfide		ND	ug/L	10		1	03/14/13	03/15/13 06:52	1011
Bromodichloromethane		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	03/14/13	03/15/13 06:52	1011

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 7</b>		<b>Date/Time Sampled: 03/11/2013 12:10</b>				<b>PSS Sample ID: 13031120-010</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	03/14/13	03/15/13 06:52
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
Toluene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
2-Hexanone		ND	ug/L	10	1	1	03/14/13	03/15/13 06:52
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
Dibromochloromethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
tert-Amyl ethyl ether		ND	ug/L	10	1	1	03/14/13	03/15/13 06:52
tert-Butyl ethyl ether		ND	ug/L	10	1	1	03/14/13	03/15/13 06:52
Diisopropyl ether		ND	ug/L	10	1	1	03/14/13	03/15/13 06:52
tert-Amyl methyl ether		ND	ug/L	10	1	1	03/14/13	03/15/13 06:52
tert-Amyl alcohol		ND	ug/L	20	1	1	03/14/13	03/15/13 06:52
Bromoform		ND	ug/L	5.0	1	1	03/14/13	03/15/13 06:52
Tetrachloroethene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
Chlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
Ethylbenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
m,p-Xylenes		ND	ug/L	2.0	1	1	03/14/13	03/15/13 06:52
Styrene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
o-Xylene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
Isopropylbenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	03/14/13	03/15/13 06:52
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
Naphthalene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	03/14/13	03/15/13 06:52

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 8A</b>	<b>Date/Time Sampled: 03/11/2013 13:30 PSS Sample ID: 13031120-011</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 03/12/13	Analyzed 03/12/13 17:47	Analyst 1035

**OFFICES:**  
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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 8A</b>		<b>Date/Time Sampled: 03/11/2013 13:30 PSS Sample ID: 13031120-011</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Chloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Vinyl Chloride		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
tert-Butyl alcohol		ND	ug/L	20		1	03/15/13	03/15/13 14:17	1011
Bromomethane		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Chloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Acetone		ND	ug/L	10		1	03/15/13	03/15/13 14:17	1011
Cyclohexane		ND	ug/L	10		1	03/15/13	03/15/13 14:17	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	03/15/13	03/15/13 14:17	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Methylene Chloride		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Methyl-t-butyl ether		32	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
2-Butanone (MEK)		ND	ug/L	10		1	03/15/13	03/15/13 14:17	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Bromochloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Chloroform		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Benzene		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Methyl Acetate		ND	ug/L	10		1	03/15/13	03/15/13 14:17	1011
Methylcyclohexane		ND	ug/L	10		1	03/15/13	03/15/13 14:17	1011
Trichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
Carbon Disulfide		ND	ug/L	10		1	03/15/13	03/15/13 14:17	1011
Bromodichloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	03/15/13	03/15/13 14:17	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 8A</b>		<b>Date/Time Sampled: 03/11/2013 13:30</b>				<b>PSS Sample ID: 13031120-011</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	03/15/13	03/15/13 14:17
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
Toluene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
2-Hexanone		ND	ug/L	10	1	1	03/15/13	03/15/13 14:17
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
Dibromochloromethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
tert-Amyl ethyl ether		ND	ug/L	10	1	1	03/15/13	03/15/13 14:17
tert-Butyl ethyl ether		ND	ug/L	10	1	1	03/15/13	03/15/13 14:17
Diisopropyl ether		ND	ug/L	10	1	1	03/15/13	03/15/13 14:17
tert-Amyl methyl ether		ND	ug/L	10	1	1	03/15/13	03/15/13 14:17
tert-Amyl alcohol		ND	ug/L	20	1	1	03/15/13	03/15/13 14:17
Bromoform		ND	ug/L	5.0	1	1	03/15/13	03/15/13 14:17
Tetrachloroethene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
Chlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
Ethylbenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
m,p-Xylenes		ND	ug/L	2.0	1	1	03/15/13	03/15/13 14:17
Styrene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
o-Xylene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
Isopropylbenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	03/15/13	03/15/13 14:17
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
Naphthalene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:17

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 8B</b>	<b>Date/Time Sampled: 03/11/2013 13:45 PSS Sample ID: 13031120-012</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>150</b>	<b>Units</b> ug/L	<b>RL</b> 100

	<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
TPH-GRO (Gasoline Range Organics)	<b>150</b>	ug/L	100		1	03/12/13	03/12/13 18:12	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 8B	Date/Time Sampled: 03/11/2013 13:45 PSS Sample ID: 13031120-012					
Matrix: GROUND WATER	Date/Time Received: 03/11/2013 15:21					
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	1	03/15/13 03/15/13 14:50 1011
Chloromethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
tert-Butyl alcohol	ND	ug/L	20	1	1	03/15/13 03/15/13 14:50 1011
Bromomethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
Chloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
Acetone	ND	ug/L	10	1	1	03/15/13 03/15/13 14:50 1011
Cyclohexane	ND	ug/L	10	1	1	03/15/13 03/15/13 14:50 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	03/15/13 03/15/13 14:50 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
Methylene Chloride	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
Methyl-t-butyl ether	17	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	03/15/13 03/15/13 14:50 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
Bromochloromethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
Chloroform	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
Benzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
Methyl Acetate	ND	ug/L	10	1	1	03/15/13 03/15/13 14:50 1011
Methylcyclohexane	ND	ug/L	10	1	1	03/15/13 03/15/13 14:50 1011
Trichloroethene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
Carbon Disulfide	ND	ug/L	10	1	1	03/15/13 03/15/13 14:50 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 14:50 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 8B</b>		<b>Date/Time Sampled: 03/11/2013 13:45</b>				<b>PSS Sample ID: 13031120-012</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	03/15/13	03/15/13 14:50
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
Toluene		<b>75</b>	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
2-Hexanone		ND	ug/L	10	1	1	03/15/13	03/15/13 14:50
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
Dibromochloromethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
tert-Amyl ethyl ether		ND	ug/L	10	1	1	03/15/13	03/15/13 14:50
tert-Butyl ethyl ether		ND	ug/L	10	1	1	03/15/13	03/15/13 14:50
Diisopropyl ether		ND	ug/L	10	1	1	03/15/13	03/15/13 14:50
tert-Amyl methyl ether		ND	ug/L	10	1	1	03/15/13	03/15/13 14:50
tert-Amyl alcohol		ND	ug/L	20	1	1	03/15/13	03/15/13 14:50
Bromoform		ND	ug/L	5.0	1	1	03/15/13	03/15/13 14:50
Tetrachloroethene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
Chlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
Ethylbenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
m,p-Xylenes		ND	ug/L	2.0	1	1	03/15/13	03/15/13 14:50
Styrene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
o-Xylene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
Isopropylbenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	03/15/13	03/15/13 14:50
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
Naphthalene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 14:50

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 9</b>	Date/Time Sampled: 03/11/2013 11:40	PSS Sample ID: 13031120-013	
<b>Matrix: GROUND WATER</b>	Date/Time Received: 03/11/2013 15:21		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>Units</b> <b>2,000</b> ug/L	<b>RL</b> <b>Flag</b> <b>Dil</b> 100                  1	<b>Prepared</b> <b>Analyzed</b> <b>Analyst</b> 03/12/13 03/12/13 18:38 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 9</b>		<b>Date/Time Sampled: 03/11/2013 11:40 PSS Sample ID: 13031120-013</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Chloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Vinyl Chloride		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
tert-Butyl alcohol	<b>1,100</b>	ug/L	400		20		03/15/13	03/16/13 15:33	1011
Bromomethane		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Chloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Acetone		ND	ug/L	10		1	03/15/13	03/15/13 15:19	1011
Cyclohexane		ND	ug/L	10		1	03/15/13	03/15/13 15:19	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	03/15/13	03/15/13 15:19	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Methylene Chloride		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Methyl-t-butyl ether	<b>2,500</b>	ug/L	20		20		03/15/13	03/16/13 15:33	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
2-Butanone (MEK)		ND	ug/L	10		1	03/15/13	03/15/13 15:19	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Bromochloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Chloroform	<b>3.3</b>	ug/L	1.0		1		03/15/13	03/15/13 15:19	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Benzene		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Methyl Acetate		ND	ug/L	10		1	03/15/13	03/15/13 15:19	1011
Methylcyclohexane		ND	ug/L	10		1	03/15/13	03/15/13 15:19	1011
Trichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
Carbon Disulfide		ND	ug/L	10		1	03/15/13	03/15/13 15:19	1011
Bromodichloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	03/15/13	03/15/13 15:19	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 9</b>		<b>Date/Time Sampled: 03/11/2013 11:40</b>				<b>PSS Sample ID: 13031120-013</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	03/15/13	03/15/13 15:19
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
Toluene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
2-Hexanone		ND	ug/L	10	1	1	03/15/13	03/15/13 15:19
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
Dibromochloromethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
tert-Amyl ethyl ether		ND	ug/L	10	1	1	03/15/13	03/15/13 15:19
tert-Butyl ethyl ether		ND	ug/L	10	1	1	03/15/13	03/15/13 15:19
Diisopropyl ether		14	ug/L	10	1	1	03/15/13	03/15/13 15:19
tert-Amyl methyl ether		97	ug/L	10	1	1	03/15/13	03/15/13 15:19
tert-Amyl alcohol		22	ug/L	20	1	1	03/15/13	03/15/13 15:19
Bromoform		ND	ug/L	5.0	1	1	03/15/13	03/15/13 15:19
Tetrachloroethene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
Chlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
Ethylbenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
m,p-Xylenes		ND	ug/L	2.0	1	1	03/15/13	03/15/13 15:19
Styrene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
o-Xylene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
Isopropylbenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	03/15/13	03/15/13 15:19
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
Naphthalene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 15:19

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 10</b>	<b>Date/Time Sampled: 03/11/2013 12:45 PSS Sample ID: 13031120-014</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>750</b>	<b>Units</b> ug/L	<b>RL</b> 100

	<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
TPH-GRO (Gasoline Range Organics)	<b>750</b>	ug/L	100		1	03/12/13	03/12/13 19:03	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 10</b>		<b>Date/Time Sampled: 03/11/2013 12:45 PSS Sample ID: 13031120-014</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Chloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Vinyl Chloride		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
tert-Butyl alcohol	1,300	ug/L	200		10		03/15/13	03/16/13 16:03	1011
Bromomethane		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Chloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Acetone		ND	ug/L	10		1	03/15/13	03/15/13 16:18	1011
Cyclohexane		ND	ug/L	10		1	03/15/13	03/15/13 16:18	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	03/15/13	03/15/13 16:18	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Methylene Chloride		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Methyl-t-butyl ether	880	ug/L	10		10		03/15/13	03/16/13 16:03	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
2-Butanone (MEK)		ND	ug/L	10		1	03/15/13	03/15/13 16:18	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Bromochloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Chloroform	17	ug/L	1.0		1		03/15/13	03/15/13 16:18	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Benzene		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Methyl Acetate		ND	ug/L	10		1	03/15/13	03/15/13 16:18	1011
Methylcyclohexane		ND	ug/L	10		1	03/15/13	03/15/13 16:18	1011
Trichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Carbon Disulfide		ND	ug/L	10		1	03/15/13	03/15/13 16:18	1011
Bromodichloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 10	Date/Time Sampled: 03/11/2013 12:45 PSS Sample ID: 13031120-014							
Matrix: GROUND WATER	Date/Time Received: 03/11/2013 15:21							
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	03/15/13	03/15/13 16:18	1011
trans-1,3-Dichloropropene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
1,1,2-Trichloroethane	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Toluene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
2-Hexanone	ND	ug/L	10		1	03/15/13	03/15/13 16:18	1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Dibromochloromethane	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
tert-Amyl ethyl ether	ND	ug/L	10		1	03/15/13	03/15/13 16:18	1011
tert-Butyl ethyl ether	ND	ug/L	10		1	03/15/13	03/15/13 16:18	1011
Diisopropyl ether	ND	ug/L	10		1	03/15/13	03/15/13 16:18	1011
tert-Amyl methyl ether	37	ug/L	10		1	03/15/13	03/15/13 16:18	1011
tert-Amyl alcohol	49	ug/L	20		1	03/15/13	03/15/13 16:18	1011
Bromoform	ND	ug/L	5.0		1	03/15/13	03/15/13 16:18	1011
Tetrachloroethene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Chlorobenzene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Ethylbenzene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
m,p-Xylenes	ND	ug/L	2.0		1	03/15/13	03/15/13 16:18	1011
Styrene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
o-Xylene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Isopropylbenzene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
1,3-Dichlorobenzene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
1,4-Dichlorobenzene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
1,2-Dichlorobenzene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10		1	03/15/13	03/15/13 16:18	1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
Naphthalene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0		1	03/15/13	03/15/13 16:18	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 11</b>	<b>Date/Time Sampled: 03/11/2013 13:05</b>	<b>PSS Sample ID: 13031120-015</b>					
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>						
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)	940 ug/L	100		1	03/12/13	03/12/13 19:29	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 11</b>		<b>Date/Time Sampled: 03/11/2013 13:05</b>			<b>PSS Sample ID: 13031120-015</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>					
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Chloromethane		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Vinyl Chloride		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
tert-Butyl alcohol	<b>3,700</b>	ug/L		1,000		50	03/15/13 03/16/13 16:32 1011
Bromomethane		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Chloroethane		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Acetone		ND	ug/L	10		1	03/15/13 03/15/13 17:17 1011
Cyclohexane		ND	ug/L	10		1	03/15/13 03/15/13 17:17 1011
Trichlorofluoromethane		ND	ug/L	5.0		1	03/15/13 03/15/13 17:17 1011
1,1-Dichloroethene		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Methylene Chloride		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Methyl-t-butyl ether	<b>1,100</b>	ug/L		10		10	03/15/13 03/15/13 17:47 1011
1,1-Dichloroethane		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
2-Butanone (MEK)		ND	ug/L	10		1	03/15/13 03/15/13 17:17 1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Bromochloromethane		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Chloroform	<b>15</b>	ug/L		1.0		1	03/15/13 03/15/13 17:17 1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
1,2-Dichloroethane		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Carbon Tetrachloride		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Benzene		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
1,2-Dichloropropane		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Methyl Acetate		ND	ug/L	10		1	03/15/13 03/15/13 17:17 1011
Methylcyclohexane		ND	ug/L	10		1	03/15/13 03/15/13 17:17 1011
Trichloroethene		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
Carbon Disulfide		ND	ug/L	10		1	03/15/13 03/15/13 17:17 1011
Bromodichloromethane		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	03/15/13 03/15/13 17:17 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 11	Date/Time Sampled: 03/11/2013 13:05 PSS Sample ID: 13031120-015					
Matrix: GROUND WATER	Date/Time Received: 03/11/2013 15:21					
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	1	03/15/13 03/15/13 17:17 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
Toluene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
2-Hexanone	ND	ug/L	10	1	1	03/15/13 03/15/13 17:17 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	03/15/13 03/15/13 17:17 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	03/15/13 03/15/13 17:17 1011
Diisopropyl ether	ND	ug/L	10	1	1	03/15/13 03/15/13 17:17 1011
tert-Amyl methyl ether	47	ug/L	10	1	1	03/15/13 03/15/13 17:17 1011
tert-Amyl alcohol	110	ug/L	20	1	1	03/15/13 03/15/13 17:17 1011
Bromoform	ND	ug/L	5.0	1	1	03/15/13 03/15/13 17:17 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
Chlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
Ethylbenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	03/15/13 03/15/13 17:17 1011
Styrene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
o-Xylene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	03/15/13 03/15/13 17:17 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
Naphthalene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 17:17 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 12</b>	<b>Date/Time Sampled: 03/11/2013 11:05 PSS Sample ID: 13031120-016</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>130</b>	<b>Units</b> ug/L	<b>RL</b> 100

	<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
TPH-GRO (Gasoline Range Organics)	<b>130</b>	ug/L	100		1	03/12/13	03/12/13 19:54	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 12</b>		<b>Date/Time Sampled: 03/11/2013 11:05 PSS Sample ID: 13031120-016</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Chloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Vinyl Chloride		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
tert-Butyl alcohol		72	ug/L	20		1	03/15/13	03/15/13 18:16	1011
Bromomethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Chloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Acetone		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
Cyclohexane		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	03/15/13	03/15/13 18:16	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Methylene Chloride		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Methyl-t-butyl ether		160	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
2-Butanone (MEK)		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Bromochloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Chloroform		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Benzene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Methyl Acetate		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
Methylcyclohexane		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
Trichloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Carbon Disulfide		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
Bromodichloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 12</b>		<b>Date/Time Sampled: 03/11/2013 11:05 PSS Sample ID: 13031120-016</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	03/15/13	03/15/13 18:16	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Toluene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
2-Hexanone		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Dibromochloromethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
Diisopropyl ether		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
tert-Amyl methyl ether		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
tert-Amyl alcohol		ND	ug/L	20		1	03/15/13	03/15/13 18:16	1011
Bromoform		ND	ug/L	5.0		1	03/15/13	03/15/13 18:16	1011
Tetrachloroethene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Chlorobenzene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Ethylbenzene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
m,p-Xylenes		ND	ug/L	2.0		1	03/15/13	03/15/13 18:16	1011
Styrene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
o-Xylene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Isopropylbenzene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	03/15/13	03/15/13 18:16	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
Naphthalene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	03/15/13	03/15/13 18:16	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 13</b>	<b>Date/Time Sampled: 03/11/2013 12:15</b>	<b>PSS Sample ID: 13031120-017</b>
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>	
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B
TPH-GRO (Gasoline Range Organics)	<b>Result</b> 940 <b>Units</b> ug/L <b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1	<b>Prepared</b> 03/12/13 <b>Analyzed</b> 03/12/13 20:20 <b>Analyst</b> 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 13	Date/Time Sampled: 03/11/2013 12:15 PSS Sample ID: 13031120-017					
Matrix: GROUND WATER	Date/Time Received: 03/11/2013 15:21					
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	1	03/15/13 03/15/13 18:45 1011
Chloromethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
tert-Butyl alcohol	180	ug/L	20	1	1	03/15/13 03/15/13 18:45 1011
Bromomethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Chloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Acetone	ND	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
Cyclohexane	ND	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	03/15/13 03/15/13 18:45 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Methylene Chloride	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Methyl-t-butyl ether	1,000	ug/L	10	10	10	03/15/13 03/15/13 19:14 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Bromochloromethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Chloroform	1.3	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Benzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Methyl Acetate	ND	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
Methylcyclohexane	ND	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
Trichloroethene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Carbon Disulfide	ND	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 13	Date/Time Sampled: 03/11/2013 12:15 PSS Sample ID: 13031120-017					
Matrix: GROUND WATER	Date/Time Received: 03/11/2013 15:21					
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	1	03/15/13 03/15/13 18:45 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Toluene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
2-Hexanone	ND	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
Diisopropyl ether	ND	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
tert-Amyl methyl ether	50	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	03/15/13 03/15/13 18:45 1011
Bromoform	ND	ug/L	5.0	1	1	03/15/13 03/15/13 18:45 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Chlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Ethylbenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	03/15/13 03/15/13 18:45 1011
Styrene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
o-Xylene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	03/15/13 03/15/13 18:45 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
Naphthalene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 18:45 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: HW 3</b>	<b>Date/Time Sampled: 03/11/2013 13:30 PSS Sample ID: 13031120-018</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>510</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: HW 3</b>		<b>Date/Time Sampled: 03/11/2013 13:30</b>				<b>PSS Sample ID: 13031120-018</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 03/11/2013 15:21</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Chloromethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Vinyl Chloride		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
tert-Butyl alcohol		190	ug/L	20	1	1	03/15/13	03/15/13 19:44
Bromomethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Chloroethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Acetone		ND	ug/L	10	1	1	03/15/13	03/15/13 19:44
Cyclohexane		ND	ug/L	10	1	1	03/15/13	03/15/13 19:44
Trichlorofluoromethane		ND	ug/L	5.0	1	1	03/15/13	03/15/13 19:44
1,1-Dichloroethene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Methylene Chloride		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Methyl-t-butyl ether		500	ug/L	10	10	10	03/15/13	03/15/13 20:14
1,1-Dichloroethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
2-Butanone (MEK)		ND	ug/L	10	1	1	03/15/13	03/15/13 19:44
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Bromochloromethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Chloroform		12	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
1,2-Dichloroethane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Carbon Tetrachloride		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Benzene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
1,2-Dichloropropane		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Methyl Acetate		ND	ug/L	10	1	1	03/15/13	03/15/13 19:44
Methylcyclohexane		ND	ug/L	10	1	1	03/15/13	03/15/13 19:44
Trichloroethene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
Carbon Disulfide		ND	ug/L	10	1	1	03/15/13	03/15/13 19:44
Bromodichloromethane		1.7	ug/L	1.0	1	1	03/15/13	03/15/13 19:44
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	03/15/13	03/15/13 19:44

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031120  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: HW 3	Date/Time Sampled: 03/11/2013 13:30 PSS Sample ID: 13031120-018					
Matrix: GROUND WATER	Date/Time Received: 03/11/2013 15:21					
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	1	03/15/13 03/15/13 19:44 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
Toluene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
2-Hexanone	ND	ug/L	10	1	1	03/15/13 03/15/13 19:44 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	03/15/13 03/15/13 19:44 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	03/15/13 03/15/13 19:44 1011
Diisopropyl ether	ND	ug/L	10	1	1	03/15/13 03/15/13 19:44 1011
tert-Amyl methyl ether	24	ug/L	10	1	1	03/15/13 03/15/13 19:44 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	03/15/13 03/15/13 19:44 1011
Bromoform	ND	ug/L	5.0	1	1	03/15/13 03/15/13 19:44 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
Chlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
Ethylbenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	03/15/13 03/15/13 19:44 1011
Styrene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
o-Xylene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	03/15/13 03/15/13 19:44 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
Naphthalene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	03/15/13 03/15/13 19:44 1011

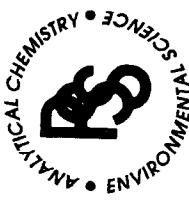


# SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

## PHASE SEPARATION SCIENCE, INC.

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

① *CLIENT: <b>AECOM</b>		*OFFICE LOC. <b>Columbia MD</b>		PSS Work Order #: <b>13031120</b>		PAGE <b>\</b> OF <b>2</b>	
Matrix Codes: SW=Surface Wtr. DW=Drinking Wtr. GW=Ground Wtr. WW=Waste Wtr. O=Oil S=Soil L=liquid SOL=Solid A=Air WI=Wipe							
EMAIL:	FAX NO.: ( )	No.	C	SAMPLE TYPE	Preservatives Used	Analysis Method Required	REMARKS
*PROJECT NAME: <b>7-11 Store 22281</b>		PROJECT NO.: <b>N44763</b>	O	COMP	③	*	
SITE LOCATION: <b>Falston MD</b>	P.O. NO.:	N	A	GRAB			
SAMPLER(S): <b>M. Parsons / N. Burnell</b>		*SAMPLE IDENTIFICATION		*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	
② LAB NO.	MW 1A	2W 13	1130	6W	6	6	
1	MW 1B	1140	1	9	9	9	
2	MW 2	1020	1	9	9	9	
3	MW 3A	1150	1	9	9	9	
4	MW 3B	1200	1	9	9	9	
5	MW 4A	1031	1	9	9	9	
6	MW 4B	115	1	9	9	9	
7	MW 5	0750	1	9	9	9	
8	MW 6	1350	1	9	9	9	
9	MW 7	1210	1	9	9	9	
10	MW 8						
③ Relinquished By: (4) <b>M. Parsons</b>		Date <b>3/11/13</b>	Time <b>14:30</b>	Received By: <b>M. Parsons</b>		*Requested TAT (One TAT per COC)	
Relinquished By: (5) <b>M. Parsons</b>		Date <b>3/11/13</b>	Time <b>1521</b>	Received By: <b>M. Parsons</b>		# of Coolers: <b>1</b>	<input checked="" type="checkbox"/> 5-Day
Relinquished By: (3) <b>M. Parsons</b>		Date	Time	Received By:		Custody Seal: <b>MIA</b>	<input type="checkbox"/> 3-Day
Relinquished By: (4) <b>M. Parsons</b>		Date	Time	Received By:		Ice Present: <b>✓</b>	<input type="checkbox"/> Next Day
Relinquished By: (5) <b>M. Parsons</b>		Date	Time	Received By:		Temp: <b>19C</b>	<input type="checkbox"/> Emergency
Relinquished By: (3) <b>M. Parsons</b>		Date	Time	Received By:		Shipping Carrier: <b>Client</b>	<input type="checkbox"/> Other
Special Instructions:							
Relinquished By: (4)		Date	Time	Received By:		DW COMPLIANCE? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	EDD FORMAT TYPE <b>AECOM</b>
Relinquished By: (5)		Date	Time	Received By:		STATE RESULTS REPORTED TO: <input type="checkbox"/> MD <input type="checkbox"/> DE <input type="checkbox"/> PA <input type="checkbox"/> VA <input type="checkbox"/> WV <input type="checkbox"/> OTHER	



# SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

## PHASE SEPARATION SCIENCE, INC.

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email: info@phaseonline.com

① *CLIENT: <b>AECOM</b>		*OFFICE LOC. <b>Columbia MD</b>		PSS Work Order #: <b>13031120</b>		PAGE <u>2</u> OF <u>2</u>	
*PROJECT MGR.: <b>J. Ganzetti</b>		*PHONE NO.: <b>(202) 980-6516</b>		Matrix Codes: <b>SW=Surface Wtr. DW=Drinking Wtr. MW=Ground Wtr. WW=Waste Wtr. O=Oil S=Soil L=Liquid</b>		<b>SD=Solid A=Air W=Wipe</b>	
EMAIL:	FAX NO.: ( )	No.	C	SAMPLE TYPE	Preservatives Used	Analysis Method Required	REMARKS
*PROJECT NAME: <b>7-11 State 2228</b>	PROJECT NO. <b>100000163</b>	C	O	N	T	<b>③</b>	
SITE LOCATION: <b>Fallston MD</b>	P.O. NO.:	A	N	A	E	*	
SAMPLER(S): <b>Daseins / Barnett</b>	DW CERT NO.:	N	E	N	R		
② LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)			
11	MW 8A	3/1/12	1330	MW	6	6	
12	MW SB		1345		6	6	
13	MW Q		1140		6	6	
14	MW O		1245		6	6	
15	MW 11		1305		6	6	
16	MW 17		1105		6	6	
17	MW 13		1215		6	6	
18	MW 3		1330		6	6	
19	ZIM Presentville Rd		1300		6	6	
④ Relinquished By: (1) <b>J. Ganzetti</b>	Date <b>3/14/12</b>	Time <b>14:30</b>	Received By: <b>J. Ganzetti</b>	*Requested TAT (One TAT per COC)		# of Coolers: <b>1</b>	
	<input checked="" type="checkbox"/> 5 Day	<input type="checkbox"/> 3-Day	<input type="checkbox"/> 2-Day	<input type="checkbox"/> Emergency	<input type="checkbox"/> Other	Custody Seal: <b>N/A</b>	
	<input type="checkbox"/> Next Day	<input type="checkbox"/> COA	<input type="checkbox"/> QC SUMM	<input type="checkbox"/> CLP LIKE	<input type="checkbox"/> OTHER	Ice Present: <b>YES</b>	Temp: <b>10 C</b>
	<input type="checkbox"/> COA	<input type="checkbox"/> QC SUMM	<input type="checkbox"/> CLP LIKE	<input type="checkbox"/> OTHER		Shipping Carrier: <b>CUR</b>	
Relinquished By: (2) <b>J. Ganzetti</b>	Date <b>3/14/12</b>	Time <b>1521</b>	Received By: <b>C. D. D.</b>	Data Deliverables Required:		Special Instructions:	
Relinquished By: (3) <b>J. Ganzetti</b>	Date <b>3/14/12</b>	Time <b>1521</b>	Received By: <b>C. D. D.</b>				
Relinquished By: (4) <b>J. Ganzetti</b>	Date	Time	Received By:	DW COMPLIANCE?	EDD FORMAT TYPE	STATE RESULTS REPORTED TO:	
	YES <input type="checkbox"/>	NO <input type="checkbox"/>		<b>EDDM</b>	MD DE PA VA WV OTHER <input type="checkbox"/>		



# Phase Separation Science, Inc

## Sample Receipt Checklist

Work Order #	13031120	Received By	Rachel Davis
Client Name	AECOM	Date Received	03/11/2013 03:21:00 PM
Project Name	7-11 Store 22281	Delivered By	Client
Project Number	60144763	Tracking No	Not Applicable
Disposal Date	04/15/2013	Logged In By	Rachel Davis

### 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

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

### Sample Container

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

Total No. of Samples Received 19

Total No. of Containers Received 114

### 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

### 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:

Rachel Davis

Date: 03/11/2013

PM Review and Approval:

Amy Friedlander

Date: 03/12/2013

# Analytical Report for

AECOM

Certificate of Analysis No.: 13060619

Project Manager: John Canzeri

Project Name : 7-11 Store #22281

Project Location: Fallston, MD

Project ID : 60144763



June 17, 2013  
Phase Separation Science, Inc.  
6630 Baltimore National Pike  
Baltimore, MD 21228  
Phone: (410) 747-8770  
Fax: (410) 788-8723

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# PHASE SEPARATION SCIENCE, INC.



June 17, 2013

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

Reference: PSS Work Order(s) No: **13060619**

Project Name: 7-11 Store #22281  
Project Location: Fallston, MD  
Project ID.: 60144763

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 **13060619**.

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 11, 2013. 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 #22281**

**Work Order Number(s): 13060619**

**Project ID: 60144763**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/06/2013 at 05:20 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
13060619-001	MW 1A	GROUND WATER	06/06/13 12:31
13060619-002	MW 1B	GROUND WATER	06/06/13 12:16
13060619-003	MW 2	GROUND WATER	06/06/13 12:56
13060619-004	MW 3A	GROUND WATER	06/06/13 13:16
13060619-005	MW 3B	GROUND WATER	06/06/13 14:56
13060619-006	MW 4A	GROUND WATER	06/06/13 10:40
13060619-007	MW 4B	GROUND WATER	06/06/13 12:45
13060619-008	MW 5	GROUND WATER	06/06/13 12:46
13060619-009	MW 6	GROUND WATER	06/06/13 13:10
13060619-010	MW 7	GROUND WATER	06/06/13 13:36
13060619-011	MW 8A	GROUND WATER	06/06/13 15:26
13060619-012	MW 8B	GROUND WATER	06/06/13 15:46
13060619-013	MW 9	GROUND WATER	06/06/13 13:25
13060619-014	MW 10	GROUND WATER	06/06/13 11:55
13060619-015	MW 11	GROUND WATER	06/06/13 13:20
13060619-016	MW 12	GROUND WATER	06/06/13 11:00
13060619-017	MW 13	GROUND WATER	06/06/13 13:30
13060619-018	HW 3	GROUND WATER	06/06/13 13:15

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. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminants, and part 141.3, for the secondary drinking water contaminants.
5. The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for non-potable water samples tested for compliance for Virginia Pollution Discharge Elimination System (VPDES) permits and Virginia Pollutant Abatement (VPA) permits, have a maximum holding time of 15 minutes established by 40CFR136.3.



# Sample Summary

**Client Name: AECOM**

**Project Name: 7-11 Store #22281**

**Work Order Number(s): 13060619**

**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.



## Case Narrative Summary

**Client Name: AECOM**

**Project Name: 7-11 Store #22281**

Work Order Number(s): 13060619

Project ID: 60144763

---

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.

**Sample Receipt:**

All sample receipt conditions were acceptable.

**General Comments:**

GRO results due to single component contributor, specifically methyl-t-butyl ether.

**NELAP accreditation was held for all analyses performed unless noted below. See [www.phaseonline.com](http://www.phaseonline.com) for complete PSS scope of accreditation.**

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 1A</b>	<b>Date/Time Sampled: 06/06/2013 12:31 PSS Sample ID: 13060619-001</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 06/07/13	Analyzed 06/07/13 23:38	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 1A	Date/Time Sampled: 06/06/2013 12:31 PSS Sample ID: 13060619-001					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/13/13 06/14/13 05:27 1011
Chloromethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
tert-Butyl alcohol	ND	ug/L	20	1	1	06/13/13 06/14/13 05:27 1011
Bromomethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Chloroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Acetone	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
Cyclohexane	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	06/13/13 06/14/13 05:27 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Methylene Chloride	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Methyl-t-butyl ether	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Bromochloromethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Chloroform	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Benzene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Methyl Acetate	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
Methylcyclohexane	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
Trichloroethene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Carbon Disulfide	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 1A	Date/Time Sampled: 06/06/2013 12:31 PSS Sample ID: 13060619-001					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/13/13 06/14/13 05:27 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Toluene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
2-Hexanone	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
Diisopropyl ether	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
tert-Amyl methyl ether	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	06/13/13 06/14/13 05:27 1011
Bromoform	ND	ug/L	5.0	1	1	06/13/13 06/14/13 05:27 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Chlorobenzene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Ethylbenzene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	06/13/13 06/14/13 05:27 1011
Styrene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
o-Xylene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	06/13/13 06/14/13 05:27 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
Naphthalene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:27 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 1B</b>	<b>Date/Time Sampled: 06/06/2013 12:16 PSS Sample ID: 13060619-002</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 06/07/13	Analyzed 06/08/13 00:03	Analyst 1035

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 1B	Date/Time Sampled: 06/06/2013 12:16 PSS Sample ID: 13060619-002					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
Dichlorodifluoromethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Chloromethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Vinyl Chloride	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
tert-Butyl alcohol	ND	ug/L	20	1	1	06/13/13 06/14/13 05:56
Bromomethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Chloroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Acetone	ND	ug/L	10	1	1	06/13/13 06/14/13 05:56
Cyclohexane	ND	ug/L	10	1	1	06/13/13 06/14/13 05:56
Trichlorofluoromethane	ND	ug/L	5.0	1	1	06/13/13 06/14/13 05:56
1,1-Dichloroethene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Methylene Chloride	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Methyl-t-butyl ether	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
1,1-Dichloroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
2-Butanone (MEK)	ND	ug/L	10	1	1	06/13/13 06/14/13 05:56
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Bromochloromethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Chloroform	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
1,2-Dichloroethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Carbon Tetrachloride	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Benzene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
1,2-Dichloropropane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Methyl Acetate	ND	ug/L	10	1	1	06/13/13 06/14/13 05:56
Methylcyclohexane	ND	ug/L	10	1	1	06/13/13 06/14/13 05:56
Trichloroethene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
Carbon Disulfide	ND	ug/L	10	1	1	06/13/13 06/14/13 05:56
Bromodichloromethane	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/13/13 06/14/13 05:56

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 1B	Date/Time Sampled: 06/06/2013 12:16 PSS Sample ID: 13060619-002					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		06/13/13 06/14/13 05:56
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
Toluene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
2-Hexanone	ND	ug/L	10	1		06/13/13 06/14/13 05:56
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
Dibromochloromethane	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
tert-Amyl ethyl ether	ND	ug/L	10	1		06/13/13 06/14/13 05:56
tert-Butyl ethyl ether	ND	ug/L	10	1		06/13/13 06/14/13 05:56
Diisopropyl ether	ND	ug/L	10	1		06/13/13 06/14/13 05:56
tert-Amyl methyl ether	ND	ug/L	10	1		06/13/13 06/14/13 05:56
tert-Amyl alcohol	ND	ug/L	20	1		06/13/13 06/14/13 05:56
Bromoform	ND	ug/L	5.0	1		06/13/13 06/14/13 05:56
Tetrachloroethene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
Chlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
Ethylbenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
m,p-Xylenes	ND	ug/L	2.0	1		06/13/13 06/14/13 05:56
Styrene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
o-Xylene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
Isopropylbenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
1,3-Dichlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
1,4-Dichlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
1,2-Dichlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		06/13/13 06/14/13 05:56
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
Naphthalene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 05:56

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 2</b>	<b>Date/Time Sampled: 06/06/2013 12:56 PSS Sample ID: 13060619-003</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 06/07/13	Analyzed 06/08/13 00:28	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 2</b>		<b>Date/Time Sampled: 06/06/2013 12:56 PSS Sample ID: 13060619-003</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Chloromethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Vinyl Chloride		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
tert-Butyl alcohol		ND	ug/L	20		1	06/13/13	06/14/13 06:25	1011
Bromomethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Chloroethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Acetone		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
Cyclohexane		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	06/13/13	06/14/13 06:25	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Methylene Chloride		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Methyl-t-butyl ether		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
2-Butanone (MEK)		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Bromochloromethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Chloroform		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Benzene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Methyl Acetate		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
Methylcyclohexane		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
Trichloroethene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Carbon Disulfide		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
Bromodichloromethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 2</b>		<b>Date/Time Sampled: 06/06/2013 12:56 PSS Sample ID: 13060619-003</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	06/13/13	06/14/13 06:25	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Toluene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
2-Hexanone		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Dibromochloromethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
Diisopropyl ether		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
tert-Amyl methyl ether		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
tert-Amyl alcohol		ND	ug/L	20		1	06/13/13	06/14/13 06:25	1011
Bromoform		ND	ug/L	5.0		1	06/13/13	06/14/13 06:25	1011
Tetrachloroethene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Chlorobenzene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Ethylbenzene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
m,p-Xylenes		ND	ug/L	2.0		1	06/13/13	06/14/13 06:25	1011
Styrene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
o-Xylene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Isopropylbenzene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	06/13/13	06/14/13 06:25	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
Naphthalene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	06/13/13	06/14/13 06:25	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3A</b>	<b>Date/Time Sampled: 06/06/2013 13:16 PSS Sample ID: 13060619-004</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 06/07/13	Analyzed 06/08/13 00:54	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3A</b>		<b>Date/Time Sampled: 06/06/2013 13:16</b>				<b>PSS Sample ID: 13060619-004</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Chloromethane		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Vinyl Chloride		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
tert-Butyl alcohol		ND	ug/L	20	1	1	06/13/13	06/14/13 06:54
Bromomethane		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Chloroethane		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Acetone		ND	ug/L	10	1	1	06/13/13	06/14/13 06:54
Cyclohexane		ND	ug/L	10	1	1	06/13/13	06/14/13 06:54
Trichlorofluoromethane		ND	ug/L	5.0	1	1	06/13/13	06/14/13 06:54
1,1-Dichloroethene		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Methylene Chloride		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Methyl-t-butyl ether		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
1,1-Dichloroethane		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
2-Butanone (MEK)		ND	ug/L	10	1	1	06/13/13	06/14/13 06:54
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Bromochloromethane		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Chloroform		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
1,2-Dichloroethane		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Carbon Tetrachloride		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Benzene		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
1,2-Dichloropropane		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Methyl Acetate		ND	ug/L	10	1	1	06/13/13	06/14/13 06:54
Methylcyclohexane		ND	ug/L	10	1	1	06/13/13	06/14/13 06:54
Trichloroethene		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
Carbon Disulfide		ND	ug/L	10	1	1	06/13/13	06/14/13 06:54
Bromodichloromethane		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	06/13/13	06/14/13 06:54

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 3A	Date/Time Sampled: 06/06/2013 13:16 PSS Sample ID: 13060619-004					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		06/13/13 06/14/13 06:54
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
Toluene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
2-Hexanone	ND	ug/L	10	1		06/13/13 06/14/13 06:54
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
Dibromochloromethane	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
tert-Amyl ethyl ether	ND	ug/L	10	1		06/13/13 06/14/13 06:54
tert-Butyl ethyl ether	ND	ug/L	10	1		06/13/13 06/14/13 06:54
Diisopropyl ether	ND	ug/L	10	1		06/13/13 06/14/13 06:54
tert-Amyl methyl ether	ND	ug/L	10	1		06/13/13 06/14/13 06:54
tert-Amyl alcohol	ND	ug/L	20	1		06/13/13 06/14/13 06:54
Bromoform	ND	ug/L	5.0	1		06/13/13 06/14/13 06:54
Tetrachloroethene	1.1	ug/L	1.0	1		06/13/13 06/14/13 06:54
Chlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
Ethylbenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
m,p-Xylenes	ND	ug/L	2.0	1		06/13/13 06/14/13 06:54
Styrene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
o-Xylene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
Isopropylbenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
1,3-Dichlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
1,4-Dichlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
1,2-Dichlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		06/13/13 06/14/13 06:54
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
Naphthalene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		06/13/13 06/14/13 06:54

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3B</b>	<b>Date/Time Sampled: 06/06/2013 14:56</b>	<b>PSS Sample ID: 13060619-005</b>					
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>						
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	06/07/13	06/08/13 01:19	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 3B</b>		<b>Date/Time Sampled: 06/06/2013 14:56 PSS Sample ID: 13060619-005</b>					
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>					
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Chloromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Vinyl Chloride		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
tert-Butyl alcohol		ND	ug/L	20	1	1	06/14/13 06/15/13 02:24 1011
Bromomethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Chloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Acetone		ND	ug/L	10	1	1	06/14/13 06/15/13 02:24 1011
Cyclohexane		ND	ug/L	10	1	1	06/14/13 06/15/13 02:24 1011
Trichlorofluoromethane		ND	ug/L	5.0	1	1	06/14/13 06/15/13 02:24 1011
1,1-Dichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Methylene Chloride		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Methyl-t-butyl ether		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
1,1-Dichloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
2-Butanone (MEK)		ND	ug/L	10	1	1	06/14/13 06/15/13 02:24 1011
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Bromochloromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Chloroform		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
1,2-Dichloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Carbon Tetrachloride		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Benzene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
1,2-Dichloropropane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Methyl Acetate		ND	ug/L	10	1	1	06/14/13 06/15/13 02:24 1011
Methylcyclohexane		ND	ug/L	10	1	1	06/14/13 06/15/13 02:24 1011
Trichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
Carbon Disulfide		ND	ug/L	10	1	1	06/14/13 06/15/13 02:24 1011
Bromodichloromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:24 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 3B	Date/Time Sampled: 06/06/2013 14:56 PSS Sample ID: 13060619-005				
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20				
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B	
	Result	Units	RL	Flag	Dil
4-Methyl-2-Pentanone	ND	ug/L	5.0	1	06/14/13 06/15/13 02:24 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
Toluene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
2-Hexanone	ND	ug/L	10	1	06/14/13 06/15/13 02:24 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
Dibromochloromethane	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	06/14/13 06/15/13 02:24 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	06/14/13 06/15/13 02:24 1011
Diisopropyl ether	ND	ug/L	10	1	06/14/13 06/15/13 02:24 1011
tert-Amyl methyl ether	ND	ug/L	10	1	06/14/13 06/15/13 02:24 1011
tert-Amyl alcohol	ND	ug/L	20	1	06/14/13 06/15/13 02:24 1011
Bromoform	ND	ug/L	5.0	1	06/14/13 06/15/13 02:24 1011
Tetrachloroethene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
Chlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
Ethylbenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
m,p-Xylenes	ND	ug/L	2.0	1	06/14/13 06/15/13 02:24 1011
Styrene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
o-Xylene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
Isopropylbenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	06/14/13 06/15/13 02:24 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
Naphthalene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 02:24 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 4A</b>	<b>Date/Time Sampled: 06/06/2013 10:40 PSS Sample ID: 13060619-006</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>760</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 4A	Date/Time Sampled: 06/06/2013 10:40 PSS Sample ID: 13060619-006					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
Dichlorodifluoromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Chloromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Vinyl Chloride	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
tert-Butyl alcohol	210	ug/L	20	1	1	06/14/13 06/15/13 02:54
Bromomethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Chloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Acetone	ND	ug/L	10	1	1	06/14/13 06/15/13 02:54
Cyclohexane	ND	ug/L	10	1	1	06/14/13 06/15/13 02:54
Trichlorofluoromethane	ND	ug/L	5.0	1	1	06/14/13 06/15/13 02:54
1,1-Dichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Methylene Chloride	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Methyl-t-butyl ether	660	ug/L	10	10	10	06/14/13 06/15/13 03:23
1,1-Dichloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
2-Butanone (MEK)	ND	ug/L	10	1	1	06/14/13 06/15/13 02:54
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Bromochloromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Chloroform	18	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
1,2-Dichloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Carbon Tetrachloride	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Benzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
1,2-Dichloropropane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Methyl Acetate	ND	ug/L	10	1	1	06/14/13 06/15/13 02:54
Methylcyclohexane	ND	ug/L	10	1	1	06/14/13 06/15/13 02:54
Trichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
Carbon Disulfide	ND	ug/L	10	1	1	06/14/13 06/15/13 02:54
Bromodichloromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 02:54

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 4A	Date/Time Sampled: 06/06/2013 10:40 PSS Sample ID: 13060619-006					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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		06/14/13 06/15/13 02:54 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
Toluene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
2-Hexanone	ND	ug/L	10	1		06/14/13 06/15/13 02:54 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
Dibromochloromethane	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
tert-Amyl ethyl ether	ND	ug/L	10	1		06/14/13 06/15/13 02:54 1011
tert-Butyl ethyl ether	ND	ug/L	10	1		06/14/13 06/15/13 02:54 1011
Diisopropyl ether	ND	ug/L	10	1		06/14/13 06/15/13 02:54 1011
tert-Amyl methyl ether	30	ug/L	10	1		06/14/13 06/15/13 02:54 1011
tert-Amyl alcohol	ND	ug/L	20	1		06/14/13 06/15/13 02:54 1011
Bromoform	ND	ug/L	5.0	1		06/14/13 06/15/13 02:54 1011
Tetrachloroethene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
Chlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
Ethylbenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
m,p-Xylenes	ND	ug/L	2.0	1		06/14/13 06/15/13 02:54 1011
Styrene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
o-Xylene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
Isopropylbenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		06/14/13 06/15/13 02:54 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
Naphthalene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 02:54 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 4B</b>	<b>Date/Time Sampled: 06/06/2013 12:45 PSS Sample ID: 13060619-007</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 06/07/13	Analyzed 06/08/13 02:09	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 4B</b>		<b>Date/Time Sampled: 06/06/2013 12:45 PSS Sample ID: 13060619-007</b>					
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>					
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Chloromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Vinyl Chloride		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
tert-Butyl alcohol		ND	ug/L	20	1	1	06/14/13 06/15/13 03:52 1011
Bromomethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Chloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Acetone		ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
Cyclohexane		ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
Trichlorofluoromethane		ND	ug/L	5.0	1	1	06/14/13 06/15/13 03:52 1011
1,1-Dichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Methylene Chloride		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Methyl-t-butyl ether		2.1	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,1-Dichloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
2-Butanone (MEK)		ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Bromochloromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Chloroform		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,2-Dichloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Carbon Tetrachloride		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Benzene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,2-Dichloropropane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Methyl Acetate		ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
Methylcyclohexane		ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
Trichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Carbon Disulfide		ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
Bromodichloromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 4B	Date/Time Sampled: 06/06/2013 12:45 PSS Sample ID: 13060619-007					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/14/13 06/15/13 03:52 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Toluene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
2-Hexanone	ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
Diisopropyl ether	ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
tert-Amyl methyl ether	ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	06/14/13 06/15/13 03:52 1011
Bromoform	ND	ug/L	5.0	1	1	06/14/13 06/15/13 03:52 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Chlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Ethylbenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	06/14/13 06/15/13 03:52 1011
Styrene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
o-Xylene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	06/14/13 06/15/13 03:52 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
Naphthalene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 03:52 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 5</b>	<b>Date/Time Sampled: 06/06/2013 12:46</b>	<b>PSS Sample ID: 13060619-008</b>					
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>						
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	06/07/13	06/08/13 02:34	1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 5</b>		<b>Date/Time Sampled: 06/06/2013 12:46</b>			<b>PSS Sample ID: 13060619-008</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>					
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>
Dichlorodifluoromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Chloromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Vinyl Chloride		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
tert-Butyl alcohol		ND	ug/L	20	1	1	06/14/13 06/15/13 04:21
Bromomethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Chloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Acetone		ND	ug/L	10	1	1	06/14/13 06/15/13 04:21
Cyclohexane		ND	ug/L	10	1	1	06/14/13 06/15/13 04:21
Trichlorofluoromethane		ND	ug/L	5.0	1	1	06/14/13 06/15/13 04:21
1,1-Dichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Methylene Chloride		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
trans-1,2-Dichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Methyl-t-butyl ether		1.1	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
1,1-Dichloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
2-Butanone (MEK)		ND	ug/L	10	1	1	06/14/13 06/15/13 04:21
cis-1,2-Dichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Bromochloromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Chloroform		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
1,1,1-Trichloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
1,2-Dichloroethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Carbon Tetrachloride		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Benzene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
1,2-Dichloropropane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Methyl Acetate		ND	ug/L	10	1	1	06/14/13 06/15/13 04:21
Methylcyclohexane		ND	ug/L	10	1	1	06/14/13 06/15/13 04:21
Trichloroethene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
Carbon Disulfide		ND	ug/L	10	1	1	06/14/13 06/15/13 04:21
Bromodichloromethane		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21
cis-1,3-Dichloropropene		ND	ug/L	1.0	1	1	06/14/13 06/15/13 04:21

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 5	Date/Time Sampled: 06/06/2013 12:46 PSS Sample ID: 13060619-008			
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20			
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B
	Result	Units	RL	Flag
4-Methyl-2-Pentanone	ND	ug/L	5.0	1
trans-1,3-Dichloropropene	ND	ug/L	1.0	1
1,1,2-Trichloroethane	ND	ug/L	1.0	1
Toluene	ND	ug/L	1.0	1
2-Hexanone	ND	ug/L	10	1
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1
Dibromochloromethane	ND	ug/L	1.0	1
tert-Amyl ethyl ether	ND	ug/L	10	1
tert-Butyl ethyl ether	ND	ug/L	10	1
Diisopropyl ether	ND	ug/L	10	1
tert-Amyl methyl ether	ND	ug/L	10	1
tert-Amyl alcohol	ND	ug/L	20	1
Bromoform	ND	ug/L	5.0	1
Tetrachloroethene	ND	ug/L	1.0	1
Chlorobenzene	ND	ug/L	1.0	1
Ethylbenzene	ND	ug/L	1.0	1
m,p-Xylenes	ND	ug/L	2.0	1
Styrene	ND	ug/L	1.0	1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1
o-Xylene	ND	ug/L	1.0	1
Isopropylbenzene	ND	ug/L	1.0	1
1,3-Dichlorobenzene	ND	ug/L	1.0	1
1,4-Dichlorobenzene	ND	ug/L	1.0	1
1,2-Dichlorobenzene	ND	ug/L	1.0	1
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1
Naphthalene	ND	ug/L	1.0	1
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 6</b>	<b>Date/Time Sampled: 06/06/2013 13:10 PSS Sample ID: 13060619-009</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>820</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 6</b>		<b>Date/Time Sampled: 06/06/2013 13:10 PSS Sample ID: 13060619-009</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Chloromethane		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Vinyl Chloride		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
tert-Butyl alcohol		48	ug/L	20		1	06/14/13	06/15/13 04:49	1011
Bromomethane		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Chloroethane		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Acetone		ND	ug/L	10		1	06/14/13	06/15/13 04:49	1011
Cyclohexane		ND	ug/L	10		1	06/14/13	06/15/13 04:49	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	06/14/13	06/15/13 04:49	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Methylene Chloride		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Methyl-t-butyl ether		750	ug/L	10		10	06/14/13	06/15/13 05:18	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
2-Butanone (MEK)		ND	ug/L	10		1	06/14/13	06/15/13 04:49	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Bromochloromethane		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Chloroform		3.1	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Benzene		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Methyl Acetate		ND	ug/L	10		1	06/14/13	06/15/13 04:49	1011
Methylcyclohexane		ND	ug/L	10		1	06/14/13	06/15/13 04:49	1011
Trichloroethene		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
Carbon Disulfide		ND	ug/L	10		1	06/14/13	06/15/13 04:49	1011
Bromodichloromethane		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	06/14/13	06/15/13 04:49	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 6	Date/Time Sampled: 06/06/2013 13:10 PSS Sample ID: 13060619-009					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B		
	Result	Units	RL	Flag	Dil	Prepared
4-Methyl-2-Pentanone	ND	ug/L	5.0	1		06/14/13 06/15/13 04:49
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
Toluene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
2-Hexanone	ND	ug/L	10	1		06/14/13 06/15/13 04:49
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
Dibromochloromethane	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
tert-Amyl ethyl ether	ND	ug/L	10	1		06/14/13 06/15/13 04:49
tert-Butyl ethyl ether	ND	ug/L	10	1		06/14/13 06/15/13 04:49
Diisopropyl ether	ND	ug/L	10	1		06/14/13 06/15/13 04:49
tert-Amyl methyl ether	35	ug/L	10	1		06/14/13 06/15/13 04:49
tert-Amyl alcohol	ND	ug/L	20	1		06/14/13 06/15/13 04:49
Bromoform	ND	ug/L	5.0	1		06/14/13 06/15/13 04:49
Tetrachloroethene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
Chlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
Ethylbenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
m,p-Xylenes	ND	ug/L	2.0	1		06/14/13 06/15/13 04:49
Styrene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
o-Xylene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
Isopropylbenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
1,3-Dichlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
1,4-Dichlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
1,2-Dichlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		06/14/13 06/15/13 04:49
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
Naphthalene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		06/14/13 06/15/13 04:49

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 7</b>	<b>Date/Time Sampled: 06/06/2013 13:36 PSS Sample ID: 13060619-010</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 06/07/13	Analyzed 06/08/13 03:25	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 7</b>		<b>Date/Time Sampled: 06/06/2013 13:36 PSS Sample ID: 13060619-010</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Chloromethane		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Vinyl Chloride		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
tert-Butyl alcohol		ND	ug/L	20		1	06/14/13	06/15/13 05:48	1011
Bromomethane		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Chloroethane		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Acetone		ND	ug/L	10		1	06/14/13	06/15/13 05:48	1011
Cyclohexane		ND	ug/L	10		1	06/14/13	06/15/13 05:48	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	06/14/13	06/15/13 05:48	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Methylene Chloride		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Methyl-t-butyl ether		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
2-Butanone (MEK)		ND	ug/L	10		1	06/14/13	06/15/13 05:48	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Bromochloromethane		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Chloroform		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Benzene		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Methyl Acetate		ND	ug/L	10		1	06/14/13	06/15/13 05:48	1011
Methylcyclohexane		ND	ug/L	10		1	06/14/13	06/15/13 05:48	1011
Trichloroethene		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
Carbon Disulfide		ND	ug/L	10		1	06/14/13	06/15/13 05:48	1011
Bromodichloromethane		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	06/14/13	06/15/13 05:48	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 7</b>		<b>Date/Time Sampled: 06/06/2013 13:36</b>				<b>PSS Sample ID: 13060619-010</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	06/14/13	06/15/13 05:48
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
Toluene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
2-Hexanone		ND	ug/L	10	1	1	06/14/13	06/15/13 05:48
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
Dibromochloromethane		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
tert-Amyl ethyl ether		ND	ug/L	10	1	1	06/14/13	06/15/13 05:48
tert-Butyl ethyl ether		ND	ug/L	10	1	1	06/14/13	06/15/13 05:48
Diisopropyl ether		ND	ug/L	10	1	1	06/14/13	06/15/13 05:48
tert-Amyl methyl ether		ND	ug/L	10	1	1	06/14/13	06/15/13 05:48
tert-Amyl alcohol		ND	ug/L	20	1	1	06/14/13	06/15/13 05:48
Bromoform		ND	ug/L	5.0	1	1	06/14/13	06/15/13 05:48
Tetrachloroethene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
Chlorobenzene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
Ethylbenzene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
m,p-Xylenes		ND	ug/L	2.0	1	1	06/14/13	06/15/13 05:48
Styrene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
o-Xylene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
Isopropylbenzene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	06/14/13	06/15/13 05:48
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
Naphthalene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	06/14/13	06/15/13 05:48

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 8A</b>	<b>Date/Time Sampled: 06/06/2013 15:26 PSS Sample ID: 13060619-011</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 06/07/13	Analyzed 06/08/13 03:50	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 8A	Date/Time Sampled: 06/06/2013 15:26 PSS Sample ID: 13060619-011					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/14/13 06/15/13 06:17 1011
Chloromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
tert-Butyl alcohol	ND	ug/L	20	1	1	06/14/13 06/15/13 06:17 1011
Bromomethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Chloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Acetone	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
Cyclohexane	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	06/14/13 06/15/13 06:17 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Methylene Chloride	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Methyl-t-butyl ether	28	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Bromochloromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Chloroform	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Benzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Methyl Acetate	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
Methylcyclohexane	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
Trichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Carbon Disulfide	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 8A	Date/Time Sampled: 06/06/2013 15:26 PSS Sample ID: 13060619-011					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/14/13 06/15/13 06:17 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Toluene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
2-Hexanone	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
Diisopropyl ether	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
tert-Amyl methyl ether	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	06/14/13 06/15/13 06:17 1011
Bromoform	ND	ug/L	5.0	1	1	06/14/13 06/15/13 06:17 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Chlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Ethylbenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	06/14/13 06/15/13 06:17 1011
Styrene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
o-Xylene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	06/14/13 06/15/13 06:17 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
Naphthalene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:17 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 8B</b>	<b>Date/Time Sampled: 06/06/2013 15:46 PSS Sample ID: 13060619-012</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B						
TPH-GRO (Gasoline Range Organics)	Result ND	Units ug/L	RL 100	Flag 1	Dil 1	Prepared 06/07/13	Analyzed 06/08/13 04:15	Analyst 1035

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 8B	Date/Time Sampled: 06/06/2013 15:46 PSS Sample ID: 13060619-012					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/14/13 06/15/13 06:46 1011
Chloromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
tert-Butyl alcohol	ND	ug/L	20	1	1	06/14/13 06/15/13 06:46 1011
Bromomethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
Chloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
Acetone	ND	ug/L	10	1	1	06/14/13 06/15/13 06:46 1011
Cyclohexane	ND	ug/L	10	1	1	06/14/13 06/15/13 06:46 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	06/14/13 06/15/13 06:46 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
Methylene Chloride	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
Methyl-t-butyl ether	17	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	06/14/13 06/15/13 06:46 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
Bromochloromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
Chloroform	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
Benzene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
Methyl Acetate	ND	ug/L	10	1	1	06/14/13 06/15/13 06:46 1011
Methylcyclohexane	ND	ug/L	10	1	1	06/14/13 06/15/13 06:46 1011
Trichloroethene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
Carbon Disulfide	ND	ug/L	10	1	1	06/14/13 06/15/13 06:46 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/14/13 06/15/13 06:46 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 8B	Date/Time Sampled: 06/06/2013 15:46 PSS Sample ID: 13060619-012				
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20				
TCL Volatiles plus Oxygenates	Analytical Method: SW-846 8260 B			Preparation Method: 5030B	
	Result	Units	RL	Flag	Dil
4-Methyl-2-Pentanone	ND	ug/L	5.0	1	06/14/13 06/15/13 06:46 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
Toluene	<b>2.1</b>	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
2-Hexanone	ND	ug/L	10	1	06/14/13 06/15/13 06:46 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
Dibromochloromethane	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	06/14/13 06/15/13 06:46 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	06/14/13 06/15/13 06:46 1011
Diisopropyl ether	ND	ug/L	10	1	06/14/13 06/15/13 06:46 1011
tert-Amyl methyl ether	ND	ug/L	10	1	06/14/13 06/15/13 06:46 1011
tert-Amyl alcohol	ND	ug/L	20	1	06/14/13 06/15/13 06:46 1011
Bromoform	ND	ug/L	5.0	1	06/14/13 06/15/13 06:46 1011
Tetrachloroethene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
Chlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
Ethylbenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
m,p-Xylenes	ND	ug/L	2.0	1	06/14/13 06/15/13 06:46 1011
Styrene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
o-Xylene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
Isopropylbenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	06/14/13 06/15/13 06:46 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
Naphthalene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	06/14/13 06/15/13 06:46 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 9</b>	<b>Date/Time Sampled: 06/06/2013 13:25 PSS Sample ID: 13060619-013</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>2,100</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 9	Date/Time Sampled: 06/06/2013 13:25 PSS Sample ID: 13060619-013					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/15/13 06/15/13 18:54 1011
Chloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
tert-Butyl alcohol	920	ug/L	200	10	10	06/15/13 06/15/13 14:00 1011
Bromomethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
Chloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
Acetone	ND	ug/L	10	1	1	06/15/13 06/15/13 18:54 1011
Cyclohexane	ND	ug/L	10	1	1	06/15/13 06/15/13 18:54 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	06/15/13 06/15/13 18:54 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
Methylene Chloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
Methyl-t-butyl ether	2,000	ug/L	10	10	10	06/15/13 06/15/13 14:00 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	06/15/13 06/15/13 18:54 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
Bromochloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
Chloroform	3.2	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
Benzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
Methyl Acetate	ND	ug/L	10	1	1	06/15/13 06/15/13 18:54 1011
Methylcyclohexane	ND	ug/L	10	1	1	06/15/13 06/15/13 18:54 1011
Trichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
Carbon Disulfide	ND	ug/L	10	1	1	06/15/13 06/15/13 18:54 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:54 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 9</b>		<b>Date/Time Sampled: 06/06/2013 13:25</b>				<b>PSS Sample ID: 13060619-013</b>		
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>						
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B			
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0	1	1	06/15/13	06/15/13 18:54
trans-1,3-Dichloropropene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
1,1,2-Trichloroethane		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
Toluene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
2-Hexanone		ND	ug/L	10	1	1	06/15/13	06/15/13 18:54
1,2-Dibromoethane (EDB)		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
Dibromochloromethane		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
tert-Amyl ethyl ether		ND	ug/L	10	1	1	06/15/13	06/15/13 18:54
tert-Butyl ethyl ether		ND	ug/L	10	1	1	06/15/13	06/15/13 18:54
Diisopropyl ether		ND	ug/L	10	1	1	06/15/13	06/15/13 18:54
tert-Amyl methyl ether		83	ug/L	10	1	1	06/15/13	06/15/13 18:54
tert-Amyl alcohol		ND	ug/L	20	1	1	06/15/13	06/15/13 18:54
Bromoform		ND	ug/L	5.0	1	1	06/15/13	06/15/13 18:54
Tetrachloroethene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
Chlorobenzene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
Ethylbenzene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
m,p-Xylenes		ND	ug/L	2.0	1	1	06/15/13	06/15/13 18:54
Styrene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
o-Xylene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
Isopropylbenzene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
1,3-Dichlorobenzene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
1,4-Dichlorobenzene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
1,2-Dichlorobenzene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
1,2-Dibromo-3-Chloropropane		ND	ug/L	10	1	1	06/15/13	06/15/13 18:54
1,2,4-Trichlorobenzene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
Naphthalene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54
1,2,3-Trichlorobenzene		ND	ug/L	1.0	1	1	06/15/13	06/15/13 18:54

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 10</b>	<b>Date/Time Sampled: 06/06/2013 11:55 PSS Sample ID: 13060619-014</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>660</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 10	Date/Time Sampled: 06/06/2013 11:55 PSS Sample ID: 13060619-014					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/15/13 06/15/13 16:56 1011
Chloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
tert-Butyl alcohol	810	ug/L	100	5	5	06/15/13 06/15/13 14:29 1011
Bromomethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Chloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Acetone	ND	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
Cyclohexane	ND	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	06/15/13 06/15/13 16:56 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Methylene Chloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Methyl-t-butyl ether	520	ug/L	5.0	5	5	06/15/13 06/15/13 14:29 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Bromochloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Chloroform	11	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Benzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Methyl Acetate	ND	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
Methylcyclohexane	ND	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
Trichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Carbon Disulfide	ND	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 10	Date/Time Sampled: 06/06/2013 11:55 PSS Sample ID: 13060619-014					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/15/13 06/15/13 16:56 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Toluene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
2-Hexanone	ND	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
Diisopropyl ether	ND	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
tert-Amyl methyl ether	23	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
tert-Amyl alcohol	24	ug/L	20	1	1	06/15/13 06/15/13 16:56 1011
Bromoform	ND	ug/L	5.0	1	1	06/15/13 06/15/13 16:56 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Chlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Ethylbenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	06/15/13 06/15/13 16:56 1011
Styrene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
o-Xylene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	06/15/13 06/15/13 16:56 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
Naphthalene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 16:56 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 11</b>	<b>Date/Time Sampled: 06/06/2013 13:20 PSS Sample ID: 13060619-015</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>690</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 11	Date/Time Sampled: 06/06/2013 13:20 PSS Sample ID: 13060619-015					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/15/13 06/15/13 17:25 1011
Chloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
tert-Butyl alcohol	<b>1,700</b>	ug/L	200	10	10	06/15/13 06/16/13 15:10 1011
Bromomethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Chloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Acetone	ND	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
Cyclohexane	ND	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	06/15/13 06/15/13 17:25 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Methylene Chloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Methyl-t-butyl ether	<b>590</b>	ug/L	5.0	5	5	06/15/13 06/15/13 14:59 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Bromochloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Chloroform	<b>10</b>	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Benzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Methyl Acetate	ND	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
Methylcyclohexane	ND	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
Trichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Carbon Disulfide	ND	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 11	Date/Time Sampled: 06/06/2013 13:20 PSS Sample ID: 13060619-015					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/15/13 06/15/13 17:25 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Toluene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
2-Hexanone	ND	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
Diisopropyl ether	ND	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
tert-Amyl methyl ether	25	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
tert-Amyl alcohol	52	ug/L	20	1	1	06/15/13 06/15/13 17:25 1011
Bromoform	ND	ug/L	5.0	1	1	06/15/13 06/15/13 17:25 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Chlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Ethylbenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	06/15/13 06/15/13 17:25 1011
Styrene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
o-Xylene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	06/15/13 06/15/13 17:25 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
Naphthalene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:25 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 12</b>	<b>Date/Time Sampled: 06/06/2013 11:00 PSS Sample ID: 13060619-016</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>150</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 12	Date/Time Sampled: 06/06/2013 11:00 PSS Sample ID: 13060619-016					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/15/13 06/15/13 13:30 1011
Chloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
tert-Butyl alcohol	ND	ug/L	20	1	1	06/15/13 06/15/13 13:30 1011
Bromomethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
Chloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
Acetone	ND	ug/L	10	1	1	06/15/13 06/15/13 13:30 1011
Cyclohexane	ND	ug/L	10	1	1	06/15/13 06/15/13 13:30 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	06/15/13 06/15/13 13:30 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
Methylene Chloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
Methyl-t-butyl ether	140	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	06/15/13 06/15/13 13:30 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
Bromochloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
Chloroform	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
Benzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
Methyl Acetate	ND	ug/L	10	1	1	06/15/13 06/15/13 13:30 1011
Methylcyclohexane	ND	ug/L	10	1	1	06/15/13 06/15/13 13:30 1011
Trichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
Carbon Disulfide	ND	ug/L	10	1	1	06/15/13 06/15/13 13:30 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 13:30 1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 12</b>		<b>Date/Time Sampled: 06/06/2013 11:00 PSS Sample ID: 13060619-016</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
4-Methyl-2-Pentanone		ND	ug/L	5.0		1	06/15/13	06/15/13 13:30	1011
trans-1,3-Dichloropropene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
1,1,2-Trichloroethane		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
Toluene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
2-Hexanone		ND	ug/L	10		1	06/15/13	06/15/13 13:30	1011
1,2-Dibromoethane (EDB)		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
Dibromochloromethane		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
tert-Amyl ethyl ether		ND	ug/L	10		1	06/15/13	06/15/13 13:30	1011
tert-Butyl ethyl ether		ND	ug/L	10		1	06/15/13	06/15/13 13:30	1011
Diisopropyl ether		ND	ug/L	10		1	06/15/13	06/15/13 13:30	1011
tert-Amyl methyl ether		ND	ug/L	10		1	06/15/13	06/15/13 13:30	1011
tert-Amyl alcohol		ND	ug/L	20		1	06/15/13	06/15/13 13:30	1011
Bromoform		ND	ug/L	5.0		1	06/15/13	06/15/13 13:30	1011
Tetrachloroethene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
Chlorobenzene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
Ethylbenzene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
m,p-Xylenes		ND	ug/L	2.0		1	06/15/13	06/15/13 13:30	1011
Styrene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
1,1,2,2-Tetrachloroethane		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
o-Xylene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
Isopropylbenzene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
1,3-Dichlorobenzene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
1,4-Dichlorobenzene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
1,2-Dichlorobenzene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
1,2-Dibromo-3-Chloropropane		ND	ug/L	10		1	06/15/13	06/15/13 13:30	1011
1,2,4-Trichlorobenzene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
Naphthalene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011
1,2,3-Trichlorobenzene		ND	ug/L	1.0		1	06/15/13	06/15/13 13:30	1011

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 13</b>	<b>Date/Time Sampled: 06/06/2013 13:30 PSS Sample ID: 13060619-017</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>1,000</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 13	Date/Time Sampled: 06/06/2013 13:30 PSS Sample ID: 13060619-017					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/15/13 06/15/13 17:55 1011
Chloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
Vinyl Chloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
tert-Butyl alcohol	290	ug/L	100	5	5	06/15/13 06/15/13 15:28 1011
Bromomethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
Chloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
Acetone	ND	ug/L	10	1	1	06/15/13 06/15/13 17:55 1011
Cyclohexane	ND	ug/L	10	1	1	06/15/13 06/15/13 17:55 1011
Trichlorofluoromethane	ND	ug/L	5.0	1	1	06/15/13 06/15/13 17:55 1011
1,1-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
Methylene Chloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
trans-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
Methyl-t-butyl ether	860	ug/L	5.0	5	5	06/15/13 06/15/13 15:28 1011
1,1-Dichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
2-Butanone (MEK)	ND	ug/L	10	1	1	06/15/13 06/15/13 17:55 1011
cis-1,2-Dichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
Bromochloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
Chloroform	1.3	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
1,1,1-Trichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
1,2-Dichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
Carbon Tetrachloride	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
Benzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
1,2-Dichloropropane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
Methyl Acetate	ND	ug/L	10	1	1	06/15/13 06/15/13 17:55 1011
Methylcyclohexane	ND	ug/L	10	1	1	06/15/13 06/15/13 17:55 1011
Trichloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
Carbon Disulfide	ND	ug/L	10	1	1	06/15/13 06/15/13 17:55 1011
Bromodichloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 1011
cis-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 17:55 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: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: MW 13	Date/Time Sampled: 06/06/2013 13:30 PSS Sample ID: 13060619-017					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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		06/15/13 06/15/13 17:55 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
Toluene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
2-Hexanone	ND	ug/L	10	1		06/15/13 06/15/13 17:55 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
Dibromochloromethane	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
tert-Amyl ethyl ether	ND	ug/L	10	1		06/15/13 06/15/13 17:55 1011
tert-Butyl ethyl ether	ND	ug/L	10	1		06/15/13 06/15/13 17:55 1011
Diisopropyl ether	ND	ug/L	10	1		06/15/13 06/15/13 17:55 1011
tert-Amyl methyl ether	39	ug/L	10	1		06/15/13 06/15/13 17:55 1011
tert-Amyl alcohol	ND	ug/L	20	1		06/15/13 06/15/13 17:55 1011
Bromoform	ND	ug/L	5.0	1		06/15/13 06/15/13 17:55 1011
Tetrachloroethene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
Chlorobenzene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
Ethylbenzene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
m,p-Xylenes	ND	ug/L	2.0	1		06/15/13 06/15/13 17:55 1011
Styrene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
o-Xylene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
Isopropylbenzene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1		06/15/13 06/15/13 17:55 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
Naphthalene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		06/15/13 06/15/13 17:55 1011

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800-932-9047  
FAX 410-788-8723

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: HW 3</b>	<b>Date/Time Sampled: 06/06/2013 13:15 PSS Sample ID: 13060619-018</b>		
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>		
Total Petroleum Hydrocarbons-GRO	Analytical Method: SW-846 8015C	Preparation Method: 5030B	
TPH-GRO (Gasoline Range Organics)	<b>Result</b> <b>1,200</b>	<b>Units</b> ug/L	<b>RL</b> 100 <b>Flag</b> <b>Dil</b> 1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: HW 3</b>		<b>Date/Time Sampled: 06/06/2013 13:15 PSS Sample ID: 13060619-018</b>							
<b>Matrix: GROUND WATER</b>		<b>Date/Time Received: 06/06/2013 17:20</b>							
TCL Volatiles plus Oxygenates		Analytical Method: SW-846 8260 B			Preparation Method: 5030B				
		<b>Result</b>	<b>Units</b>	<b>RL</b>	<b>Flag</b>	<b>Dil</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Analyst</b>
Dichlorodifluoromethane		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Chloromethane		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Vinyl Chloride		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
tert-Butyl alcohol		450	ug/L	100		5	06/15/13	06/15/13 15:58	1011
Bromomethane		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Chloroethane		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Acetone		ND	ug/L	10		1	06/15/13	06/15/13 18:24	1011
Cyclohexane		ND	ug/L	10		1	06/15/13	06/15/13 18:24	1011
Trichlorofluoromethane		ND	ug/L	5.0		1	06/15/13	06/15/13 18:24	1011
1,1-Dichloroethene		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Methylene Chloride		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
trans-1,2-Dichloroethene		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Methyl-t-butyl ether		1,100	ug/L	5.0		5	06/15/13	06/15/13 15:58	1011
1,1-Dichloroethane		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
2-Butanone (MEK)		ND	ug/L	10		1	06/15/13	06/15/13 18:24	1011
cis-1,2-Dichloroethene		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Bromochloromethane		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Chloroform		11	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
1,1,1-Trichloroethane		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
1,2-Dichloroethane		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Carbon Tetrachloride		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Benzene		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
1,2-Dichloropropane		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Methyl Acetate		ND	ug/L	10		1	06/15/13	06/15/13 18:24	1011
Methylcyclohexane		ND	ug/L	10		1	06/15/13	06/15/13 18:24	1011
Trichloroethene		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
Carbon Disulfide		ND	ug/L	10		1	06/15/13	06/15/13 18:24	1011
Bromodichloromethane		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011
cis-1,3-Dichloropropene		ND	ug/L	1.0		1	06/15/13	06/15/13 18:24	1011

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

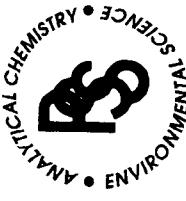
No: 13060619  
**AECOM, Columbia, MD**  
 June 17, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

Sample ID: HW 3	Date/Time Sampled: 06/06/2013 13:15 PSS Sample ID: 13060619-018					
Matrix: GROUND WATER	Date/Time Received: 06/06/2013 17:20					
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	1	06/15/13 06/15/13 18:24 1011
trans-1,3-Dichloropropene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
1,1,2-Trichloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
Toluene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
2-Hexanone	ND	ug/L	10	1	1	06/15/13 06/15/13 18:24 1011
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
Dibromochloromethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
tert-Amyl ethyl ether	ND	ug/L	10	1	1	06/15/13 06/15/13 18:24 1011
tert-Butyl ethyl ether	ND	ug/L	10	1	1	06/15/13 06/15/13 18:24 1011
Diisopropyl ether	ND	ug/L	10	1	1	06/15/13 06/15/13 18:24 1011
tert-Amyl methyl ether	52	ug/L	10	1	1	06/15/13 06/15/13 18:24 1011
tert-Amyl alcohol	ND	ug/L	20	1	1	06/15/13 06/15/13 18:24 1011
Bromoform	ND	ug/L	5.0	1	1	06/15/13 06/15/13 18:24 1011
Tetrachloroethene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
Chlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
Ethylbenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
m,p-Xylenes	ND	ug/L	2.0	1	1	06/15/13 06/15/13 18:24 1011
Styrene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
o-Xylene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
Isopropylbenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
1,3-Dichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
1,4-Dichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
1,2-Dichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
1,2-Dibromo-3-Chloropropane	ND	ug/L	10	1	1	06/15/13 06/15/13 18:24 1011
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
Naphthalene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1	1	06/15/13 06/15/13 18:24 1011



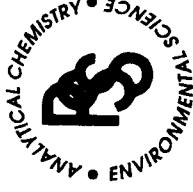
# SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

## PHASE SEPARATION SCIENCE, INC.

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

① *CLIENT: <b>AECOM</b>		*OFFICE LOC. <b>Columbia MD</b>		PSS Work Order #: <b>13060619</b>		PAGE <b>\ 2</b> OF <b>2</b>
*PROJECT MGR: <b>J. Conzari</b>		*PHONE NO.: <b>(410) 525 0516</b>		Matrix Codes: <b>SW=Surface Wtr DW=Drinking Wtr GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil L=Liquid A=Air M=Wipe</b>		
EMAIL:	FAX NO.: ( )	No. C	SAMPLE TYPE	Preservatives Used	Analysis Method Required	REMARKS
*PROJECT NAME: <b>7-11 Store # 22281</b>		O N T	A	C = COMP	③	
SITE LOCATION: <b>Fallston, MD</b>		A	I	N	*	
SAMPLER(S): <b>D. Parsons &amp; Bennett</b>		A	R	E	G	
LAB NO.		*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	
1	MW 1A	6/6/13	1231	GW	G	
2	MW 1B		1216	G	G	
3	MW 2		1226	G	G	
4	MW 3 A		1306	G	G	
5	MW 3 B		1456	G	G	
6	MW 4 A		1040	G	G	
7	MW 4 B		1245	G	G	
8	MW 5		1240	G	G	
9	MW 6		1310	G	G	
10	MW 7		1330	G	G	
② Relinquished By: (1)		Date <b>6/6/13</b>	Time <b>5:20 PM</b>	Received By: <b>A. Parsons</b>	④ *Requested TAT (One TAT per COC)	
Relinquished By: (2)		Date	Time	Received By:	<input checked="" type="checkbox"/> 5-Day	# of Coolers:
Relinquished By: (3)		Date	Time	Received By:	<input type="checkbox"/> 3-Day	
Relinquished By: (4)		Date	Time	Received By:	<input type="checkbox"/> Next Day	
					<input type="checkbox"/> Emergency	
					<input type="checkbox"/> 2-Day	
					<input type="checkbox"/> Other	
					Custody Seal: <b>AB</b>	
					Ice Present: <b>Present</b> Temp: <b>44 °C</b>	
					Shipping Carrier: <b>Client</b>	
Special Instructions:						
DW COMPLIANCE?		EDD FORMAT TYPE	STATE RESULTS REPORTED TO:			
YES <input type="checkbox"/>		<b>AECOM</b>	MD <input checked="" type="checkbox"/>	PA <input type="checkbox"/>	VA <input type="checkbox"/>	WV <input type="checkbox"/>
NO <input type="checkbox"/>			OTHER <input type="checkbox"/>			

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723  
The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary. \* = REQUIRED



# SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

## PHASE SEPARATION SCIENCE, INC.

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

① *CLIENT: <b>AECOM</b>		*OFFICE LOC: <b>Columbia, MD</b>		PSS Work Order #: <b>1306062019</b>		PAGE <b>2</b> OF <b>2</b>	
*PROJECT MGR: <b>J. Carter</b>		*PHONE NO.: <b>(202) 585-0500</b>		Matrix Codes: <b>SW=Surface Wtr DW=Drinking Wtr GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil L=Liquid SOL=Solid A=Air W=Wipe</b>			
EMAIL:	FAX NO.: ( )	No. C	SAMPLE TYPE	Preservatives Used	Analysis Method Required	REMARKS	
*PROJECT NAME: <b>7-11 Store # 22281</b>	PROJECT NO: <b>1044763</b>	N T	C = COMP	③ *	TPA-GRO + TPA-GRB		
SITE LOCATION: <b>Fallston, MD</b>	P.O. NO. <b>45814 ACM</b>	A	I	E	G		
SAMPLER(S): <b>Darson's &amp; Barnett</b>	DW CERT NO.:	N	R	S			
② LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)			
1	MW 8 A	6/6/13	1526	GW	6		
12	MW 8 B	6/6/13	1546	GW	6		
13	MW 9	6/6/13	1325	GW	6		
14	MW 10	6/6/13	1325	GW	6		
15	MW 11	6/6/13	1320	GW	6		
16	MW 12	6/6/13	1100	GW	6		
17	MW 13	6/6/13	1330	GW	6		
18	MW 14	6/6/13	1315	GW	6		
④ *Requested TAT (One TAT per COC) <input checked="" type="checkbox"/> 5-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> Next Day <input type="checkbox"/> 2-Day <input type="checkbox"/> Emergency <input type="checkbox"/> Other Data Deliverables Required: COA <input checked="" type="checkbox"/> Q&SUMM <input type="checkbox"/> CLP LIKE <input type="checkbox"/> OTHER <input type="checkbox"/> Ice Present: <input checked="" type="checkbox"/> present      Temp: <b>41°C</b> Shipping Carrier: <b>Client</b>							
Special Instructions:							
Relinquished By: (1)	Date: <b>6/6/13</b>	Time: <b>5:20 PM</b>	Received By: <b>A. Provenza</b>	DW COMPLIANCE? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> EDD FORMAT TYPE <b>AECOM</b>			
Relinquished By: (2)	Date:	Time:	Received By:	STATE RESULTS REPORTED TO: MD <input checked="" type="checkbox"/> DE <input type="checkbox"/> PA <input type="checkbox"/> VA <input type="checkbox"/> WV <input type="checkbox"/> OTHER			
Relinquished By: (3)	Date:	Time:	Received By:				
Relinquished By: (4)	Date:	Time:	Received By:				

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 The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary. \* = REQUIRED



# Phase Separation Science, Inc

## Sample Receipt Checklist

Work Order #	13060619	Received By	Jacob Prucnal
Client Name	AECOM	Date Received	06/06/2013 05:20:00 PM
Project Name	7-11 Store #22281	Delivered By	Client
Project Number	60144763	Tracking No	Not Applicable
Disposal Date	07/11/2013	Logged In By	Rachel Davis

### Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	4
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

### Documentation

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

### Sample Container

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

Total No. of Samples Received 18

Total No. of Containers Received 108

### 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

### 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:

Amy Friedlander

Date: 06/07/2013

PM Review and Approval:

Amy Friedlander

Date: 06/07/2013

**ATTACHMENT C**

**Laboratory Analytical Reports (Nutrients)**

# Analytical Report for

AECOM

Certificate of Analysis No.: 13021411

Project Manager: John Canzeri

Project Name : 7-11 Store 22281

Project Location: Fallston, MD

Project ID : 60144763



February 22, 2013  
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.



February 22, 2013

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

Reference: PSS Work Order(s) No: **13021411**

Project Name: 7-11 Store 22281  
Project Location: Fallston, MD  
Project ID.: 60144763

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 **13021411**.

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 March 21, 2013. 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,

**Cathy Thompson**  
QA Officer



# Sample Summary

**Client Name: AECOM**  
**Project Name: 7-11 Store 22281**

**Work Order Number(s): 13021411**

**Project ID: 60144763**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 02/14/2013 at 04:55 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
13021411-001	MW6	GROUND WATER	02/14/13 14:40
13021411-002	MW9	GROUND WATER	02/14/13 13:45
13021411-003	MW11	GROUND WATER	02/14/13 14:15
13021411-004	MW13	GROUND WATER	02/14/13 13:55
13021411-005	HW3	GROUND WATER	02/14/13 14:20

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. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminants, and part 141.3, for the secondary drinking water contaminants.
5. The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for non-potable water samples tested for compliance for Virginia Pollution Discharge Elimination System (VDPES) permits and Virginia Pollutant Abatement (VPA) permits, have a maximum holding time of 15 minutes established by 40CFR136.3.

**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.



## Case Narrative Summary

**Client Name: AECOM**

**Project Name: 7-11 Store 22281**

Work Order Number(s): 13021411

Project ID: 60144763

---

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.

**Sample Receipt:**

All sample receipt conditions were acceptable.

Analyses associated with analyst code 4005 were performed by Enviro-Chem Laboratories, Inc.

**Analytical:**

**Nitrate, Nitrite**

**Batch: 104168**

Samples -001 and -005 required dilution for nitrate. Analysis of the dilutions was performed past the recommended holding time.

**Batch: 104179**

Samples -002 and -004 required dilution for nitrate. Analysis of the dilutions was performed past the recommended holding time.

**NELAP accreditation was held for all analyses performed unless noted below. See [www.phaseonline.com](http://www.phaseonline.com) for complete PSS scope of accreditation.**

EPA 365.3

**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: 13021411  
**AECOM, Columbia, MD**  
 February 22, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW6</b>	<b>Date/Time Sampled: 02/14/2013 14:40 PSS Sample ID: 13021411-001</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 02/14/2013 16:55</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	73 mg/L	1.0		10	02/15/13	02/21/13 16:30	1044	
Nitrite (as N)	0.21 mg/L	0.10		1	02/15/13	02/15/13 17:06	1044	
Orthophosphate	Analytical Method: EPA 365.3							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	ND mg/L	0.15			02/15/13	02/15/13 13:51	4005	
<b>Sample ID: MW9</b>	<b>Date/Time Sampled: 02/14/2013 13:45 PSS Sample ID: 13021411-002</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 02/14/2013 16:55</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	15 mg/L	0.50		5	02/15/13	02/22/13 11:53	1044	
Nitrite (as N)	0.15 mg/L	0.10		1	02/15/13	02/15/13 17:33	1044	
Orthophosphate	Analytical Method: EPA 365.3							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	1.42 mg/L	0.15			02/15/13	02/15/13 13:51	4005	
<b>Sample ID: MW11</b>	<b>Date/Time Sampled: 02/14/2013 14:15 PSS Sample ID: 13021411-003</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 02/14/2013 16:55</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	7.8 mg/L	0.10		1	02/15/13	02/15/13 18:01	1044	
Nitrite (as N)	0.17 mg/L	0.10		1	02/15/13	02/15/13 18:01	1044	
Orthophosphate	Analytical Method: EPA 365.3							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	0.17 mg/L	0.15			02/15/13	02/15/13 13:51	4005	

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**BALTIMORE, MD 21228**  
**410-747-8770**  
**800-932-9047**  
**FAX 410-788-8723**

# **PHASE SEPARATION SCIENCE, INC.**



## CERTIFICATE OF ANALYSIS

No: 13021411  
**AECOM, Columbia, MD**  
 February 22, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW13</b>	<b>Date/Time Sampled: 02/14/2013 13:55 PSS Sample ID: 13021411-004</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 02/14/2013 16:55</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	28 mg/L	0.50		5	02/15/13	02/22/13 12:21	1044	
Nitrite (as N)	0.19 mg/L	0.10		1	02/15/13	02/15/13 18:28	1044	
Orthophosphate	Analytical Method: EPA 365.3							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	2.44 mg/L	0.15			02/15/13	02/15/13 13:51	4005	
<b>Sample ID: HW3</b>	<b>Date/Time Sampled: 02/14/2013 14:20 PSS Sample ID: 13021411-005</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 02/14/2013 16:55</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	850 mg/L	50		500	02/15/13	02/21/13 16:02	1044	
Nitrite (as N)	3.3 mg/L	0.10		1	02/15/13	02/15/13 18:55	1044	
Orthophosphate	Analytical Method: EPA 365.3							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	745 mg/L	76.6			02/15/13	02/15/13 13:51	4005	



# SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

## PHASE SEPARATION SCIENCE, INC.

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

① *CLIENT: <u>AECOM</u>		*OFFICE LOC. <u>Columbia, MD</u>		PSS Work Order #: <u>13021411</u>		PAGE <u>1</u> OF <u>1</u>	
Matrix Codes: SW=Surface Wtr DW=Drinking Wtr GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil L=Liquid SOL=Solid A=Air WI=Wipe							
*PROJECT MGR: <u>J. Carter, C. newm</u>		*PHONE NO.: <u>(240) 545-6516</u>					
EMAIL: <u>John.Carter.Cnewm@AECOM.COM</u>							
*PROJECT NAME: <u>7-11 Site 22281</u>		PROJECT NO. <u>0444703</u>					
SITE LOCATION: <u>Fallston, MD</u>		P.O. NO.:					
SAMPLER(S): <u>Mike Parsons</u>		DW CERT NO.:					
		*SAMPLE IDENTIFICATION		*TIME (SAMPLED)		MATRIX (See Codes)	
② LAB NO.							
1	MW 6	2/14/13	1440	GW	2	G	/
2	MW 9		1345	1	2	/	/
3	MW 11		1415	2	2	/	/
4	MW 13		1355	2	2	/	/
5	MW 3		1420	2	2	/	/
REMARKS <i>Handwritten Remarks: Quality Analysis Samples</i>							
④ *Requested TAT (One TAT per COC) <input checked="" type="checkbox"/> 5-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> Next Day <input type="checkbox"/> 2-Day <input type="checkbox"/> Emergency <input type="checkbox"/> Other Data Deliverables Required: COA   QC SUMM   CLP LIKE   OTHER <input checked="" type="checkbox"/> <input type="checkbox"/>							
Relinquished By: (1) <u>[Signature]</u> Date: <u>2/14/13</u> Time: <u>1655</u> Received By: <u>[Signature]</u> Date: <u></u> Time: <u></u>							
Relinquished By: (2) Date: <u></u> Time: <u></u> Received By: <u></u> Date: <u></u> Time: <u></u>							
Relinquished By: (3) Date: <u></u> Time: <u></u> Received By: <u></u> Date: <u></u> Time: <u></u>							
Relinquished By: (4)		Date		Time		Received By:	
						DW COMPLIANCE?	EDD FORMAT TYPE
						<input type="checkbox"/> YES	<u>AECOM</u>
						<input type="checkbox"/> MD	<input type="checkbox"/> DE
						<input type="checkbox"/> PA	<input type="checkbox"/> VA
						<input type="checkbox"/> WV	<input type="checkbox"/> OTHER
STATE RESULTS REPORTED TO:							



# Phase Separation Science, Inc

## Sample Receipt Checklist

Work Order #	13021411	Received By	Rachel Davis
Client Name	AECOM	Date Received	02/14/2013 04:55:00 PM
Project Name	7-11 Store 22281	Delivered By	Client
Project Number	60144763	Tracking No	Not Applicable
Disposal Date	03/21/2013	Logged In By	Rachel Davis

### 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

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

### Sample Container

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

Total No. of Samples Received 5

Total No. of Containers Received 10

### 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)	N/A
Do VOA vials have zero headspace?		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:

Rachel Davis

Date: 02/14/2013

PM Review and Approval:

Amy Friedlander

Date: 02/15/2013

# Analytical Report for

AECOM

Certificate of Analysis No.: 13031119

Project Manager: John Canzeri

Project Name : 7-11 Store 22281

Project Location: Fallston, MD

Project ID : 60144763



March 18, 2013  
Phase Separation Science, Inc.  
6630 Baltimore National Pike  
Baltimore, MD 21228  
Phone: (410) 747-8770  
Fax: (410) 788-8723

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FAX 410-788-8723

# PHASE SEPARATION SCIENCE, INC.



March 18, 2013

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

Reference: PSS Work Order(s) No: **13031119**

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID.: 60144763

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 **13031119**.

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 April 15, 2013. 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,

A handwritten signature in black ink that reads "Dan Prucnal".

**Dan Prucnal**

Laboratory Manager



# Sample Summary

**Client Name: AECOM**  
**Project Name: 7-11 Store 22281**

**Work Order Number(s): 13031119**

**Project ID: 60144763**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 03/11/2013 at 03:21 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
13031119-001	HW 3	GROUND WATER	03/11/13 13:30
13031119-002	MW 9	GROUND WATER	03/11/13 11:40
13031119-003	MW 11	GROUND WATER	03/11/13 13:05
13031119-004	MW 13	GROUND WATER	03/11/13 12:15
13031119-005	MW 6	GROUND WATER	03/11/13 13:50

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. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminants, and part 141.3, for the secondary drinking water contaminants.
5. The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for non-potable water samples tested for compliance for Virginia Pollution Discharge Elimination System (VDPES) permits and Virginia Pollutant Abatement (VPA) permits, have a maximum holding time of 15 minutes established by 40CFR136.3.

**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.



## Case Narrative Summary

**Client Name: AECOM**

**Project Name: 7-11 Store 22281**

Work Order Number(s): 13031119

Project ID: 60144763

---

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.

**Sample Receipt:**

All sample receipt conditions were acceptable.

Analyses associated with analyst code 4005 were performed by Enviro-Chem Laboratories, Inc.

**NELAP accreditation was held for all analyses performed unless noted below. See [www.phaseonline.com](http://www.phaseonline.com) for complete PSS scope of accreditation.**

EPA 365.3

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**FAX 410-788-8723**

# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13031119  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: HW 3</b>	<b>Date/Time Sampled: 03/11/2013 13:30 PSS Sample ID: 13031119-001</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	880 mg/L	20		200	03/12/13	03/14/13 03:12	1044	
Nitrite (as N)	7.9 mg/L	0.10		1	03/11/13	03/11/13 18:54	1044	
Orthophosphate	Analytical Method: EPA 365.3							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	746 mg/L	76.6			03/12/13	03/12/13 15:26	4005	
<b>Sample ID: MW 9</b>	<b>Date/Time Sampled: 03/11/2013 11:40 PSS Sample ID: 13031119-002</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	17 mg/L	0.50		5	03/12/13	03/13/13 01:31	1044	
Nitrite (as N)	0.20 mg/L	0.10		1	03/11/13	03/11/13 19:22	1044	
Orthophosphate	Analytical Method: EPA 365.3							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	0.32 mg/L	0.15			03/12/13	03/12/13 14:06	4005	
<b>Sample ID: MW 11</b>	<b>Date/Time Sampled: 03/11/2013 13:05 PSS Sample ID: 13031119-003</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	8.3 mg/L	0.10		1	03/11/13	03/11/13 19:49	1044	
Nitrite (as N)	0.18 mg/L	0.10		1	03/11/13	03/11/13 19:49	1044	
Orthophosphate	Analytical Method: EPA 365.3							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	2.19 mg/L	0.15			03/12/13	03/12/13 14:06	4005	

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**410-747-8770**  
**800-932-9047**  
**FAX 410-788-8723**

# **PHASE SEPARATION SCIENCE, INC.**



## CERTIFICATE OF ANALYSIS

No: 13031119  
**AECOM, Columbia, MD**  
 March 18, 2013

Project Name: 7-11 Store 22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 13</b>	<b>Date/Time Sampled: 03/11/2013 12:15 PSS Sample ID: 13031119-004</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	19 mg/L	0.50		5	03/12/13	03/13/13 01:59	1044	
Nitrite (as N)	0.22 mg/L	0.10		1	03/11/13	03/11/13 20:16	1044	
Orthophosphate	Analytical Method: EPA 365.3							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	1.02 mg/L	0.15			03/12/13	03/12/13 14:06	4005	
<b>Sample ID: MW 6</b>	<b>Date/Time Sampled: 03/11/2013 13:50 PSS Sample ID: 13031119-005</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 03/11/2013 15:21</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	74 mg/L	1.0		10	03/12/13	03/13/13 02:26	1044	
Nitrite (as N)	0.26 mg/L	0.10		1	03/11/13	03/11/13 20:44	1044	
Orthophosphate	Analytical Method: EPA 365.3							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	2.02 mg/L	0.15			03/12/13	03/12/13 14:06	4005	



# SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

## PHASE SEPARATION SCIENCE, INC.

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

① *CLIENT: AECOM		*OFFICE LOC. Columbia, MD		PSS Work Order #: 13031119		PAGE \ OF 1	
*PROJECT MGR: John Carter *PHONE NO.: (202) 325-4516							
EMAIL:	FAX NO.: ( )	Matrix Codes: SW=Surface Wtr DW=Drinking Wtr GW=Ground Wtr WW=Maste Wtr O=Oil S=Soil L=liquid SOL=Solid A=Air W=Wipe	No.	Preservatives Used	②	REMARKS	
SITE LOCATION: Elston, MD	P.O. NO.:	C O N T A I N E R	SAMPLE TYPE	Analysis Method Required	③		
SAMPLER(S): Mike Parsons	DW CERT NO.:	I	C = COMP	*			
LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	R		
1	HWS	3/11/13	1330	GW	S		
2	MW9		140				
3	MW11		1305				
4	MW13		1215				
5	MW9		1350				
④ Relinquished By: (1) [Signature] Date: 3/11/13 Time: 14:30 Received By: [Signature]							
Relinquished By: (2) [Signature] Date: 3/11/13 Time: 1521 Received By: [Signature]							
Relinquished By: (3) [Signature] Date: Time: Received By: [Signature]							
⑤ *Requested TAT (One TAT per COC) <input type="checkbox"/> 5-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> Next Day <input checked="" type="checkbox"/> Emergency <input type="checkbox"/> Other Data Deliverables Required: COA <input checked="" type="checkbox"/> QC SUMM <input type="checkbox"/> CLP LIKE <input type="checkbox"/> OTHER Special Instructions: ⑥ Five							
DW COMPLIANCE? YES <input type="checkbox"/>		EDD FORMAT TYPE <input checked="" type="checkbox"/> EDD		STATE RESULTS REPORTED TO: MD <input checked="" type="checkbox"/> DE <input type="checkbox"/> PA <input type="checkbox"/> VA <input type="checkbox"/> WV <input type="checkbox"/> OTHER			

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The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary. \* = REQUIRED



# Phase Separation Science, Inc

## Sample Receipt Checklist

Work Order #	13031119	Received By	Rachel Davis
Client Name	AECOM	Date Received	03/11/2013 03:21:00 PM
Project Name	7-11 Store 22281	Delivered By	Client
Project Number	60144763	Tracking No	Not Applicable
Disposal Date	04/15/2013	Logged In By	Rachel Davis

### 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

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

### Sample Container

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

Total No. of Samples Received 5

Total No. of Containers Received 10

### 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)	N/A
Do VOA vials have zero headspace?		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:

Rachel Davis

Date: 03/11/2013

PM Review and Approval:

Amy Friedlander

Date: 03/12/2013

# Analytical Report for

AECOM

Certificate of Analysis No.: 13060618

Project Manager: John Canzeri

Project Name : 7-11 Store #22281

Project Location: Fallston, MD

Project ID : 60144763



June 14, 2013

Phase Separation Science, Inc.  
6630 Baltimore National Pike  
Baltimore, MD 21228  
Phone: (410) 747-8770  
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# PHASE SEPARATION SCIENCE, INC.



June 14, 2013

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

Reference: PSS Work Order(s) No: **13060618**

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID.: 60144763

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 **13060618**.

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 11, 2013. 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 #22281**

**Work Order Number(s): 13060618**

**Project ID: 60144763**

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/06/2013 at 05:20 pm

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
13060618-001	MW 6 Special	GROUND WATER	06/06/13 13:10
13060618-002	MW 9 Special	GROUND WATER	06/06/13 13:25
13060618-003	MW 11 Special	GROUND WATER	06/06/13 13:20
13060618-004	MW 13 Special	GROUND WATER	06/06/13 13:30
13060618-005	HW 3 Special	GROUND WATER	06/06/13 13:15

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. The following analytical results are never reported on a dry weight basis: pH, flashpoint, moisture and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminants, and part 141.3, for the secondary drinking water contaminants.
5. The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for non-potable water samples tested for compliance for Virginia Pollution Discharge Elimination System (VDPES) permits and Virginia Pollutant Abatement (VPA) permits, have a maximum holding time of 15 minutes established by 40CFR136.3.

**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.



## Case Narrative Summary

**Client Name: AECOM**

**Project Name: 7-11 Store #22281**

Work Order Number(s): 13060618

Project ID: 60144763

---

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.

**Sample Receipt:**

Received one container per sample. COC indicates two for each. Split off approx. 125ml from each sample in an unpreserved 250ml plastic.

Analyses associated with analyst code 4005 were performed by Enviro-Chem Laboratories, Inc.

**NELAP accreditation was held for all analyses performed unless noted below. See [www.phaseonline.com](http://www.phaseonline.com) for complete PSS scope of accreditation.**

EPA 365.1

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# PHASE SEPARATION SCIENCE, INC.



## CERTIFICATE OF ANALYSIS

No: 13060618  
**AECOM, Columbia, MD**  
 June 14, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 6 Special</b>	<b>Date/Time Sampled: 06/06/2013 13:10 PSS Sample ID: 13060618-001</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	190 mg/L	2.0		20	06/07/13	06/07/13 20:20	1044	
Nitrite (as N)	0.14 mg/L	0.10		1	06/06/13	06/06/13 20:29	1044	
Orthophosphate	Analytical Method: EPA 365.1							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	ND mg/L	0.15			06/07/13	06/07/13 13:26	4005	
<b>Sample ID: MW 9 Special</b>	<b>Date/Time Sampled: 06/06/2013 13:25 PSS Sample ID: 13060618-002</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	23 mg/L	1.0		10	06/07/13	06/07/13 20:47	1044	
Nitrite (as N)	ND mg/L	0.10		1	06/06/13	06/06/13 20:56	1044	
Orthophosphate	Analytical Method: EPA 365.1							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	2.32 mg/L	0.15			06/07/13	06/07/13 13:26	4005	
<b>Sample ID: MW 11 Special</b>	<b>Date/Time Sampled: 06/06/2013 13:20 PSS Sample ID: 13060618-003</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	7.9 mg/L	0.10		1	06/06/13	06/06/13 21:24	1044	
Nitrite (as N)	ND mg/L	0.10		1	06/06/13	06/06/13 21:24	1044	
Orthophosphate	Analytical Method: EPA 365.1							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	0.15 mg/L	0.15			06/07/13	06/07/13 13:26	4005	

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**FAX 410-788-8723**

# **PHASE SEPARATION SCIENCE, INC.**



## CERTIFICATE OF ANALYSIS

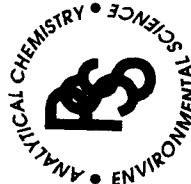
No: 13060618  
**AECOM, Columbia, MD**  
 June 14, 2013

Project Name: 7-11 Store #22281

Project Location: Fallston, MD

Project ID: 60144763

<b>Sample ID: MW 13 Special</b>	<b>Date/Time Sampled: 06/06/2013 13:30 PSS Sample ID: 13060618-004</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	28 mg/L	1.0		10	06/07/13	06/07/13 21:15	1044	
Nitrite (as N)	ND mg/L	0.10		1	06/06/13	06/06/13 21:51	1044	
Orthophosphate	Analytical Method: EPA 365.1							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	1.87 mg/L	0.15			06/07/13	06/07/13 13:26	4005	
<b>Sample ID: HW 3 Special</b>	<b>Date/Time Sampled: 06/06/2013 13:15 PSS Sample ID: 13060618-005</b>							
<b>Matrix: GROUND WATER</b>	<b>Date/Time Received: 06/06/2013 17:20</b>							
Nitrate, Nitrite	Analytical Method: EPA 300.0				Preparation Method: E300.0P			
Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst	
Nitrate (as N)	960 mg/L	20		200	06/07/13	06/10/13 12:21	1044	
Nitrite (as N)	3.3 mg/L	0.10		1	06/06/13	06/06/13 22:18	1044	
Orthophosphate	Analytical Method: EPA 365.1							
Result	Units	RL	Flag		Prepared	Analyzed	Analyst	
Orthophosphate (as PO4)	764 mg/L	61.3			06/08/13	06/08/13 09:17	4005	



## **SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM**

PHASE SEPARATION SCIENCE, INC.

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email: [info@phaseonline.com](mailto:info@phaseonline.com)



# Phase Separation Science, Inc

## Sample Receipt Checklist

Work Order #	13060618	Received By	Jacob Prucnal
Client Name	AECOM	Date Received	06/06/2013 05:20:00 PM
Project Name	7-11 Store #22281	Delivered By	Client
Project Number	60144763	Tracking No	Not Applicable
Disposal Date	07/11/2013	Logged In By	Rachel Davis

### Shipping Container(s)

No. of Coolers	1	Ice	Present
Custody Seal(s) Intact?	N/A	Temp (deg C)	4
Seal(s) Signed / Dated?	N/A	Temp Blank Present	No

### Documentation

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

### Sample Container

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

Total No. of Samples Received 5

Total No. of Containers Received 10

### 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)	N/A
Do VOA vials have zero headspace?		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.

Received one container per sample. COC indicates two for each. Split off approx. 125ml from each sample in an unpreserved 250ml plastic.

Samples Inspected/Checklist Completed By:

*Rachel Davis*

Rachel Davis

Date: 06/07/2013

PM Review and Approval:

*Vin Lynn Moran*

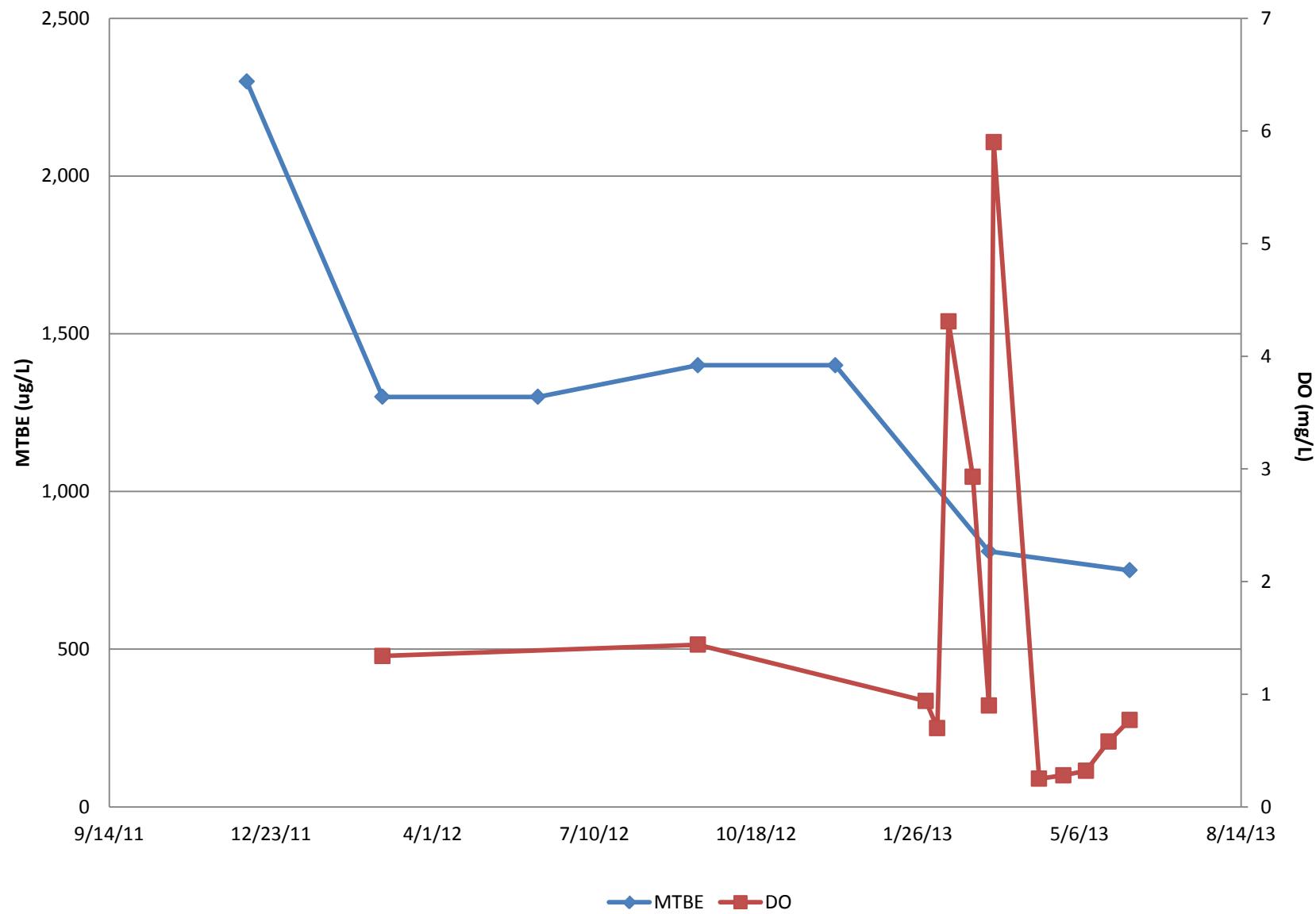
Lynn Moran

Date: 06/14/2013

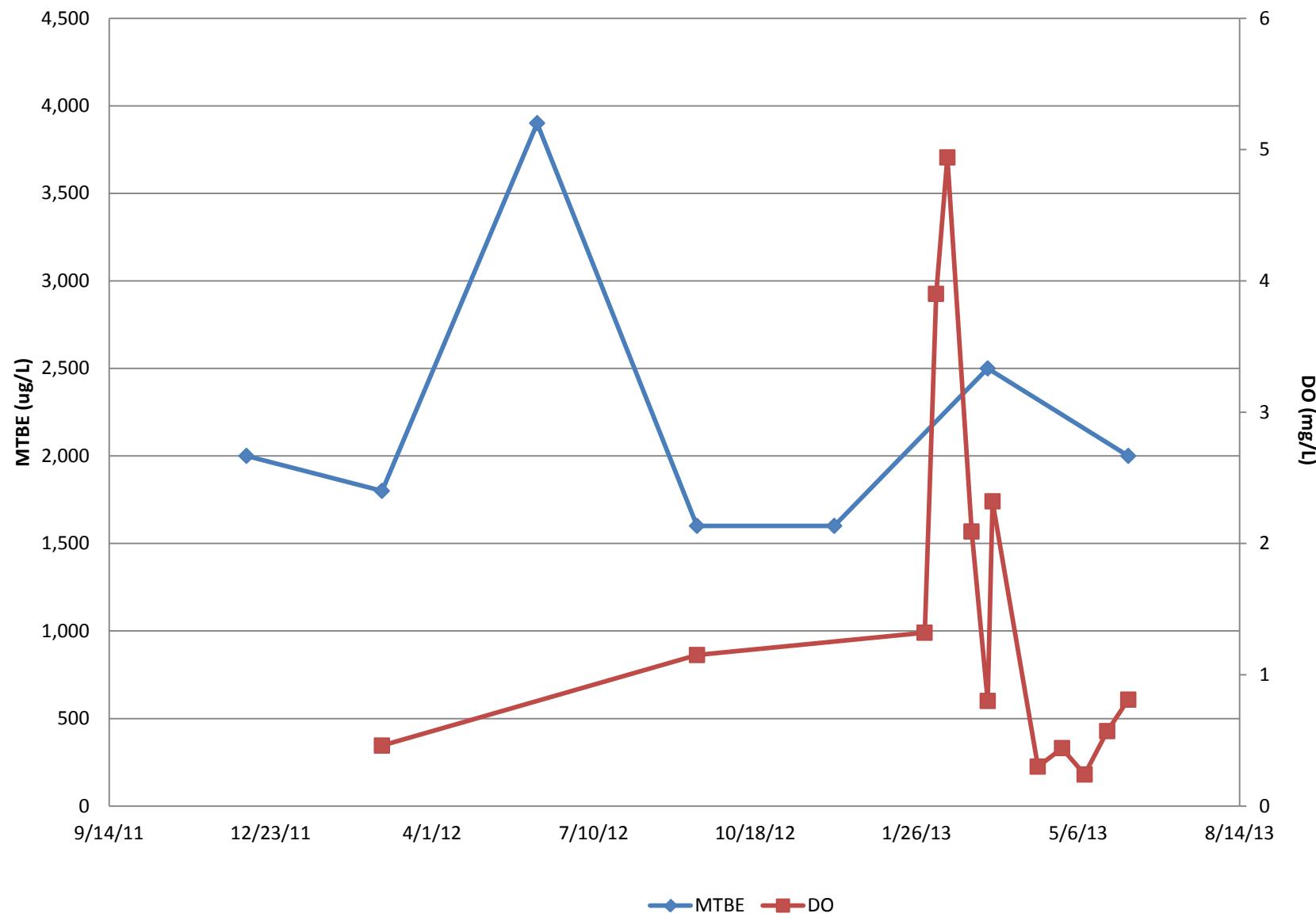
**ATTACHMENT D**

**MTBE Concentration vs. Dissolved Oxygen Graphs**

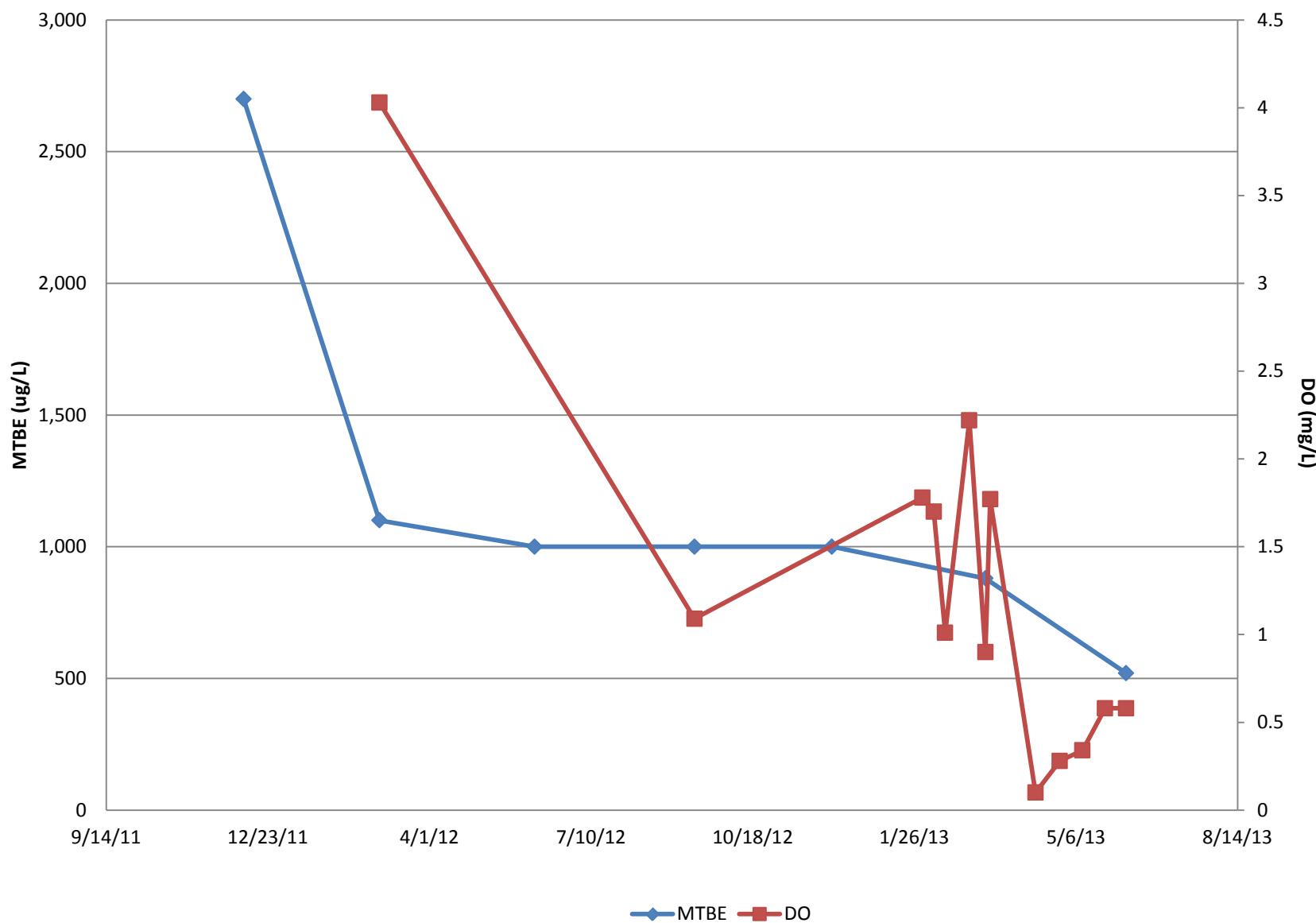
## MW-6



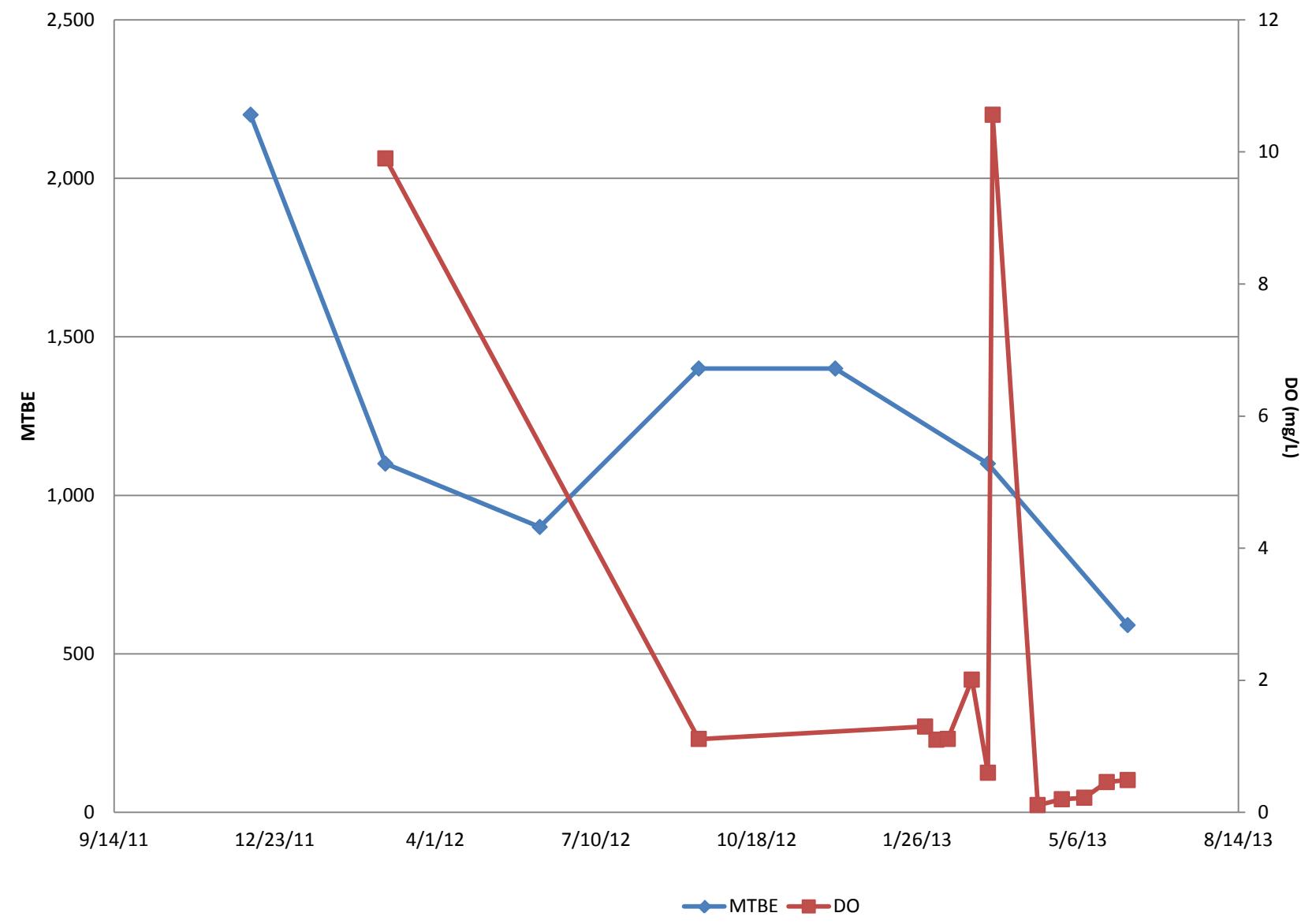
## MW-9



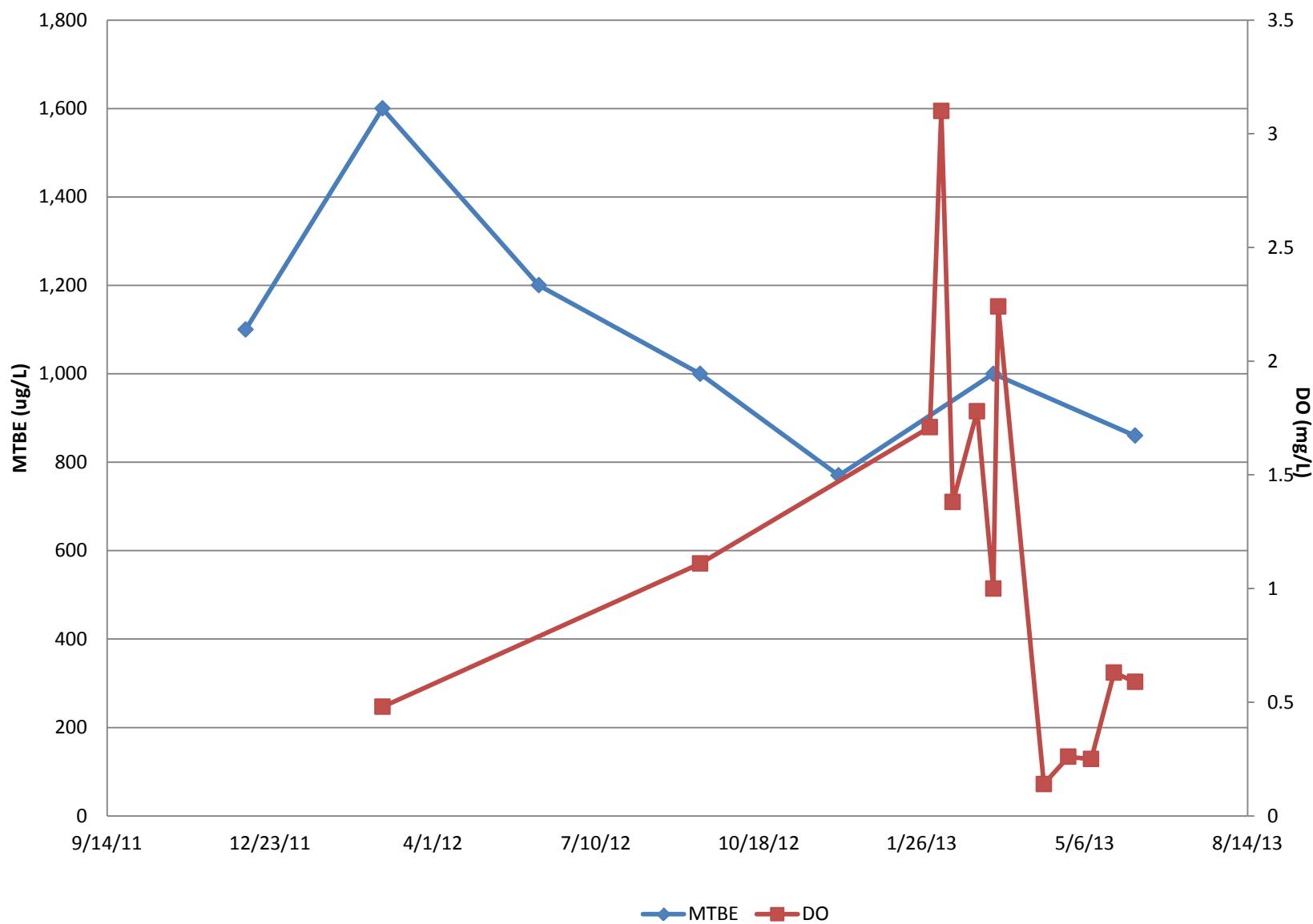
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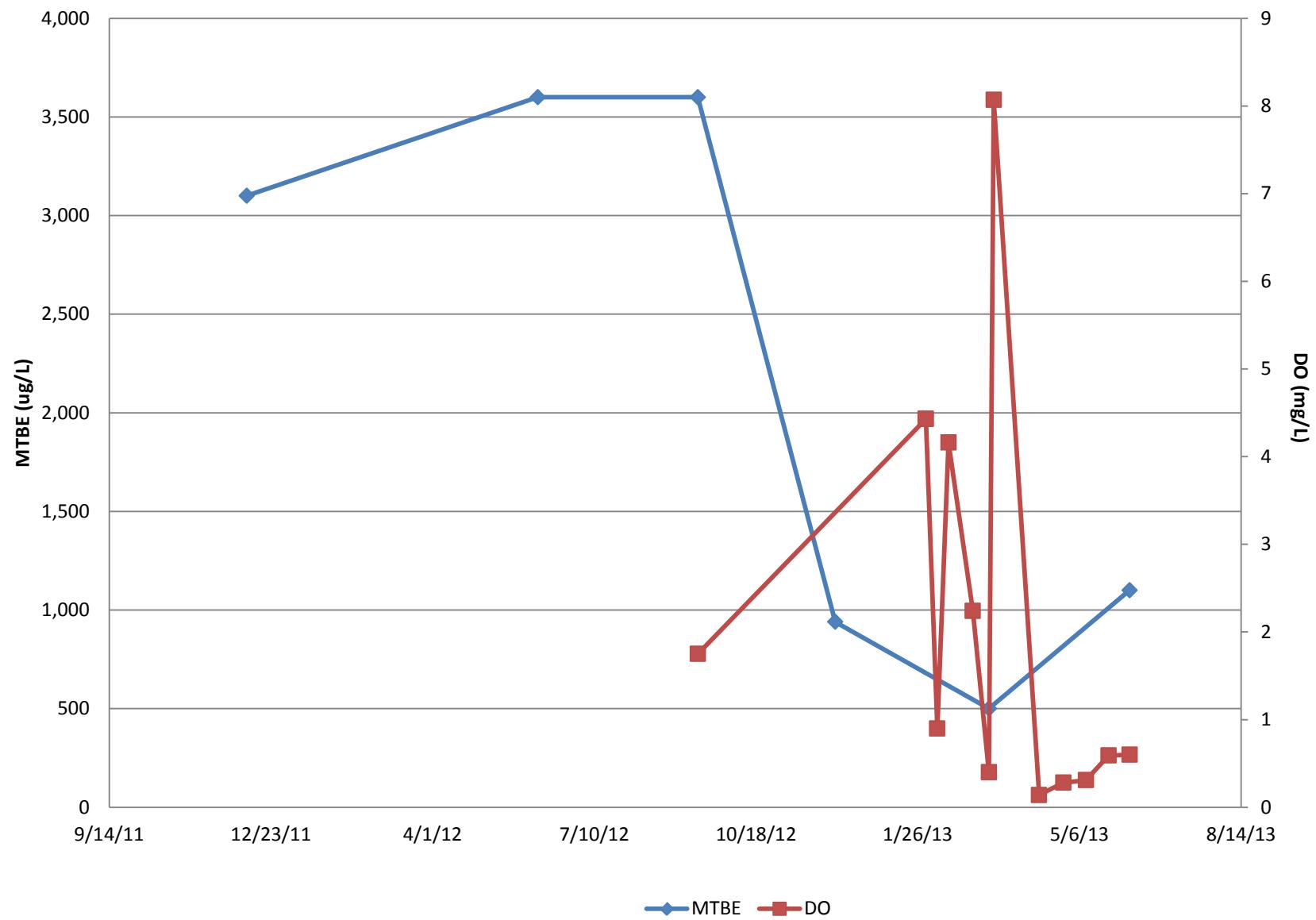
## MW-11



## MW-13



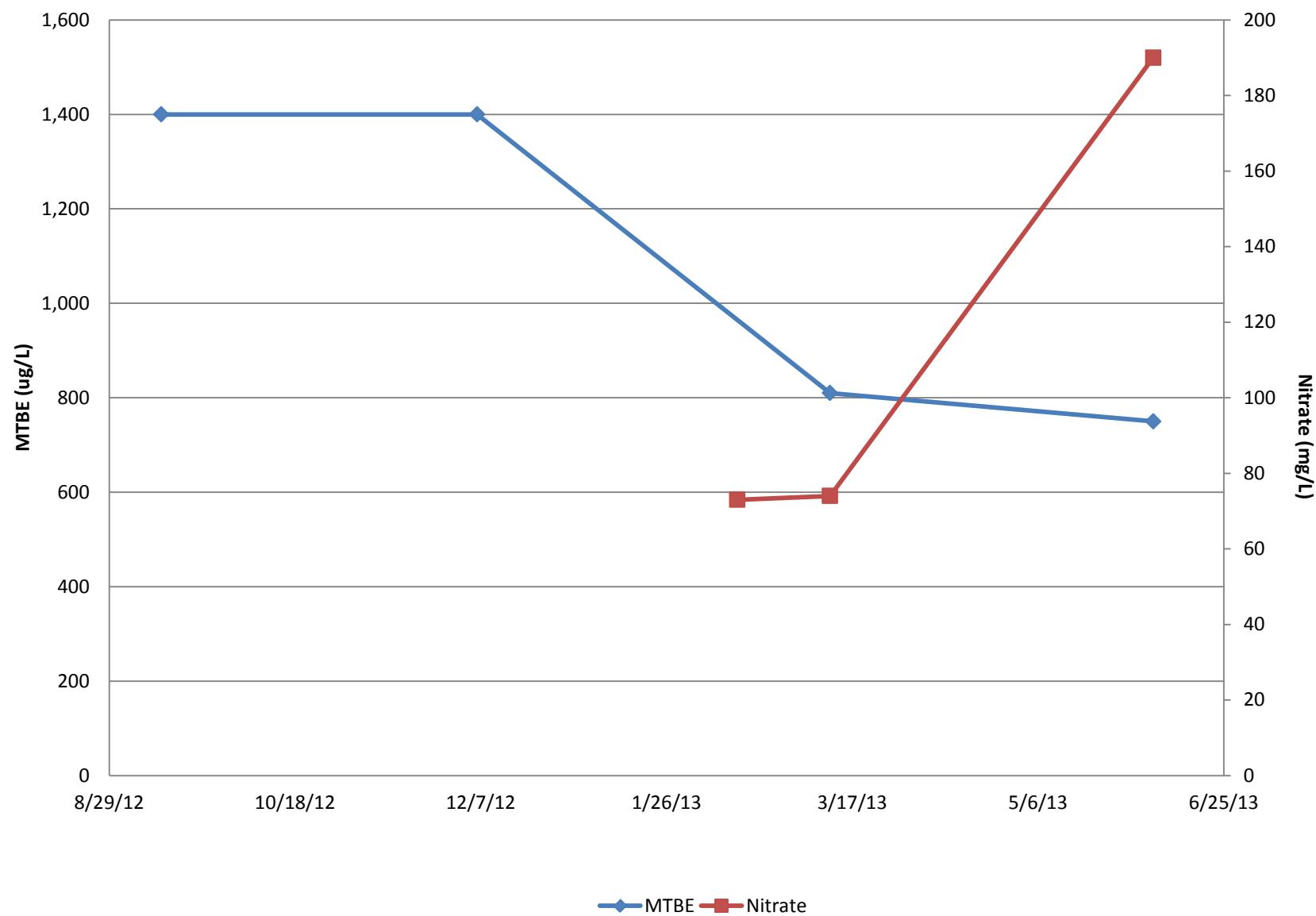
## HW-3



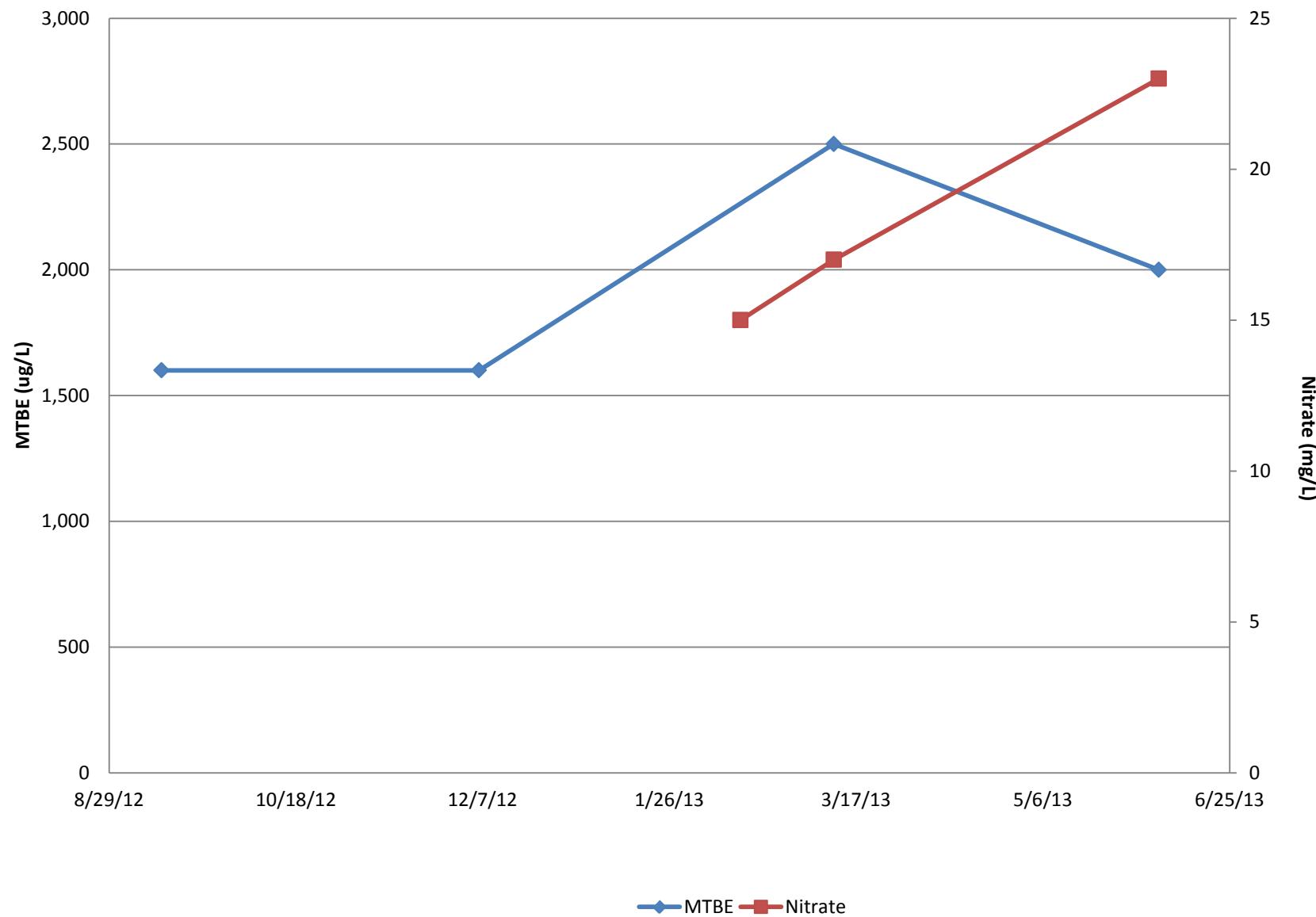
**ATTACHMENT E**

**MTBE Concentrations vs. Nitrate Levels Graphs**

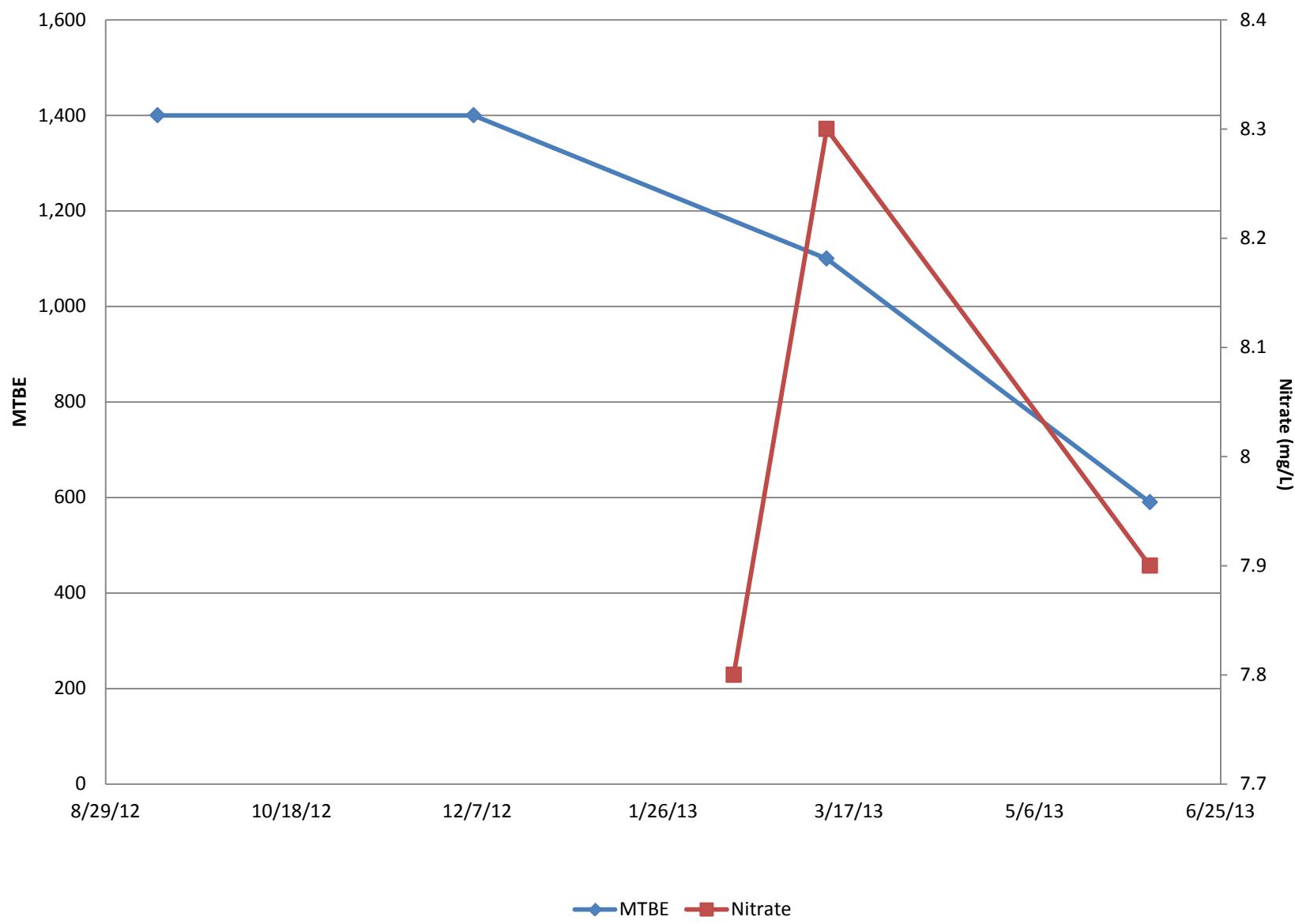
## MW-6



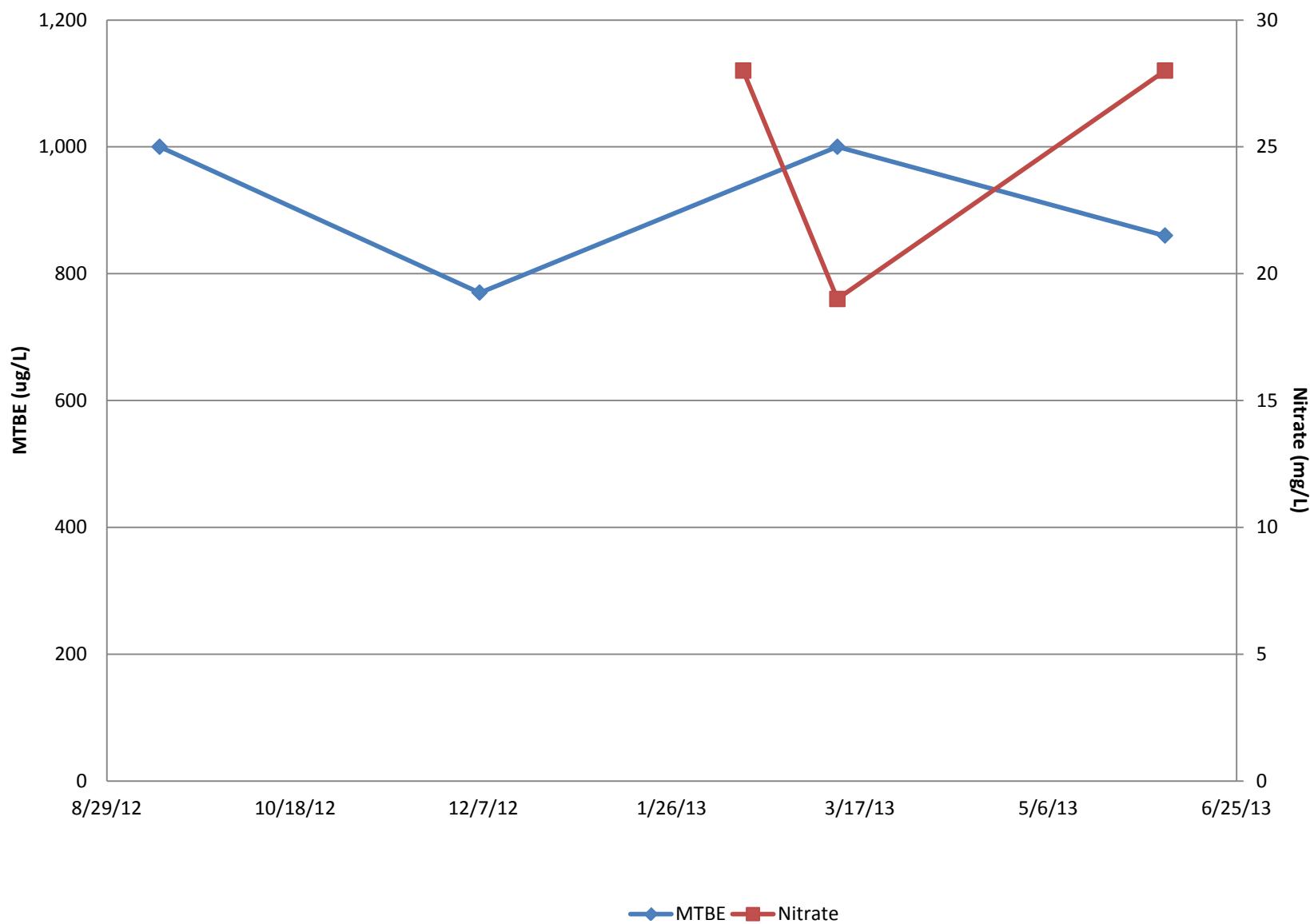
## MW-9



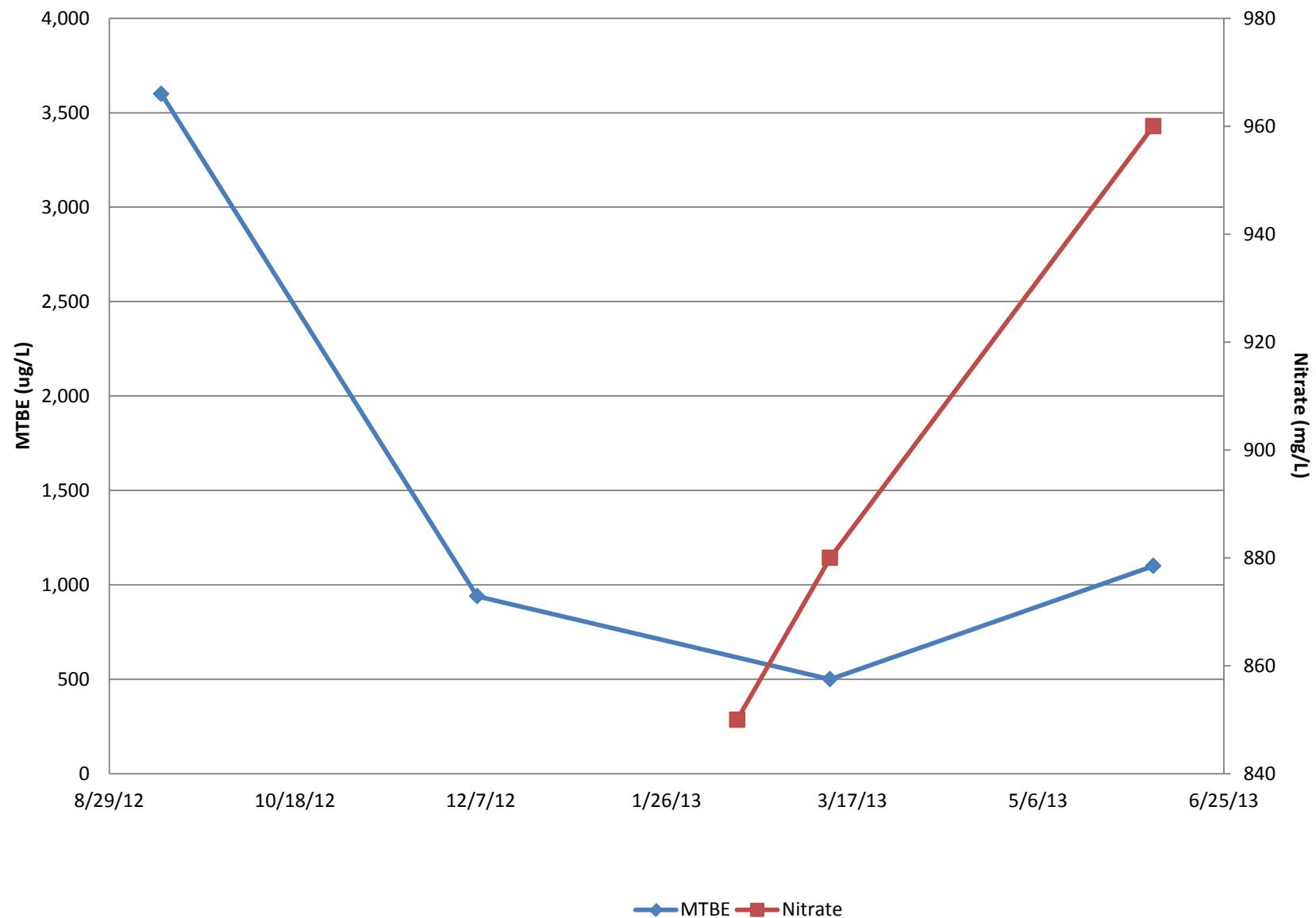
## MW-11



## MW-13



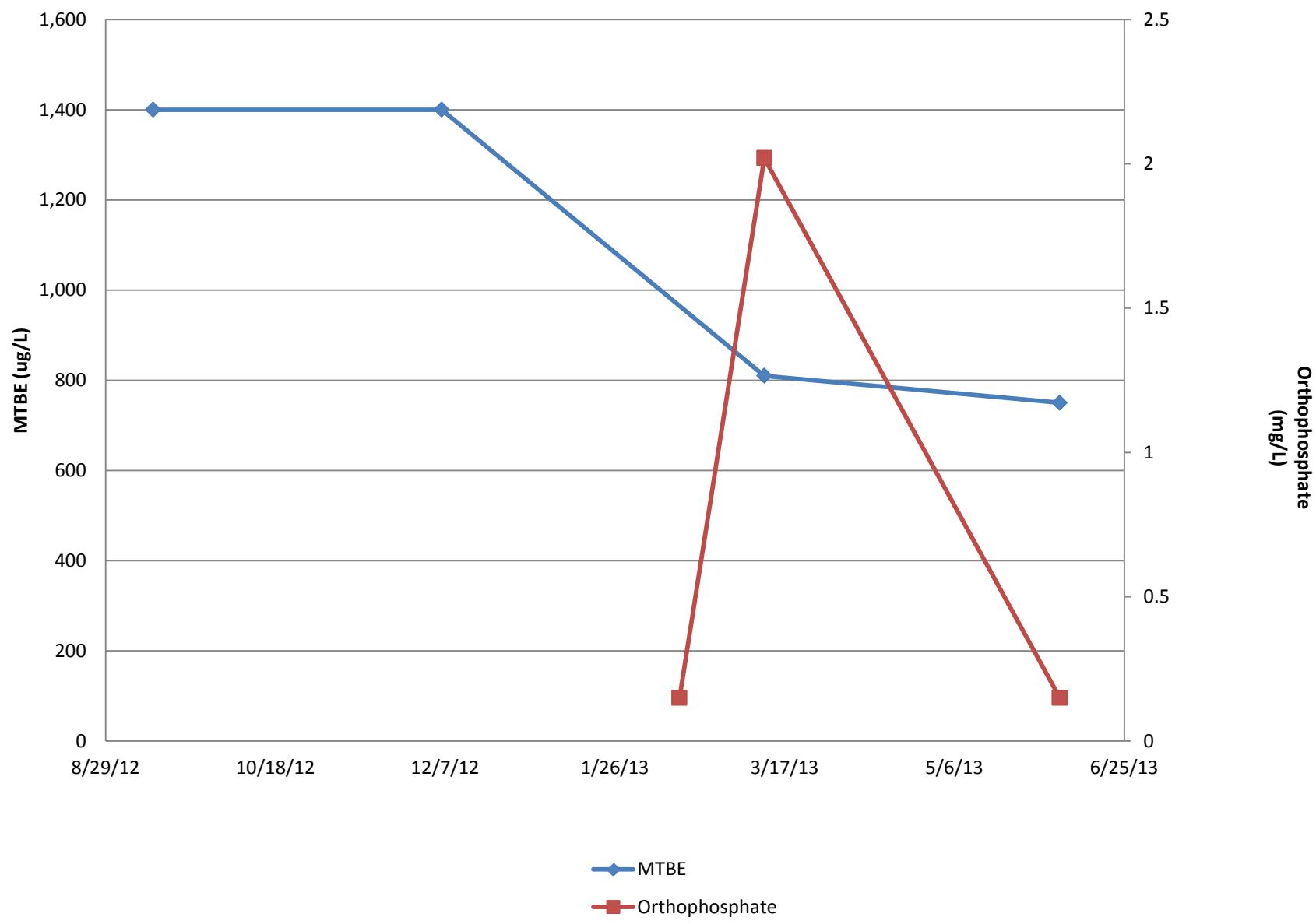
## HW-3



**ATTACHMENT F**

**MTBE Concentrations vs. Orthophosphate Levels Graphs**

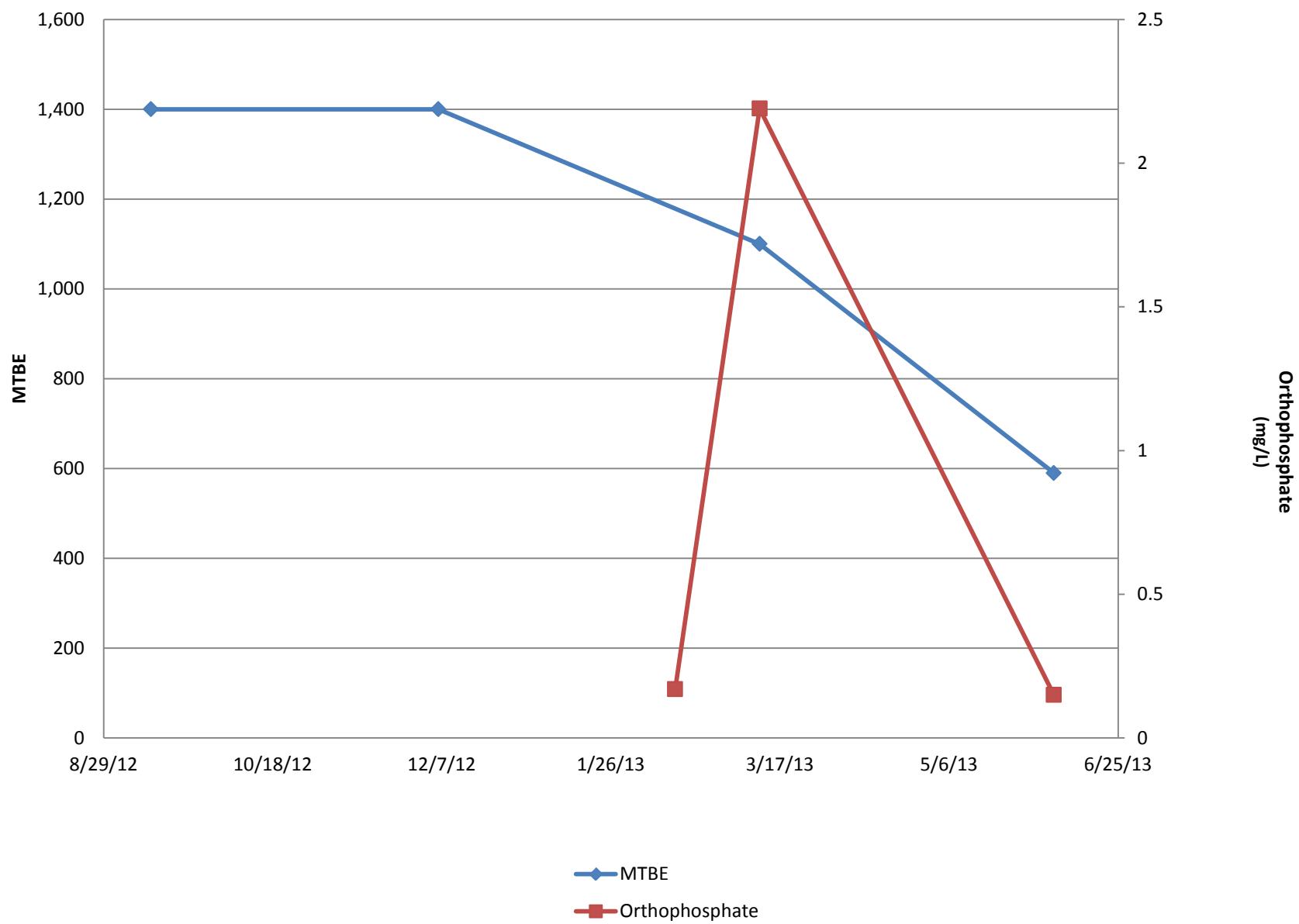
## MW-6



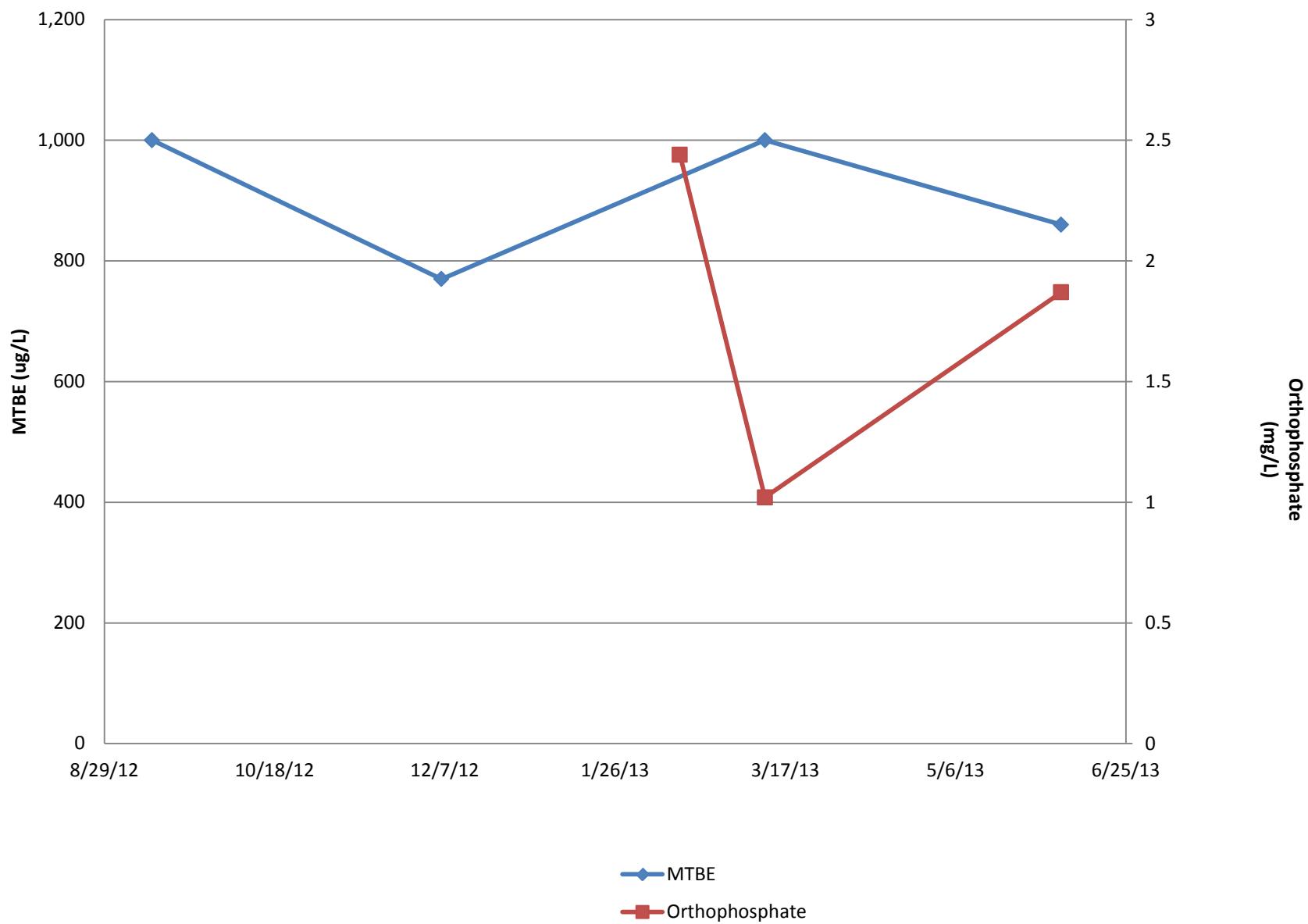
## MW-9



## MW-11



## MW-13



## HW-3

