Quarterly Progress Report – 2nd Quarter 2015

Gasoline Fueling Station – Royal Farms #64

7950 Pulaski Highway, Rosedale, MD 21237
MDE Case No. 10-0339-BA
MDE Facility ID 3975

AEC Project Number: 05-056RF064

Prepared for:
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Oil Control Program
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And

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August 5, 2015
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Regulatory Information

Regulatory Agency:	Maryland Department of the Environment
Agency Contact:	Jenny Herman
Case Number:	Case No. 10-0339-BA
Current Case Status:	Dual Phase Extraction (DPE) System Operation Monthly well gauging Quarterly monitoring well sampling Quarterly indoor air quality (IAQ) sampling (1207 Chesaco Ave.) Quarterly residential sump sampling (1207, 1209, and 1209 1/2 Chesaco Ave) Bi-annual recovery well sampling.
Reporting Period:	Quarterly Sampling: Second Quarter 2015 System operation: 4-1-15 through 6-30-15

General Site Information

Royal Farms Contact:	Tom Ruszin
Consultant Contact:	Jeff Stein/James Wolf
Facility Status:	Operating fuel station
Area Property Use:	See Site Vicinity, Site Features and Site Utility Maps (Figures 1, 2 and 3 in Attachment A)
Monitoring Wells:	MW-1, MW-3, MW-9, MW-10 through MW-13, MW-18 through MW-30, and CMW-1 and CMW-2
Recovery Wells:	MW-2R, MW-4R, MW-5R, MW-6, MW-7R, MW-8R, MW-14 through MW-17
Potable Wells:	None
Liquid Phase Hydrocarbon (LPH) Present:	A sheen was last observed in MW-6 on Dec. 6, 2013
Min/Max Groundwater Elevation:	73.34 feet / 89.19 feet on June 9, 2015
Groundwater Flow Direction:	Northwest

Project Summary

1993:	Four underground storage tanks (USTs) were installed at the Site.
2007:	Tank top upgrade conducted and double walled piping was installed.
Dec. 15, 2009:	MDE Oil Control Program (OCP) opened a case in response to a report of evidence of a petroleum spill at 1205 Chesaco Avenue, which adjoins the Site to the north. Fuel dispensers were shut down. 24-hour enhanced fluid recovery (EFR) activities via vacuum trucks were begun. Installed first monitoring well (MW-1).
Dec. 16, 2009:	Installed MW-2 through MW-9.
Dec. 19, 2009	MDE authorized EFR activity to be changed to 8 hours per day, seven days per week.
Dec. 18, 2009:	Begun operation of Soil-vapor extraction (SVE) system.
Jan. 8, 2010:	MDE authorized EFR activity to be changed to 8 hours per day, five days per week.
Jan. 11, 2010	MDE approved AEC's *Subsurface Investigation Work Plan.*
Jan. 22-28, 2010:	A subsurface investigation including 24 direct push borings was performed. The borings were located on the Site and on the 1205 and 1207 Chesaco Ave. properties. Temporary piezometers were installed.

Feb. 5, 2010:	MDE authorized EFR activity to be changed to 4 hours per day, three days per week and two liquid phase hydrocarbon (LPH) hand-bailing events per week.
Apr. 14, 2010	Temporary piezometers installed in January were abandoned.
June 11, 2010:	MDE required EFR activity to be changed to 8 hours per day, three days per week and two LPH hand-bailing events per week.
June 15, 2010:	MDE approved AEC's *Supplemental Subsurface Investigation Work Plan.*
July 23, 2010:	MDE approved AEC's *Design Basis Summary 1205 Chesaco Ave. Residence Sump Water Treatment System*, and *1207 Chesaco Ave. Indoor Air Investigation Work Plan.*
July 2010:	Installed MW-10 through MW-14.
Sept. 21, 2010:	MDE approved AEC's *St. Clements School Environmental Investigation Work Plan.*
Oct. 1, 2010:	An estimated 4,313 gallons of LPH was estimated to have been removed from the Site since recovery activities began.
Oct. 10-11 2010:	Eight direct push borings were advanced in locations along Chesaco Ave., from the site proceeding northwest to Old Philadelphia Ave.
November 2010:	Sump water treatment system installed at 1205 Chesaco Avenue residence.
Jan. 26 2011:	MDE approved the installation of a dual phase remediation system.
March 1, 2011:	MDE approved discontinuation of regular EFR events and AEC's *Granular Activated Carbon Bed Removal Work Plan*.
March 9-10, 2011:	Began quarterly indoor air quality (IAQ) sampling. Samples were taken from the 1205 Chesaco Ave. property.
April 26-27, 2011:	IAQ samples taken from the 1207 Chesaco Ave. residence and from the Royal Farms Store (7950 Pulaski Hwy.).
June 16-21, 2011:	Installed Monitoring wells: MW-2R, MW-4R, MW-5R, MW-7R, MW-8R, and MW-15 through MW-22.
Dec. 2, 2011:	MDE issued a letter re-initiating EFR events until the DPE remediation system could become operational.
Dec. 14, 2011:	DPE remediation system was activated.
Feb. 6, 2012:	After review of AEC's report of a 14-day pilot study of the dual phase remediation system: MDE gives permission to remove vapor control devices including an activated carbon control unit and catalytic oxidizer.
April 27, 2012:	AEC submitted *Focused Risk Assessment – Vapor Intrusion at 1207 Chesaco Ave*. to MDE.
May 15, 2012	MDE gives authorization to remove SVE system and discontinue sump water sampling at 1205 Chesaco Avenue. MDE also authorizes removal of carbon filtration units from the sump discharge line.
May 29, 2012:	Use of SVE system is permanently discontinued.
July 20, 2012:	AEC submitted *Groundwater Quality Report - Third Quarter 2012 and Dual Phase Extraction System Performance and Monitoring Summary – April 1, 2012 through June 30, 2012 to MDE.*
Aug. 28, 2012:	MDE approved AEC's *Additional Monitoring Well Installation Plan* for the installation on two additional monitoring wells (MW-23 and MW-24).
Oct. 2, 2012:	MDE issued a letter to modify IAQ testing requirements to discontinue sampling at the 1205 Chesaco Ave. residence.
Oct. 30, 2012:	AEC submitted *Groundwater Quality Report - Fourth Quarter 2012 and Dual Phase Extraction System Performance and Monitoring Summary – July 1, 2012 through September 30, 2012*
Dec. 5, 2012:	AEC submitted *Additional Monitoring Well Installation – Report of Results* to MDE.
Jan. 8, 2013:	AEC submitted *Indoor Air Quality Sampling – Fourth Quarter 2012* to MDE.
Jan. 14, 2013:	*Fourth Quarter - Discharge Monitoring Report* submitted to the MDE.
Jan. 15, 2013:	MDE issues *Modification to Sampling Requirements* approving monthly well gauging, and semi-annual recovery well sampling. MDE requires

	quarterly sump water samples be taken from 1207, 1209, and 1209.5 Chesaco Ave.
Feb. 7, 2013:	AEC submitted *Groundwater Quality Data Pack – 1st Quarter 2013* to MDE.
Feb. 11, 2013:	AEC submitted a revised *Quarterly Progress Report – 4th Quarter 2012* to MDE.
March 26, 2013:	Submitted *Indoor Air Quality and Sump Water Sampling – First Quarter 2013* to MDE.
March 28, 2013:	Submitted *CAP Addendum* to MDE.
April 16, 2013:	*First Quarter - Discharge Monitoring Report* submitted to the MDE.
May 14, 2013:	Submitted *Quarterly Progress Report – 1st Quarter 2013* to MDE.
May 29, 2013:	MDE issued a letter requesting modifications to the *CAP Addendum*, dated March 28, 2013.
July 3, 2013:	Submitted *Revised CAP Addendum* to MDE.
July 10, 2013:	*Second Quarter - Discharge Monitoring Report* submitted to the MDE.
August 6, 2013	AEC submitted *Quarterly Progress Report – 2nd Quarter 2013* to MDE.
August 13, 2013	AEC submitted *Additional Monitoring Well Installation Work Plan* to MDE.
September 4, 2013	MDE authorizes the *Revised CAP Addendum.*
September 12, 2013	MDE authorizes *Additional Monitoring Well Installation Work Plan*.
October 4, 2013	*Third Quarter - Discharge Monitoring Report* submitted to MDE.
October 30, 2013	AEC submitted *Additional Monitoring Well Installation Report*.
November 11, 2013	AEC submitted *Quarterly Progress Report – 3rd Quarter 2013* to MDE.
	AEC submitted *Work Plan for Post Building Demolition Subsurface Investigation* to MDE. The work plan included proposed plans to perform a limited subsurface investigation including test-pitting beneath the former residence located at 1205 Chesaco Avenue following its demolition.
January 29, 2014	Fourth Quarter - Discharge Monitoring Report submitted to MDE.
January 30, 2014	MDE issued a letter - *Approval of Work Plans* authorizing alteration of the IAQ sampling procedures, demolition of the residence located on the 1205 Chesaco Ave. property and a subsurface investigation beneath the residence, and expansion of the remediation system to include MW-6.
February 14, 2014	AEC submitted *Quarterly Progress Report – 4th Quarter 2013* to MDE.
April 30, 2014	First Quarter - Discharge Monitoring Report submitted to MDE.
May 6, 2014	AEC submitted *Quarterly Progress Report – 1st Quarter 2014* to MDE.
May 27, 2014	AEC submitted a letter to MDE summarizing Post Building Demolition Subsurface Investigation.
July 24, 2014	Second Quarter - Discharge Monitoring Report submitted to MDE.
July 30, 2014	AEC submitted *Quarterly Progress Report – 2nd Quarter 2014* to MDE.
October 7, 2014	AEC submitted *Quarterly Progress Report – 3rd Quarter 2014* to MDE.
November 3, 2014	Third Quarter - Discharge Monitoring Report submitted to MDE.
January 9, 2015	Fourth Quarter - Discharge Monitoring Report submitted to MDE.
February 6, 2015	AEC submitted *Quarterly Progress Report – 4th Quarter 2014* to MDE.
April 13, 2015	First Quarter - Discharge Monitoring Report submitted to MDE.
May 5, 2015	AEC submitted *Quarterly Progress Report – 1st Quarter 2015* to MDE.
June 10, 2015	AEC submitted *Rebound Evaluation Work Plan* to MDE.

Work Authorized and Performed During this Quarter

April 6:	Alarm visit, system is restarted
April 14:	System Operations and Maintenance (O&M), well gauging, and discharge samples taken.
April 15:	Quarterly groundwater sampling of the monitoring and recovery well network.
April 28:	O&M and discharge sample taken.
May 12:	System O&M, well gauging, and discharge samples taken.
May 26:	O&M and discharge sample taken.
June 9:	System O&M, well gauging, and discharge samples taken.

June 23: O&M and discharge sample taken.
June 23-25: IAQ and sump water samples collected.

The groundwater samples were collected on April 15, 2015 and analyzed according to Environmental Protection Agency (EPA) protocols from the monitoring well network. Groundwater samples were collected by first gauging and purging at least three well volumes using a dedicated PVC bailer. After purging, each well was allowed to recharge for a period of at least one hour. Groundwater samples were analyzed for volatile organic compounds (VOCs) including fuel oxygenates per EPA Analytical Method 8260 and Total Petroleum Hydrocarbons (TPH) Diesel Range Organics (DRO) and Gasoline Range Organics (GRO) per EPA Analytical Method 8015B.

A groundwater gradient map depicting groundwater flow direction during operation of the DPE system is included as Figure 4 in Attachment A. Table 1 in Attachment B provides current and historical groundwater elevation data based on an arbitrary benchmark of 100 feet.

Groundwater Sampling Results

The results of the laboratory analysis show that concentrations of petroleum constituents above regulatory standards (MDE Cleanup Standards for Type I and II Aquifers, June 2008), were detected in groundwater samples collected from all monitoring wells, with the exception of MW-11, MW-12, MW-20, MW-30, and CMW-2. Laboratory analysis shows that the maximum concentration of benzene, toluene, ethylbenzene and xylenes (total BTEX) in the wells sampled was 6,587 micrograms per liter (µg/L) in MW-1. The maximum methyl-tert butyl ether (MTBE) concentration was 343 µg/L in the sample obtained from MW-27. It should be noted that groundwater in the site vicinity is not used as a potable water source.

Laboratory analytical results for monitoring well MW-1 indicate benzene, naphthalene, TPH DRO, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of ethylbenzene, n-propylbenzene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and o-, m- & p-xylenes. All other analytes were below detection limits (BDL).

Laboratory analytical results for monitoring well MW-3 indicate a concentration of TPH DRO above regulatory standards. Laboratory analytical results for this sample also show detectable levels of diisopropyl ether (DIPE) and MTBE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-9 indicate benzene, naphthalene, TPH DRO, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of tert-amyl alcohol (TAA), tert-butanol (TBA), n-butylbenzene, DIPE, ethylbenzene, cumene, MTBE, n-propylbenzene, styrene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and o-, m- & p-xylenes. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-10 indicate MTBE and TPH DRO, concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of tert-Amyl methyl ether (TAME), benzene, TBA, and DIPE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-11 show all analytes were BDL.

Laboratory analytical results for monitoring well MW-12 show all analytes were BDL.

Laboratory analytical results for monitoring well MW-13 indicate a concentration of TPH DRO above the regulatory standard. Laboratory analytical results for this sample also show a detectable levels of acetone and TAA. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-18 indicate a concentration of TPH DRO, above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TBA and MTBE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-19 indicate naphthalene, TPH DRO, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of n-butylbenzene, ethylbenzene, cumene, 4-isopropyltoluene, n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and o-, m- & p-xylenes. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-20 show all analytes were BDL.

Laboratory analytical results for monitoring well MW-21 indicate benzene, MTBE, naphthalene, TPH DRO, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TBA, DIPE, ethylbenzene, cumene, n-propylbenzene, toluene, 1,2,4-trimethylbenzene, and o-, m- & p-xylenes. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-22 indicate TPH DRO above the regulatory standard. Laboratory analytical results for this sample also show detectable levels of benzene, DIPE, and MTBE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-23 indicate benzene, MTBE, TPH DRO, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TAA, TAME, TBA, DIPE, and o-xylenes. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-24 indicate detectable levels of benzene, DIPE, and MTBE below MDE standards.

Laboratory analytical results for monitoring well MW-25 show a detectable level of MTBE below the regulatory standard. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-26 show a detectable level of MTBE below the regulatory standard. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-27 indicate benzene, MTBE, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show a detectable levels of TAA, TAME, TBA, and DIPE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-28 indicate benzene, MTBE, Naphthalene, TPH GRO, and TPH DRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TAA, TAME, TBA, DIPE, and o-xylenes. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-29 indicate TPH GRO, benzene, and MTBE concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TAME, TBA, and DIPE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-30 show all analytes were BDL.

Laboratory analytical results for monitoring well CMW-1 indicate benzene, MTBE, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TAA, TAME, DIPE, and TBA. All other analytes were BDL.

Laboratory analytical results for monitoring well CMW-2 show all analytes were BDL.

Figure 5 in Attachment A summarizes the latest total BTEX, naphthalene, MTBE, TPH GRO and TPH DRO groundwater quality data. Figure 6 in Attachment A contours the dissolved BTEX groundwater quality data. Figure 7 in Attachment A contours the dissolved benzene groundwater quality data. Figure 8 in Attachment A contours the dissolved MTBE groundwater quality data. Table 2 in Attachment B summarizes current and historical groundwater analytical results. The laboratory analytical report is presented in Attachment C. Graphs 1 through 37 in Attachment D show benzene, MTBE, naphthalene, and total BTEX concentrations versus time for each of the monitoring and recovery wells.

Contaminant Trends

Groundwater

Based on the results of Mann-Kendall constituent trend analysis (Attachment E) for the on-site wells (7950 Pulaski Highway and 1205 Chesaco Avenue) the following conclusions were made:

- Decreasing benzene concentration trends were noted in MW-1, MW-2R, MW-3, MW-4R, MW-5R, MW-6, MW-7R, MW-8R, MW-9, MW-10, MW-14, MW-18, MW-19, and MW-21. A stable benzene concentration trend was noted in MW-13. A probable decreasing benzene concentration trend was noted in MW-17. No benzene concentration trends were noted in MW-15 and MW-20.

- Decreasing total BTEX concentration trends were noted in MW-1, MW-2R, MW-3, MW-4R, MW-5R, MW-6, MW-7R, MW-8R, MW-9, MW-10, MW-14, MW-17, MW-18, MW-19, and MW-21. No total BTEX concentration trends were noted in MW-13 and MW-20.

- No increasing benzene or BTEX concentration trends were noted in any of the on-site wells.

Based on the results of Mann-Kendall constituent trend analysis (Attachment E) for the off-site wells the following conclusions were made:

- Decreasing benzene concentration trends were noted in MW-11, MW-22, MW-23, and MW-24. A stable benzene concentration trend was noted in MW-25 and CMW-2. No benzene concentration trends were noted in MW-12, MW-26, MW-29, and MW-30. A probable increasing BTEX trend was noted in CMW-1.

- Decreasing total BTEX concentration trends were noted in MW-11, MW-22, MW-23, and MW-24. A probable decreasing BTEX trend was noted in MW-30. A stable total BTEX concentration trend was noted in MW-25 and CMW-2. No total BTEX concentration trends were noted in MW-12, MW-26, and MW-29. A probable increasing BTEX trend was noted in CMW-1.

- Increasing benzene and BTEX concentration trends were noted in MW-27 and MW-28.

A summary of the aforementioned conclusions is presented as Table 18 in Attachment B.

Vapor

Based on the results of Mann-Kendall constituent trend analysis (Attachment E) for the vapor effluent samples collected from the Site, the following conclusions were made:

- A decreasing benzene concentration trend was noted.

- A decreasing total BTEX concentration trend was noted.

Based on the results of Mann-Kendall constituent trend analysis (Attachment E) for the PID

readings collected from the effluent stack, the following conclusions were made:

- A decreasing VOC concentration trend was noted.

Asymptotic Level Evaluation

Hydrocarbon recovery estimate data is summarized in Tables 7, 8, and 9 in Attachment B and graphs 38 through 43 in Attachment D. Recovery estimate data collected to date indicates that dissolved and vapor phase recovery has reached asymptotic levels.

Based on the data collected to date, AEC is requesting a trial shutdown of the DPE remediation system in order to begin a rebound evaluation.

Indoor Air Quality (IAQ) and Sump Water Sampling Results

On June 23 through June 25, 2015 IAQ samples were obtained from the 1207 Chesaco Avenue residence. One sample was collected from the basement near the bottom of the stairs (IAQ-01), and a background ambient air sample was collected from the western (IAQ-AA) side of the exterior of the residence near the 1207 Chesaco basement door. Prior to sampling, all known VOC containing materials were removed from the 1207 Chesaco structure. In addition, tenants were asked to complete an Occupied Dwelling Questionnaire for Indoor Air Surveys (see Attachment F).

Sampling was conducted using pre-cleaned, laboratory-supplied six-liter stainless steel summa canisters equipped with a 24-hour draw regulator. The IAQ SUMMA canisters were positioned between 51 inches and 64 inches above floor level. The regulator valve and the ball valve were then opened and the test started. The sample containers were filled over the appropriate time period. Prior to exhausting the vacuum in the canisters near the end of the sample collection time, the canister valves were closed. Sample labels were firmly attached to the container side, and the following information was legibly and indelibly written on the labels: Facility name, Sample identification, Sampling date and time, and Sample collector's initials. After the samples were collected and labeled, they were packaged for transport to the laboratory. The samples were shipped to Maryland Spectral Services, Inc. of Baltimore, Maryland for analysis of VOCs using EPA Analytical Method TO-15.

Naphthalene was detected above MDE standards in the basement at 1207 Chesaco Avenue. No other constituents were detected above their respective MDE residential standards.

In addition to the IAQ sampling effort, water which accumulated in basement sumps was sampled from the buildings located on the 1207 Chesaco Ave., 1209 Chesaco Ave., and 1209.5 Chesaco Ave. properties. The sump samples were collected on December 4, 2014. Samples were analyzed for VOCs including fuel oxygenates per EPA Analytical Method 8260 and TPH DRO and GRO per EPA Analytical Method 8015B. THE DRO was detected at a concentration above the regulatory standard and acetone was detected at a concentration below the regulatory standard from the sample taken at 1209.5 Chesaco Avenue. Chloroform was detected at a concentration below the regulatory standard from the sample taken at 1209 Chesaco Avenue. Concentrations were below laboratory detection limits for all analyzed compounds from the sample taken at 1207 Chesaco Avenue.

Attachment B includes Tables 3 through 6 which summarize the current and historical analytical results from IAQ and sump sampling activities. The laboratory analytical reports and chain of custody documentation are presented in Attachment C.

DPE Remediation System Description

System equipment is stationed at the southeastern corner of the Site property (equipment compound). The system control panel and electrical panel are mounted on the outside of the system building. The interior of the system building houses a liquid ring dual phase extraction pump, phase separation tanks, an integrated oil-water separator and air-stripper for LPH and dissolved phase hydrocarbon removal, two fluid transfer pumps, two bag filters, two activated carbon canisters connected in series for final groundwater treatment, and a flow totalizer to record total volume of groundwater treated. The equipment and wiring in the treatment room is rated for explosive environments.

Total fluids and soil vapors are extracted from the ten vertical extraction wells by a skid-mounted liquid ring vacuum pump. Extracted fluids and vapors from the recovery wells pass through primary and secondary vapor knock-out tanks for separation of recovered liquid and vapor phases. Separated liquids are directed to the oil-water separator/air stripper for groundwater and LPH separation. LPH, if present, is directed to a storage reservoir in the separator for collection, and the stripped water is directed through the bag filters and GAC vessels connected in series for final polishing prior to discharge.

Dual Phase Extraction Remediation System Performance Summary

System Operation

Period:	4-1-15 through 6-30-15
Operating Days:	87 out of 91 days
System Compliance:	Did not exceed discharge standards (General Discharge Permit No. MGD913823 and ARMA ID No. 005-9-1391). Compliance laboratory analytical results are provided in Attachment C.

Groundwater Recovery

Recovery Wells in Operation:	MW-2R, MW-4R, MW-5R, MW-6, MW-8R, MW-14, MW-15, MW-16, MW-17
Discharge in Period:	140,866 gallons
Average System Flow Rate:	1.12 gpm
Flow Rate per Utilized Recovery Well:	0.14 gpm
Pre-System Start-up LPH (Cumulative):	4,393 gal
System Dissolved Phase Recovery (Period/Cumulative):	0.00 / 0.55 gal
Dissolved Phase Recovery per Recovery Well (Period/Cumulative):	0.00 / 0.06 gal
Average Groundwater BTEX Concentration (influent/effluent)	0.97 µg/L / 0.0 µg/L
Average BTEX Treatment Efficiency	100%

Vapor Recovery

Recovery Wells in Operation:	MW-2R, MW-4R, MW-5R, MW-6, MW-8R, MW-14, MW-15, MW-16, MW-17
Discharge in Period:	4,746,859 cubic feet
Average Manifold Flow Rate:	37.9 CFM
Well Flow Rate per Utilized Well:	3.51 CFM
Average Manifold Vacuum:	20.1 inches of Mercury
Manifold Vapor Phase Recovery (Average/Period):	0.06 lb./day/1.5 lbs.
Manifold Vapor Phase Recovery (Cumulative):	1,424.5 lbs.
Average Vapor VOC (via PID) Concentration	1.1 ppm
Average Treatment Efficiency	Not Applicable

Hydrocarbon Recovery Estimates (gallons)

Total Recovery (Period/Cumulative):	0.24 / 4,620.9

Conversion equations and factors used to calculate recovery estimates are included as footnotes on the recovery tables and work sheets in Attachment B.

During this monitoring period the treatment system has been operational for 87 out of 91 days. The system was shut down for one day during the quarterly groundwater sampling (April 15, 2015). Three days of system downtime were experienced from May 27 through May 29. Routine inspections of the remedial operations are performed in order to ensure proper operation and to evaluate system effectiveness. These routine inspections occasionally require brief shutdowns (3 hours average). Bi-monthly site visits are used to monitor, adjust, and optimize the system operation. Recovery well valves and vertical PVC recovery pipes in the recovery wells (stinger tubes) are periodically changed to increase or decrease recovery rates, optimize the system operation, and recover maximum vapor and liquid from critical areas of the site.

As of June 30, 2015; approximately 2,694,600 gallons of liquid and approximately 87,251,500 cubic feet of air have been processed by the system, removing approximately 1,424.5 pounds (or 227.9 gallons) of VOCs. An estimated 4,620.9 gallons of hydrocarbons have been recovered during the life-cycle of this project. No LPH was recovered during this monitoring period. The individual well points connected to the recovery system are manifolded in the pipe runs below grade. This configuration does not allow vapor or groundwater monitoring to occur in each well. Tables 7, 8, and 9 in Attachment B and graphs 38 through 43 in Attachment D summarize hydrocarbon recovery estimate data. Also included in Attachment B are computational worksheets used to compile recovery data and estimate recovery rates. Diagnostic worksheets completed during system visits are presented in Attachment G.

Hydraulic Control and Vacuum Influence Summary

A figure depicting the groundwater gradient and vacuum influence readings taken while the system was active is included as Figure 4 in Attachment A. Significant groundwater drawdown associated with groundwater extraction is apparent in the remediation zone. Vacuum readings taken regularly from the monitoring well network under pumping conditions indicate significant vacuum influence in wells down-gradient of the recovery well network. Vacuum readings taken since start-up of the system are included in Table 2 of Attachment B.

Figures, Tables, and Graphs

Figure 1 Site Vicinity Map
Figure 2 Site Features Map
Figure 3 Site Features Map with Utilities and Remediation System Layout
Figure 4 Groundwater Gradient Map
Figure 5 Groundwater Quality Map
Figure 6 Groundwater Quality Map – Dissolved Total BTEX
Figure 7 Groundwater Quality Map – Dissolved Benzene
Figure 8 Groundwater Quality Map – Dissolved MTBE

Table 1 Well Gauging Summary
Table 2 Historical Groundwater Analytical Results
Table 3 1207 Chesaco Ave. Historical Indoor Air Quality Analytical Results
Table 4 1205 Chesaco Ave. Historical Indoor Air Quality Analytical Results
Table 5 7950 Pulaski Highway Historical Indoor Air Quality Analytical Results
Table 6 1205, 1207, 1209 and 1209.5 Chesaco Ave. Historical Sump Sampling Analytical Results
Table 7 Groundwater Extraction Estimates
Table 8 Vapor Extraction Estimates
Table 9 Cumulative Hydrocarbon Recovery Estimates
Table 10 Dual Phase Extraction System Recovery Estimates – Worksheet 1
Table 11 Dual Phase Extraction System Recovery Estimates – Worksheet 2
Table 12 Dual Phase Extraction System Recovery Estimates – Worksheet 3
Table 13 Groundwater Influent Concentration Worksheet
Table 14 Airflow and Vapor Concentration Worksheet
Table 15 System Emissions Compliance Table
Table 16 Groundwater Treatment Efficiency Worksheet
Table 17 Groundwater and Vapor Recovery Well Operation Summary
Table 18 Benzene and BTEX Concentration Trend Summary

Graphs 1-37 Benzene, MTBE, Naphthalene, and Total BTEX Concentrations vs. Time for All Monitoring and Recovery Wells
Graph 38 Dissolved Phase Hydrocarbon Recovery (gallons) Vs. Time
Graph 39 Vapor Phase Hydrocarbon Recovery (gallons) Vs. Time
Graph 40 Total Hydrocarbon Recovery (gallons) Vs. Time
Graph 41 Dissolved Phase Hydrocarbon Recovery (pounds) Vs. Time
Graph 42 Vapor Phase Hydrocarbon Recovery (pounds) Vs. Time
Graph 43 Total Hydrocarbon Recovery (pounds) Vs. Time

Attachments

Attachment A Figures
Attachment B Tables
Attachment C Laboratory Analytical Results
Attachment D Graphs
Attachment E Mann-Kendall Analysis Work Sheets
Attachment F Occupied Dwelling Questionnaire for Indoor Air Surveys
Attachment G System Visit Work Sheets

Attachment A

Attachment B

Attachment C

Attachment D

Attachment E

Attachment F

Attachment G

Regulatory Information

Regulatory Agency:	Maryland Department of the Environment
Agency Contact:	Jenny Herman
Case Number:	Case No. 10-0339-BA
Current Case Status:	Dual Phase Extraction (DPE) System Operation Monthly well gauging Quarterly monitoring well sampling Quarterly indoor air quality (IAQ) sampling (1207 Chesaco Ave.) Quarterly residential sump sampling (1207, 1209, and 1209 1/2 Chesaco Ave) Bi-annual recovery well sampling.
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Recovery Wells:	MW-2R, MW-4R, MW-5R, MW-6, MW-7R, MW-8R, MW-14 through MW-17
Potable Wells:	None
Liquid Phase Hydrocarbon (LPH) Present:	A sheen was last observed in MW-6 on Dec. 6, 2013
Min/Max Groundwater Elevation:	73.34 feet / 89.19 feet on June 9, 2015
Groundwater Flow Direction:	Northwest

Project Summary

1993:	Four underground storage tanks (USTs) were installed at the Site.
2007:	Tank top upgrade conducted and double walled piping was installed.
Dec. 15, 2009:	MDE Oil Control Program (OCP) opened a case in response to a report of evidence of a petroleum spill at 1205 Chesaco Avenue, which adjoins the Site to the north. Fuel dispensers were shut down. 24-hour enhanced fluid recovery (EFR) activities via vacuum trucks were begun. Installed first monitoring well (MW-1).
Dec. 16, 2009:	Installed MW-2 through MW-9.
Dec. 19, 2009	MDE authorized EFR activity to be changed to 8 hours per day, seven days per week.
Dec. 18, 2009:	Begun operation of Soil-vapor extraction (SVE) system.
Jan. 8, 2010:	MDE authorized EFR activity to be changed to 8 hours per day, five days per week.
Jan. 11, 2010	MDE approved AEC's *Subsurface Investigation Work Plan.*
Jan. 22-28, 2010:	A subsurface investigation including 24 direct push borings was performed. The borings were located on the Site and on the 1205 and 1207 Chesaco Ave. properties. Temporary piezometers were installed.

Feb. 5, 2010:	MDE authorized EFR activity to be changed to 4 hours per day, three days per week and two liquid phase hydrocarbon (LPH) hand-bailing events per week.
Apr. 14, 2010	Temporary piezometers installed in January were abandoned.
June 11, 2010:	MDE required EFR activity to be changed to 8 hours per day, three days per week and two LPH hand-bailing events per week.
June 15, 2010:	MDE approved AEC's *Supplemental Subsurface Investigation Work Plan.*
July 23, 2010:	MDE approved AEC's *Design Basis Summary 1205 Chesaco Ave. Residence Sump Water Treatment System*, and *1207 Chesaco Ave. Indoor Air Investigation Work Plan.*
July 2010:	Installed MW-10 through MW-14.
Sept. 21, 2010:	MDE approved AEC's *St. Clements School Environmental Investigation Work Plan.*
Oct. 1, 2010:	An estimated 4,313 gallons of LPH was estimated to have been removed from the Site since recovery activities began.
Oct. 10-11 2010:	Eight direct push borings were advanced in locations along Chesaco Ave., from the site proceeding northwest to Old Philadelphia Ave.
November 2010:	Sump water treatment system installed at 1205 Chesaco Avenue residence.
Jan. 26 2011:	MDE approved the installation of a dual phase remediation system.
March 1, 2011:	MDE approved discontinuation of regular EFR events and AEC's *Granular Activated Carbon Bed Removal Work Plan*.
March 9-10, 2011:	Began quarterly indoor air quality (IAQ) sampling. Samples were taken from the 1205 Chesaco Ave. property.
April 26-27, 2011:	IAQ samples taken from the 1207 Chesaco Ave. residence and from the Royal Farms Store (7950 Pulaski Hwy.).
June 16-21, 2011:	Installed Monitoring wells: MW-2R, MW-4R, MW-5R, MW-7R, MW-8R, and MW-15 through MW-22.
Dec. 2, 2011:	MDE issued a letter re-initiating EFR events until the DPE remediation system could become operational.
Dec. 14, 2011:	DPE remediation system was activated.
Feb. 6, 2012:	After review of AEC's report of a 14-day pilot study of the dual phase remediation system: MDE gives permission to remove vapor control devices including an activated carbon control unit and catalytic oxidizer.
April 27, 2012:	AEC submitted *Focused Risk Assessment – Vapor Intrusion at 1207 Chesaco Ave*. to MDE.
May 15, 2012	MDE gives authorization to remove SVE system and discontinue sump water sampling at 1205 Chesaco Avenue. MDE also authorizes removal of carbon filtration units from the sump discharge line.
May 29, 2012:	Use of SVE system is permanently discontinued.
July 20, 2012:	AEC submitted *Groundwater Quality Report - Third Quarter 2012 and Dual Phase Extraction System Performance and Monitoring Summary – April 1, 2012 through June 30, 2012 to MDE.*
Aug. 28, 2012:	MDE approved AEC's *Additional Monitoring Well Installation Plan* for the installation on two additional monitoring wells (MW-23 and MW-24).
Oct. 2, 2012:	MDE issued a letter to modify IAQ testing requirements to discontinue sampling at the 1205 Chesaco Ave. residence.
Oct. 30, 2012:	AEC submitted *Groundwater Quality Report - Fourth Quarter 2012 and Dual Phase Extraction System Performance and Monitoring Summary – July 1, 2012 through September 30, 2012*
Dec. 5, 2012:	AEC submitted *Additional Monitoring Well Installation – Report of Results* to MDE.
Jan. 8, 2013:	AEC submitted *Indoor Air Quality Sampling – Fourth Quarter 2012* to MDE.
Jan. 14, 2013:	*Fourth Quarter - Discharge Monitoring Report* submitted to the MDE.
Jan. 15, 2013:	MDE issues *Modification to Sampling Requirements* approving monthly well gauging, and semi-annual recovery well sampling. MDE requires

	quarterly sump water samples be taken from 1207, 1209, and 1209.5 Chesaco Ave.
Feb. 7, 2013:	AEC submitted *Groundwater Quality Data Pack – 1st Quarter 2013* to MDE.
Feb. 11, 2013:	AEC submitted a revised *Quarterly Progress Report – 4th Quarter 2012* to MDE.
March 26, 2013:	Submitted *Indoor Air Quality and Sump Water Sampling – First Quarter 2013* to MDE.
March 28, 2013:	Submitted *CAP Addendum* to MDE.
April 16, 2013:	*First Quarter - Discharge Monitoring Report* submitted to the MDE.
May 14, 2013:	Submitted *Quarterly Progress Report – 1st Quarter 2013* to MDE.
May 29, 2013:	MDE issued a letter requesting modifications to the *CAP Addendum*, dated March 28, 2013.
July 3, 2013:	Submitted *Revised CAP Addendum* to MDE.
July 10, 2013:	*Second Quarter - Discharge Monitoring Report* submitted to the MDE.
August 6, 2013	AEC submitted *Quarterly Progress Report – 2nd Quarter 2013* to MDE.
August 13, 2013	AEC submitted *Additional Monitoring Well Installation Work Plan* to MDE.
September 4, 2013	MDE authorizes the *Revised CAP Addendum.*
September 12, 2013	MDE authorizes *Additional Monitoring Well Installation Work Plan*.
October 4, 2013	*Third Quarter - Discharge Monitoring Report* submitted to MDE.
October 30, 2013	AEC submitted *Additional Monitoring Well Installation Report*.
November 11, 2013	AEC submitted *Quarterly Progress Report – 3rd Quarter 2013* to MDE.
	AEC submitted *Work Plan for Post Building Demolition Subsurface Investigation* to MDE. The work plan included proposed plans to perform a limited subsurface investigation including test-pitting beneath the former residence located at 1205 Chesaco Avenue following its demolition.
January 29, 2014	Fourth Quarter - Discharge Monitoring Report submitted to MDE.
January 30, 2014	MDE issued a letter - *Approval of Work Plans* authorizing alteration of the IAQ sampling procedures, demolition of the residence located on the 1205 Chesaco Ave. property and a subsurface investigation beneath the residence, and expansion of the remediation system to include MW-6.
February 14, 2014	AEC submitted *Quarterly Progress Report – 4th Quarter 2013* to MDE.
April 30, 2014	First Quarter - Discharge Monitoring Report submitted to MDE.
May 6, 2014	AEC submitted *Quarterly Progress Report – 1st Quarter 2014* to MDE.
May 27, 2014	AEC submitted a letter to MDE summarizing Post Building Demolition Subsurface Investigation.
July 24, 2014	Second Quarter - Discharge Monitoring Report submitted to MDE.
July 30, 2014	AEC submitted *Quarterly Progress Report – 2nd Quarter 2014* to MDE.
October 7, 2014	AEC submitted *Quarterly Progress Report – 3rd Quarter 2014* to MDE.
November 3, 2014	Third Quarter - Discharge Monitoring Report submitted to MDE.
January 9, 2015	Fourth Quarter - Discharge Monitoring Report submitted to MDE.
February 6, 2015	AEC submitted *Quarterly Progress Report – 4th Quarter 2014* to MDE.
April 13, 2015	First Quarter - Discharge Monitoring Report submitted to MDE.
May 5, 2015	AEC submitted *Quarterly Progress Report – 1st Quarter 2015* to MDE.
June 10, 2015	AEC submitted *Rebound Evaluation Work Plan* to MDE.

Work Authorized and Performed During this Quarter

April 6:	Alarm visit, system is restarted
April 14:	System Operations and Maintenance (O&M), well gauging, and discharge samples taken.
April 15:	Quarterly groundwater sampling of the monitoring and recovery well network.
April 28:	O&M and discharge sample taken.
May 12:	System O&M, well gauging, and discharge samples taken.
May 26:	O&M and discharge sample taken.
June 9:	System O&M, well gauging, and discharge samples taken.

June 23: O&M and discharge sample taken.
June 23-25: IAQ and sump water samples collected.

The groundwater samples were collected on April 15, 2015 and analyzed according to Environmental Protection Agency (EPA) protocols from the monitoring well network. Groundwater samples were collected by first gauging and purging at least three well volumes using a dedicated PVC bailer. After purging, each well was allowed to recharge for a period of at least one hour. Groundwater samples were analyzed for volatile organic compounds (VOCs) including fuel oxygenates per EPA Analytical Method 8260 and Total Petroleum Hydrocarbons (TPH) Diesel Range Organics (DRO) and Gasoline Range Organics (GRO) per EPA Analytical Method 8015B.

A groundwater gradient map depicting groundwater flow direction during operation of the DPE system is included as Figure 4 in Attachment A. Table 1 in Attachment B provides current and historical groundwater elevation data based on an arbitrary benchmark of 100 feet.

Groundwater Sampling Results

The results of the laboratory analysis show that concentrations of petroleum constituents above regulatory standards (MDE Cleanup Standards for Type I and II Aquifers, June 2008), were detected in groundwater samples collected from all monitoring wells, with the exception of MW-11, MW-12, MW-20, MW-30, and CMW-2. Laboratory analysis shows that the maximum concentration of benzene, toluene, ethylbenzene and xylenes (total BTEX) in the wells sampled was 6,587 micrograms per liter (µg/L) in MW-1. The maximum methyl-tert butyl ether (MTBE) concentration was 343 µg/L in the sample obtained from MW-27. It should be noted that groundwater in the site vicinity is not used as a potable water source.

Laboratory analytical results for monitoring well MW-1 indicate benzene, naphthalene, TPH DRO, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of ethylbenzene, n-propylbenzene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and o-, m- & p-xylenes. All other analytes were below detection limits (BDL).

Laboratory analytical results for monitoring well MW-3 indicate a concentration of TPH DRO above regulatory standards. Laboratory analytical results for this sample also show detectable levels of diisopropyl ether (DIPE) and MTBE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-9 indicate benzene, naphthalene, TPH DRO, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of tert-amyl alcohol (TAA), tert-butanol (TBA), n-butylbenzene, DIPE, ethylbenzene, cumene, MTBE, n-propylbenzene, styrene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and o-, m- & p-xylenes. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-10 indicate MTBE and TPH DRO, concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of tert-Amyl methyl ether (TAME), benzene, TBA, and DIPE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-11 show all analytes were BDL.

Laboratory analytical results for monitoring well MW-12 show all analytes were BDL.

Laboratory analytical results for monitoring well MW-13 indicate a concentration of TPH DRO above the regulatory standard. Laboratory analytical results for this sample also show a detectable levels of acetone and TAA. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-18 indicate a concentration of TPH DRO, above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TBA and MTBE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-19 indicate naphthalene, TPH DRO, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of n-butylbenzene, ethylbenzene, cumene, 4-isopropyltoluene, n-propylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and o-, m- & p-xylenes. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-20 show all analytes were BDL.

Laboratory analytical results for monitoring well MW-21 indicate benzene, MTBE, naphthalene, TPH DRO, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TBA, DIPE, ethylbenzene, cumene, n-propylbenzene, toluene, 1,2,4-trimethylbenzene, and o-, m- & p-xylenes. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-22 indicate TPH DRO above the regulatory standard. Laboratory analytical results for this sample also show detectable levels of benzene, DIPE, and MTBE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-23 indicate benzene, MTBE, TPH DRO, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TAA, TAME, TBA, DIPE, and o-xylenes. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-24 indicate detectable levels of benzene, DIPE, and MTBE below MDE standards.

Laboratory analytical results for monitoring well MW-25 show a detectable level of MTBE below the regulatory standard. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-26 show a detectable level of MTBE below the regulatory standard. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-27 indicate benzene, MTBE, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show a detectable levels of TAA, TAME, TBA, and DIPE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-28 indicate benzene, MTBE, Naphthalene, TPH GRO, and TPH DRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TAA, TAME, TBA, DIPE, and o-xylenes. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-29 indicate TPH GRO, benzene, and MTBE concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TAME, TBA, and DIPE. All other analytes were BDL.

Laboratory analytical results for monitoring well MW-30 show all analytes were BDL.

Laboratory analytical results for monitoring well CMW-1 indicate benzene, MTBE, and TPH GRO concentrations above regulatory standards. Laboratory analytical results for this sample also show detectable levels of TAA, TAME, DIPE, and TBA. All other analytes were BDL.

Laboratory analytical results for monitoring well CMW-2 show all analytes were BDL.

Figure 5 in Attachment A summarizes the latest total BTEX, naphthalene, MTBE, TPH GRO and TPH DRO groundwater quality data. Figure 6 in Attachment A contours the dissolved BTEX groundwater quality data. Figure 7 in Attachment A contours the dissolved benzene groundwater quality data. Figure 8 in Attachment A contours the dissolved MTBE groundwater quality data. Table 2 in Attachment B summarizes current and historical groundwater analytical results. The laboratory analytical report is presented in Attachment C. Graphs 1 through 37 in Attachment D show benzene, MTBE, naphthalene, and total BTEX concentrations versus time for each of the monitoring and recovery wells.

Contaminant Trends

Groundwater

Based on the results of Mann-Kendall constituent trend analysis (Attachment E) for the on-site wells (7950 Pulaski Highway and 1205 Chesaco Avenue) the following conclusions were made:

- Decreasing benzene concentration trends were noted in MW-1, MW-2R, MW-3, MW-4R, MW-5R, MW-6, MW-7R, MW-8R, MW-9, MW-10, MW-14, MW-18, MW-19, and MW-21. A stable benzene concentration trend was noted in MW-13. A probable decreasing benzene concentration trend was noted in MW-17. No benzene concentration trends were noted in MW-15 and MW-20.

- Decreasing total BTEX concentration trends were noted in MW-1, MW-2R, MW-3, MW-4R, MW-5R, MW-6, MW-7R, MW-8R, MW-9, MW-10, MW-14, MW-17, MW-18, MW-19, and MW-21. No total BTEX concentration trends were noted in MW-13 and MW-20.

- No increasing benzene or BTEX concentration trends were noted in any of the on-site wells.

Based on the results of Mann-Kendall constituent trend analysis (Attachment E) for the off-site wells the following conclusions were made:

- Decreasing benzene concentration trends were noted in MW-11, MW-22, MW-23, and MW-24. A stable benzene concentration trend was noted in MW-25 and CMW-2. No benzene concentration trends were noted in MW-12, MW-26, MW-29, and MW-30. A probable increasing BTEX trend was noted in CMW-1.

- Decreasing total BTEX concentration trends were noted in MW-11, MW-22, MW-23, and MW-24. A probable decreasing BTEX trend was noted in MW-30. A stable total BTEX concentration trend was noted in MW-25 and CMW-2. No total BTEX concentration trends were noted in MW-12, MW-26, and MW-29. A probable increasing BTEX trend was noted in CMW-1.

- Increasing benzene and BTEX concentration trends were noted in MW-27 and MW-28.

A summary of the aforementioned conclusions is presented as Table 18 in Attachment B.

Vapor

Based on the results of Mann-Kendall constituent trend analysis (Attachment E) for the vapor effluent samples collected from the Site, the following conclusions were made:

- A decreasing benzene concentration trend was noted.

- A decreasing total BTEX concentration trend was noted.

Based on the results of Mann-Kendall constituent trend analysis (Attachment E) for the PID

readings collected from the effluent stack, the following conclusions were made:

- A decreasing VOC concentration trend was noted.

Asymptotic Level Evaluation

Hydrocarbon recovery estimate data is summarized in Tables 7, 8, and 9 in Attachment B and graphs 38 through 43 in Attachment D. Recovery estimate data collected to date indicates that dissolved and vapor phase recovery has reached asymptotic levels.

Based on the data collected to date, AEC is requesting a trial shutdown of the DPE remediation system in order to begin a rebound evaluation.

Indoor Air Quality (IAQ) and Sump Water Sampling Results

On June 23 through June 25, 2015 IAQ samples were obtained from the 1207 Chesaco Avenue residence. One sample was collected from the basement near the bottom of the stairs (IAQ-01), and a background ambient air sample was collected from the western (IAQ-AA) side of the exterior of the residence near the 1207 Chesaco basement door. Prior to sampling, all known VOC containing materials were removed from the 1207 Chesaco structure. In addition, tenants were asked to complete an Occupied Dwelling Questionnaire for Indoor Air Surveys (see Attachment F).

Sampling was conducted using pre-cleaned, laboratory-supplied six-liter stainless steel summa canisters equipped with a 24-hour draw regulator. The IAQ SUMMA canisters were positioned between 51 inches and 64 inches above floor level. The regulator valve and the ball valve were then opened and the test started. The sample containers were filled over the appropriate time period. Prior to exhausting the vacuum in the canisters near the end of the sample collection time, the canister valves were closed. Sample labels were firmly attached to the container side, and the following information was legibly and indelibly written on the labels: Facility name, Sample identification, Sampling date and time, and Sample collector's initials. After the samples were collected and labeled, they were packaged for transport to the laboratory. The samples were shipped to Maryland Spectral Services, Inc. of Baltimore, Maryland for analysis of VOCs using EPA Analytical Method TO-15.

The samples collected during this investigation did not contain fuel constituents above their respective MDE residential standards.

In addition to the IAQ sampling effort, water which accumulated in basement sumps was sampled from the buildings located on the 1207 Chesaco Ave., 1209 Chesaco Ave., and 1209.5 Chesaco Ave. properties. The sump samples were collected on December 4, 2014. Samples were analyzed for VOCs including fuel oxygenates per EPA Analytical Method 8260 and TPH DRO and GRO per EPA Analytical Method 8015B. THE DRO was detected at a concentration above the regulatory standard and acetone was detected at a concentration below the regulatory standard from the sample taken at 1209.5 Chesaco Avenue. Chloroform was detected at a concentration below the regulatory standard from the sample taken at 1209 Chesaco Avenue. Concentrations were below laboratory detection limits for all analyzed compounds from the sample taken at 1207 Chesaco Avenue.

Attachment B includes Tables 3 through 6 which summarize the current and historical analytical results from IAQ and sump sampling activities. The laboratory analytical reports and chain of custody documentation are presented in Attachment C.

DPE Remediation System Description

System equipment is stationed at the southeastern corner of the Site property (equipment compound). The system control panel and electrical panel are mounted on the outside of the system building. The interior of the system building houses a liquid ring dual phase extraction pump, phase separation tanks, an integrated oil-water separator and air-stripper for LPH and dissolved phase hydrocarbon removal, two fluid transfer pumps, two bag filters, two activated carbon canisters connected in series for final groundwater treatment, and a flow totalizer to record total volume of groundwater treated. The equipment and wiring in the treatment room is rated for explosive environments.

Total fluids and soil vapors are extracted from the ten vertical extraction wells by a skid-mounted liquid ring vacuum pump. Extracted fluids and vapors from the recovery wells pass through primary and secondary vapor knock-out tanks for separation of recovered liquid and vapor phases. Separated liquids are directed to the oil-water separator/air stripper for groundwater and LPH separation. LPH, if present, is directed to a storage reservoir in the separator for collection, and the stripped water is directed through the bag filters and GAC vessels connected in series for final polishing prior to discharge.

Dual Phase Extraction Remediation System Performance Summary

System Operation

Period:	4-1-15 through 6-30-15
Operating Days:	87 out of 91 days
System Compliance:	Did not exceed discharge standards (General Discharge Permit No. MGD913823 and ARMA ID No. 005-9-1391). Compliance laboratory analytical results are provided in Attachment C.

Groundwater Recovery

Recovery Wells in Operation:	MW-2R, MW-4R, MW-5R, MW-6, MW-8R, MW-14, MW-15, MW-16, MW-17
Discharge in Period:	140,866 gallons
Average System Flow Rate:	1.12 gpm
Flow Rate per Utilized Recovery Well:	0.14 gpm
Pre-System Start-up LPH (Cumulative):	4,393 gal
System Dissolved Phase Recovery (Period/Cumulative):	0.00 / 0.55 gal
Dissolved Phase Recovery per Recovery Well (Period/Cumulative):	0.00 / 0.06 gal
Average Groundwater BTEX Concentration (influent/effluent)	0.97 µg/L / 0.0 µg/L
Average BTEX Treatment Efficiency	100%

Vapor Recovery

Recovery Wells in Operation:	MW-2R, MW-4R, MW-5R, MW-6, MW-8R, MW-14, MW-15, MW-16, MW-17
Discharge in Period:	4,746,859 cubic feet
Average Manifold Flow Rate:	37.9 CFM
Well Flow Rate per Utilized Well:	3.51 CFM
Average Manifold Vacuum:	20.1 inches of Mercury
Manifold Vapor Phase Recovery (Average/Period):	0.06 lb./day/1.5 lbs.
Manifold Vapor Phase Recovery (Cumulative):	1,424.5 lbs.
Average Vapor VOC (via PID) Concentration	1.1 ppm
Average Treatment Efficiency	Not Applicable

Hydrocarbon Recovery Estimates (gallons)

Total Recovery (Period/Cumulative):	0.24 / 4,620.9

Conversion equations and factors used to calculate recovery estimates are included as footnotes on the recovery tables and work sheets in Attachment B.

During this monitoring period the treatment system has been operational for 87 out of 91 days. The system was shut down for one day during the quarterly groundwater sampling (April 15, 2015). Three days of system downtime were experienced from May 27 through May 29. Routine inspections of the remedial operations are performed in order to ensure proper operation and to evaluate system effectiveness. These routine inspections occasionally require brief shutdowns (3 hours average). Bi-monthly site visits are used to monitor, adjust, and optimize the system operation. Recovery well valves and vertical PVC recovery pipes in the recovery wells (stinger tubes) are periodically changed to increase or decrease recovery rates, optimize the system operation, and recover maximum vapor and liquid from critical areas of the site.

As of June 30, 2015; approximately 2,694,600 gallons of liquid and approximately 87,251,500 cubic feet of air have been processed by the system, removing approximately 1,424.5 pounds (or 227.9 gallons) of VOCs. An estimated 4,620.9 gallons of hydrocarbons have been recovered during the life-cycle of this project. No LPH was recovered during this monitoring period. The individual well points connected to the recovery system are manifolded in the pipe runs below grade. This configuration does not allow vapor or groundwater monitoring to occur in each well. Tables 7, 8, and 9 in Attachment B and graphs 38 through 43 in Attachment D summarize hydrocarbon recovery estimate data. Also included in Attachment B are computational worksheets used to compile recovery data and estimate recovery rates. Diagnostic worksheets completed during system visits are presented in Attachment G.

Hydraulic Control and Vacuum Influence Summary

A figure depicting the groundwater gradient and vacuum influence readings taken while the system was active is included as Figure 4 in Attachment A. Significant groundwater drawdown associated with groundwater extraction is apparent in the remediation zone. Vacuum readings taken regularly from the monitoring well network under pumping conditions indicate significant vacuum influence in wells down-gradient of the recovery well network. Vacuum readings taken since start-up of the system are included in Table 2 of Attachment B.

Figures, Tables, and Graphs

Figure 1 Site Vicinity Map
Figure 2 Site Features Map
Figure 3 Site Features Map with Utilities and Remediation System Layout
Figure 4 Groundwater Gradient Map
Figure 5 Groundwater Quality Map
Figure 6 Groundwater Quality Map – Dissolved Total BTEX
Figure 7 Groundwater Quality Map – Dissolved Benzene
Figure 8 Groundwater Quality Map – Dissolved MTBE

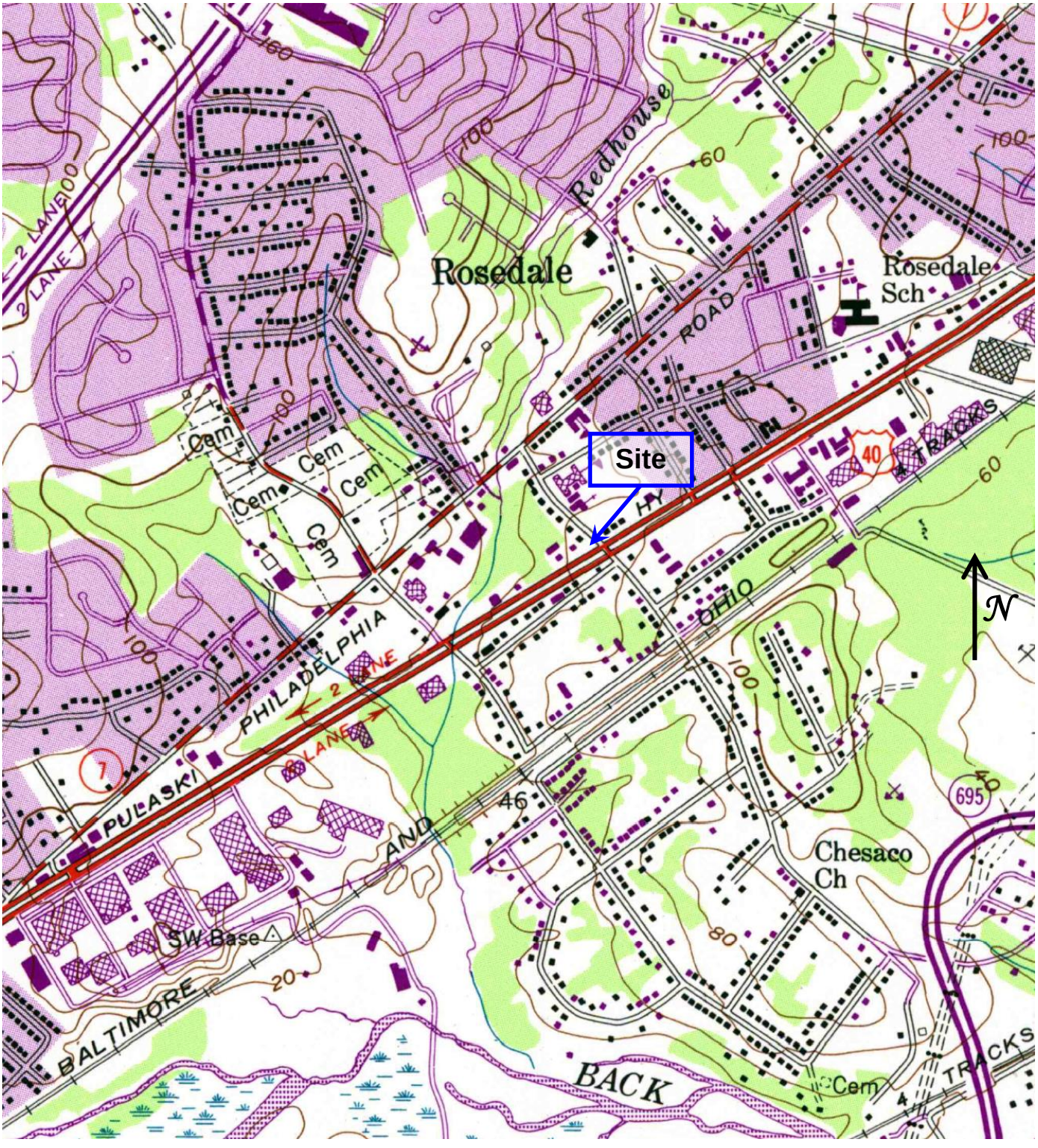
Table 1 Well Gauging Summary
Table 2 Historical Groundwater Analytical Results
Table 3 1207 Chesaco Ave. Historical Indoor Air Quality Analytical Results
Table 4 1205 Chesaco Ave. Historical Indoor Air Quality Analytical Results
Table 5 7950 Pulaski Highway Historical Indoor Air Quality Analytical Results
Table 6 1205, 1207, 1209 and 1209.5 Chesaco Ave. Historical Sump Sampling Analytical Results
Table 7 Groundwater Extraction Estimates
Table 8 Vapor Extraction Estimates
Table 9 Cumulative Hydrocarbon Recovery Estimates
Table 10 Dual Phase Extraction System Recovery Estimates – Worksheet 1
Table 11 Dual Phase Extraction System Recovery Estimates – Worksheet 2
Table 12 Dual Phase Extraction System Recovery Estimates – Worksheet 3
Table 13 Groundwater Influent Concentration Worksheet
Table 14 Airflow and Vapor Concentration Worksheet
Table 15 System Emissions Compliance Table
Table 16 Groundwater Treatment Efficiency Worksheet
Table 17 Groundwater and Vapor Recovery Well Operation Summary
Table 18 Benzene and BTEX Concentration Trend Summary

Graphs 1-37 Benzene, MTBE, Naphthalene, and Total BTEX Concentrations vs. Time for All Monitoring and Recovery Wells
Graph 38 Dissolved Phase Hydrocarbon Recovery (gallons) Vs. Time
Graph 39 Vapor Phase Hydrocarbon Recovery (gallons) Vs. Time
Graph 40 Total Hydrocarbon Recovery (gallons) Vs. Time
Graph 41 Dissolved Phase Hydrocarbon Recovery (pounds) Vs. Time
Graph 42 Vapor Phase Hydrocarbon Recovery (pounds) Vs. Time
Graph 43 Total Hydrocarbon Recovery (pounds) Vs. Time

Attachments

Attachment A Figures
Attachment B Tables
Attachment C Laboratory Analytical Results
Attachment D Graphs
Attachment E Mann-Kendall Analysis Work Sheets
Attachment F Occupied Dwelling Questionnaire for Indoor Air Surveys
Attachment G System Visit Work Sheets

Attachment A

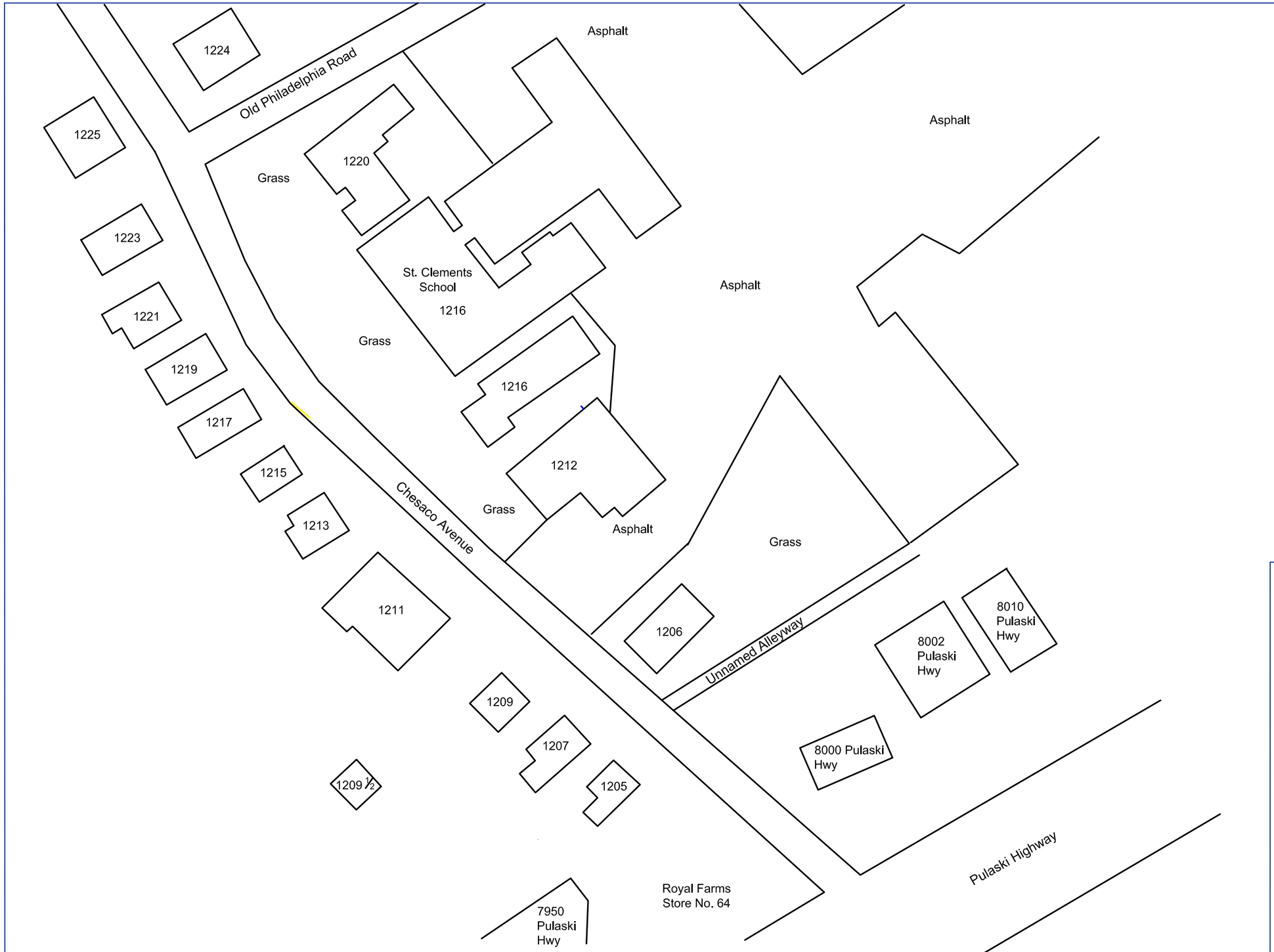


USGS Topographic Quad Map, Baltimore East, MD, 1974

Advantage Environmental Consultants, LLC
8610 Washington Boulevard, Suite 217
Jessup, MD 20794
(301) 776-0500 Office
(301) 776-1123 Fax

Figure 1 - Site Vicinity Map
Royal Farms Store 64
7950 Pulaski Highway
Baltimore, Maryland 21237

Work Order No.:	Report Date:	Drawn By:
05-056	12/2011	WEG



Legend

0 40 80

Scale in Feet

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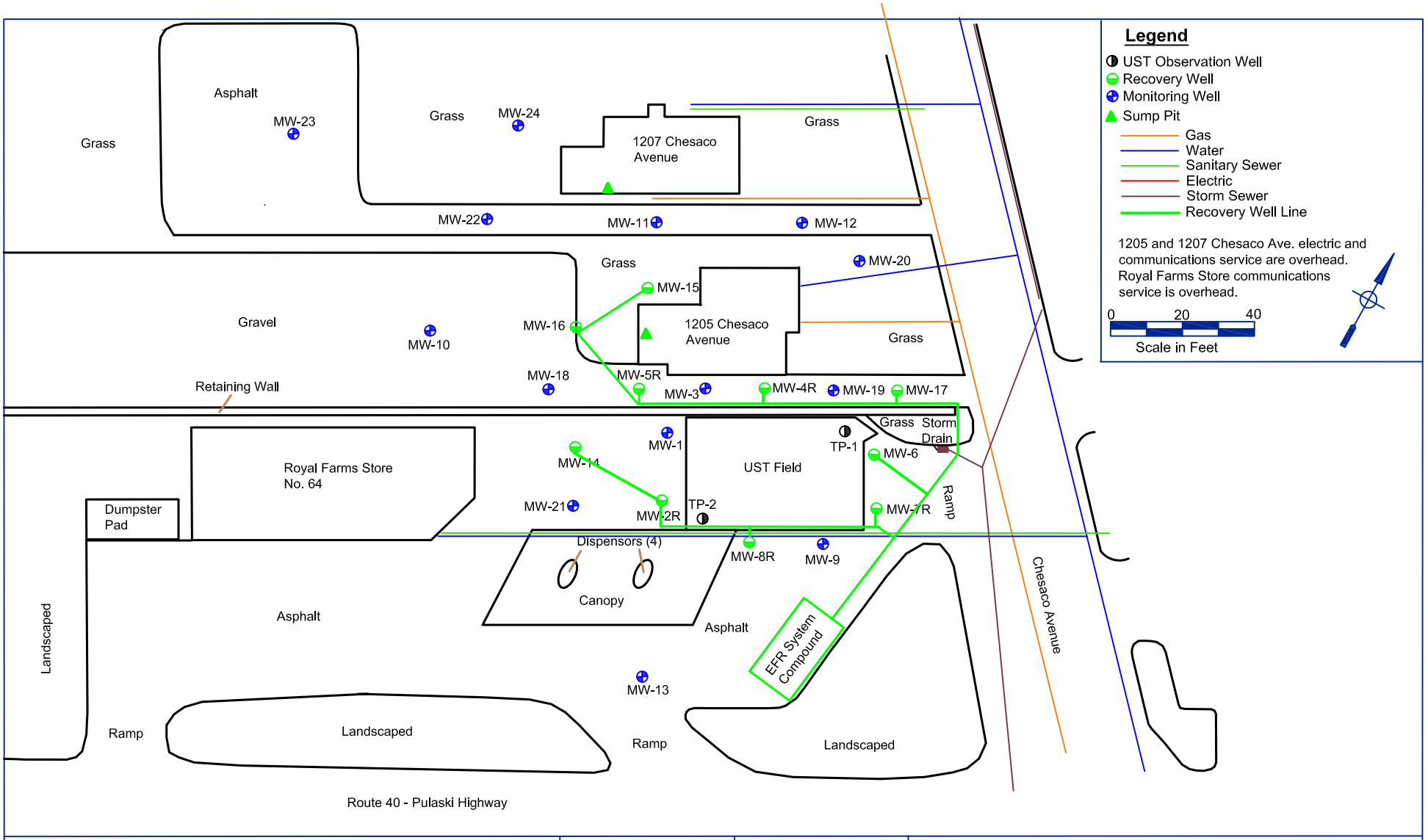
Project No.: 05-056	Drawn by: TER
Task No.: RF064	Date: 11-12-10
File: Site Features	Revision No.: 0

Figure 2 - Site Area Map
Royal Farms No. 64
7950 Pulaski Highway
Baltimore, MD 21237



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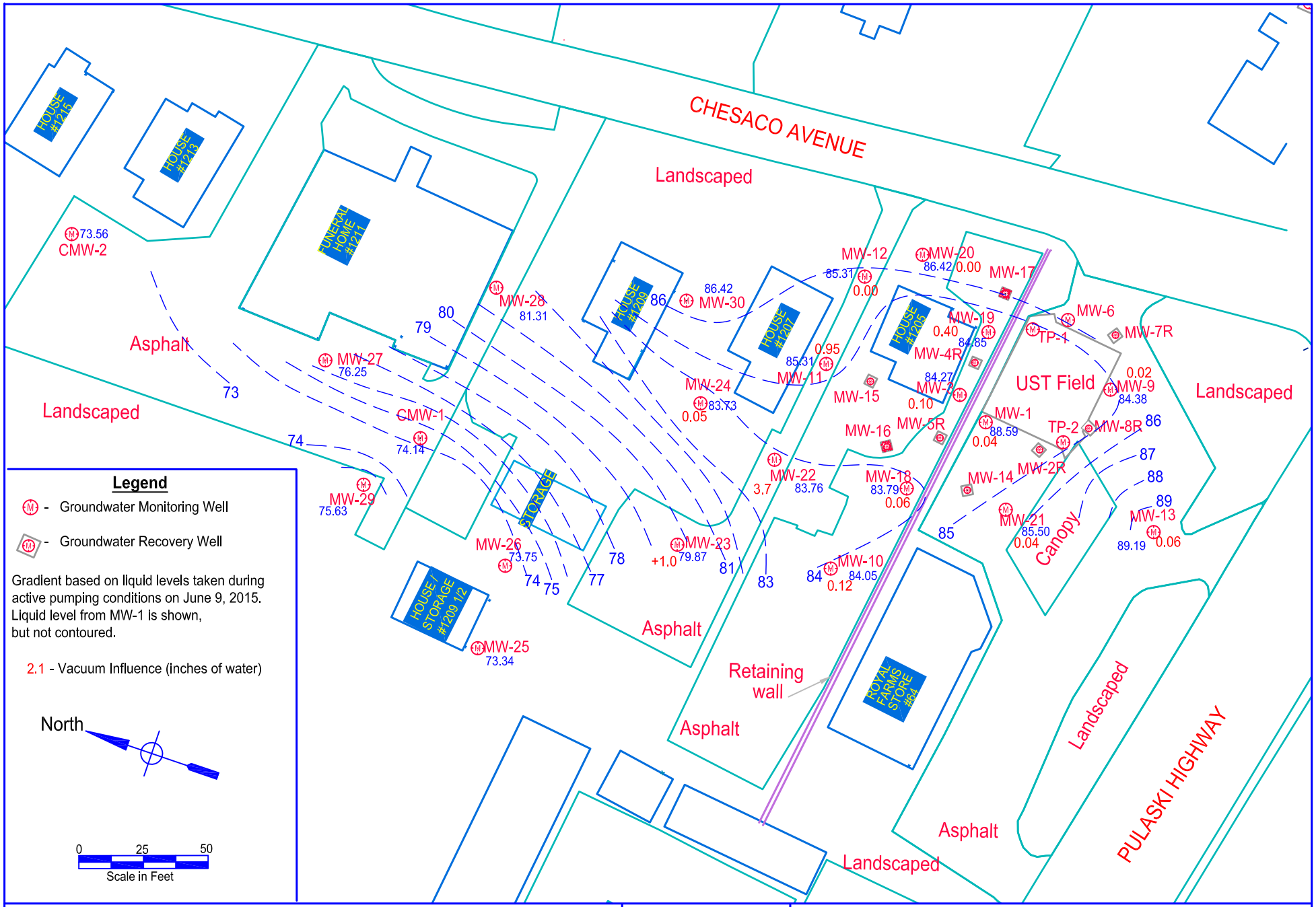
Project No. 05-056	Drawn by: JDW
Task No. RF064	Date: April 2014
File: Site Features	Revision No. 6

Figure 3 - Site Features with Utilities and Remediation System Layout
Royal Farms No. 64
7950 Pulaski Highway
Baltimore, MD 21237



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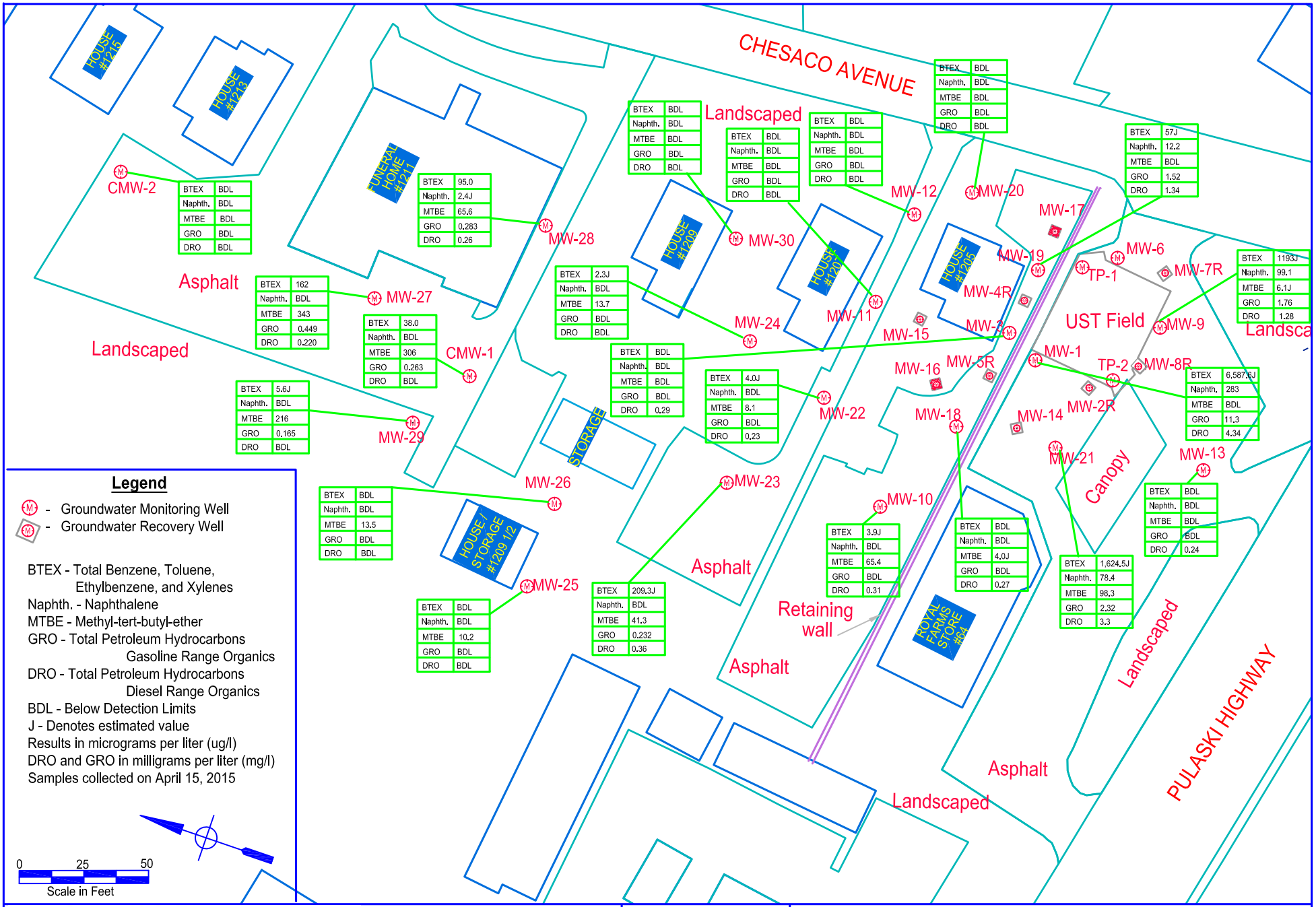
Drawn by: JDW

Project No. 05-056-RF064

Date: July 2015

Figure 4 - Groundwater Gradient Map
Royal Farms No. 64
7950 Pulaski Highway
Baltimore, MD 21237



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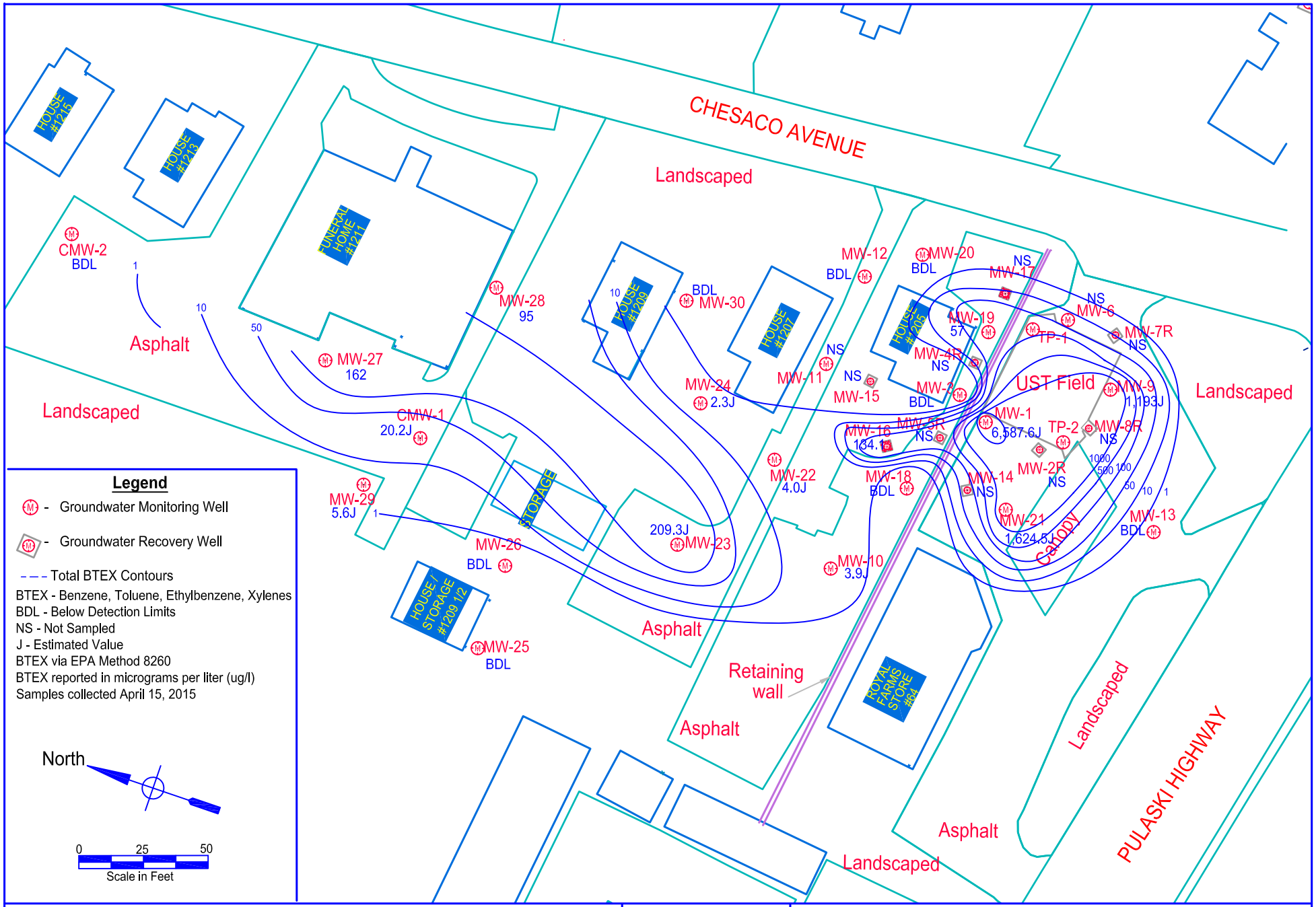
Date: July 2015

Figure 5 - Groundwater Quality Map
Royal Farms No. 64
7950 Pulaski Highway
Baltimore, MD 21237



Legend

- Groundwater Monitoring Well
- Groundwater Recovery Well
- Total BTEX Contours

BTEX - Benzene, Toluene, Ethylbenzene, Xylenes
BDL - Below Detection Limits
NS - Not Sampled
J - Estimated Value
BTEX via EPA Method 8260
BTEX reported in micrograms per liter (ug/l)
Samples collected April 15, 2015

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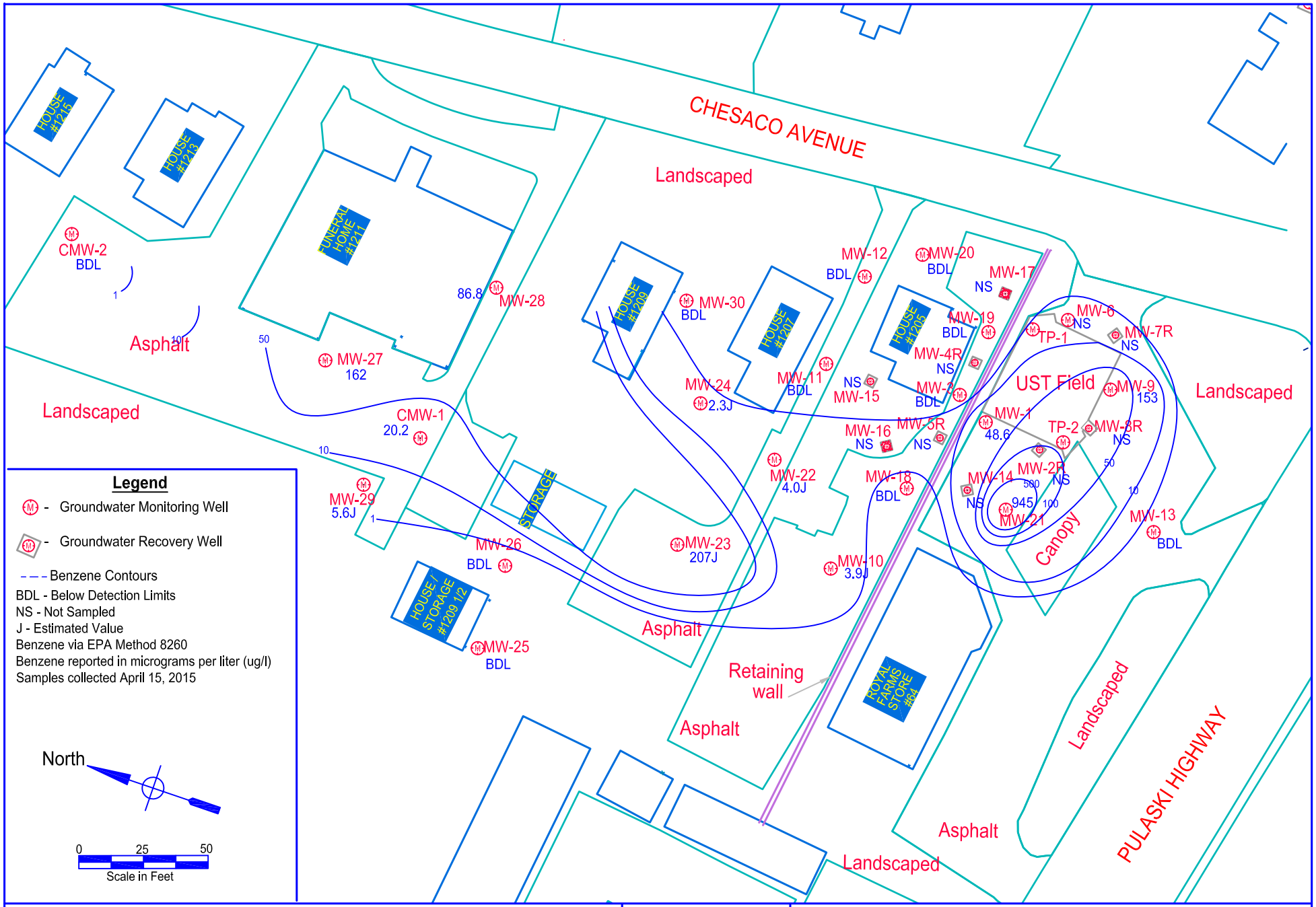
Project No. 05-056-RF064
Date: July 2015

Figure 6 - BTEX Contour Map
Royal Farms No. 64
7950 Pulaski Highway
Baltimore, MD 21237



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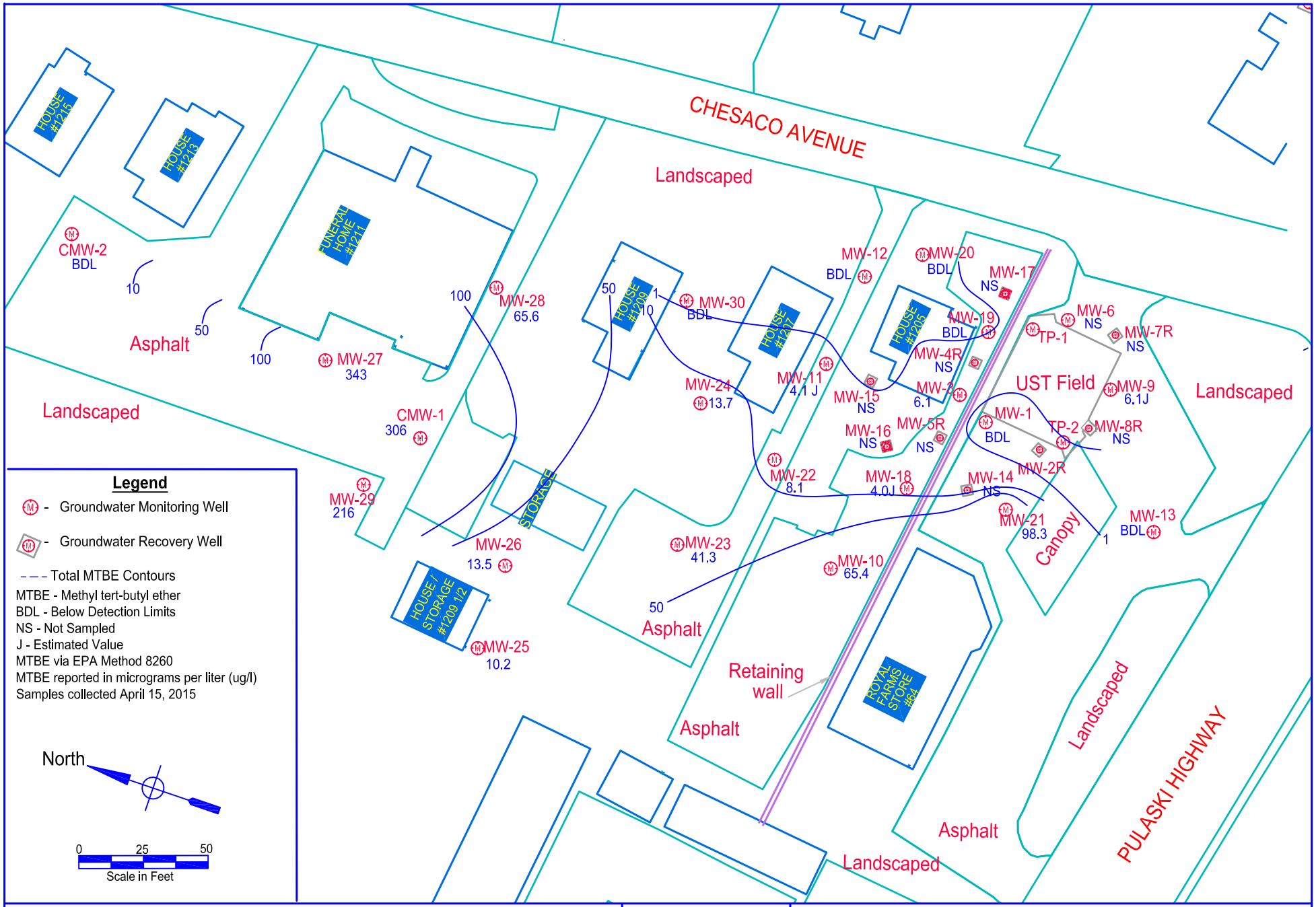
Date: July 2015

Figure 7 - Benzene Contour Map
Royal Farms No. 64
7950 Pulaski Highway
Baltimore, MD 21237



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Project No. 05-056-RF064

Date: July 2015

Figure 8 - MTBE Contour Map
Royal Farms No. 64
7950 Pulaski Highway
Baltimore, MD 21237

Attachment B

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
MW-1	12/14/2011	10.74	ND	98.98	88.24	NA	NA	NA		
	12/15/2011	13.01	ND	98.98	85.97	NA	NA	NA		0.75
	12/16/2011	13.28	ND	98.98	85.70	NA	NA	NA	stagnant odor	0.08
	12/19/2011	13.74	ND	98.98	85.24	NA	NA	NA	stagnant odor	0.15
	12/20/2011	13.95	13.95	98.98	85.03	85.03	85.03	0.00	Spotty Sheen	0.20
	12/21/2011	14.20	ND	98.98	84.78	NA	NA	NA		0.24
	12/22/2011	14.07	ND	98.98	84.91	NA	NA	NA	stagnant odor	0.26
	12/23/2011	13.65	ND	98.98	85.33	NA	NA	NA	stagnant odor	0.30
	12/27/2011	13.11	ND	98.98	85.87	NA	NA	NA	stagnant odor	0.17
	12/28/2011	13.27	ND	98.98	85.71	NA	NA	NA	stagnant odor	0.30
	12/29/2011	13.25	ND	98.98	85.73	NA	NA	NA	stagnant odor	0.28
	12/30/2011	13.36	ND	98.98	85.62	NA	NA	NA	stagnant odor	0.36
	1/3/2012	13.82	ND	98.98	85.16	NA	NA	NA	stagnant odor	0.26
	1/5/2012	14.07	ND	98.98	84.91	NA	NA	NA	stagnant odor	0.14
	1/9/2012	14.75	ND	98.98	84.23	NA	NA	NA	stagnant odor	
	1/10/2012	13.23	ND	98.98	85.75	NA	NA	NA	stagnant odor	
	1/18/2012	15.08	ND	98.98	83.90	NA	NA	NA	stagnant odor	
	1/25/2012	15.01	ND	98.98	83.97	NA	NA	NA	stagnant odor	
	1/30/2012	14.85	ND	98.98	84.13	NA	NA	NA	Slight Odor	
	2/6/2012	15.08	ND	98.98	83.90	NA	NA	NA	Slight Odor	
	2/13/2012	15.49	ND	98.98	83.49	NA	NA	NA	Moderate odor	
	2/20/2012	16.06	ND	98.98	82.92	NA	NA	NA	Slight Odor	1.00
	2/28/2012	16.18	ND	98.98	82.80	NA	NA	NA		
	3/5/2012	15.48	ND	98.98	83.50	NA	NA	NA		0.98
	3/12/2012	15.29	ND	98.98	83.69	NA	NA	NA	Slight Odor	
	3/19/2012	15.35	ND	98.98	83.63	NA	NA	NA		0.84
	3/29/2012	12.34	ND	98.98	86.64	NA	NA	NA	Slight Odor	
	4/2/2012	14.74	ND	98.98	84.24	NA	NA	NA	Slight Odor	
	4/10/2012	13.87	ND	98.98	85.11	NA	NA	NA	Slight Odor	
	4/16/2012	15.67	ND	98.98	83.31	NA	NA	NA		0.46
	4/23/2012	14.98	ND	98.98	84.00	NA	NA	NA	Moderate odor	
	4/30/2012	15.42	ND	98.98	83.56	NA	NA	NA	Moderate odor	
	5/8/2012*	14.32	ND	98.98	84.66	NA	NA	NA		
	5/15/2012	14.86	ND	98.98	84.12	NA	NA	NA	Slight Odor	
	5/21/2012	15.74	ND	98.98	83.24	NA	NA	NA	Moderate odor	0.44
	5/31/2012	15.38	ND	98.98	83.60	NA	NA	NA	Slight Odor	
	6/7/2012*	14.22	ND	98.98	84.76	NA	NA	NA		
	6/11/2012	15.26	ND	98.98	83.72	NA	NA	NA	Slight Odor	0.22
	6/18/2012	15.75	ND	98.98	83.23	NA	NA	NA	Slight Odor	
	6/25/2012	15.80	15.80	98.98	83.18	83.18	83.18	0.00	Slight Sheen	
	7/6/2012*	14.19	ND	98.98	84.79	NA	NA	NA	Slight Odor	
	7/10/2012	15.92	ND	98.98	83.06	NA	NA	NA	Slight Odor	
	7/17/2012	15.99	ND	98.98	82.99	NA	NA	NA	Slight Odor	0.27
	7/24/2012	15.21	ND	98.98	83.77	NA	NA	NA	Slight Odor	
	7/31/2012	14.89	ND	98.98	84.09	NA	NA	NA	Moderate odor	
	8/7/2012	14.63	ND	98.98	84.35	NA	NA	NA	Slight Odor	0.16
	8/14/2012	14.62	ND	98.98	84.36	NA	NA	NA	Slight Odor	
	8/21/2012	15.04	ND	98.98	83.94	NA	NA	NA	Slight Odor	
	8/28/2012	12.97	ND	98.98	86.01	NA	NA	NA	Slight Odor	
	9/5/2012	13.93	ND	98.98	85.05	NA	NA	NA	Slight Odor	0.16
	9/13/2012	14.24	ND	98.98	84.74	NA	NA	NA	Slight Odor	

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	9/18/2012	14.48	ND	98.98	84.50	NA	NA	NA	Slight Odor	
	9/26/2012	13.41	ND	98.98	85.57	NA	NA	NA	Slight Odor	
	10/5/2012*	12.44	ND	98.98	86.54	NA	NA	NA	Slight Odor	
	10/11/2012	NG	ND	98.98	NA	NA	NA	NA		0.05
	10/16/2012	14.74	ND	98.98	84.24	NA	NA	NA	Slight Odor	
	10/22/2012	13.23	ND	98.98	85.75	NA	NA	NA	Slight Odor	
	10/31/2012	11.64	ND	98.98	87.34	NA	NA	NA		
	11/7/2012	10.84	ND	98.98	88.14	NA	NA	NA		
	11/13/2012	11.85	ND	98.98	87.13	NA	NA	NA		0.22
	11/21/2012	12.65	ND	98.98	86.33	NA	NA	NA		
	11/27/2012	13.44	ND	98.98	85.54	NA	NA	NA		
	12/4/2012	14.35	ND	98.98	84.63	NA	NA	NA		0.17
	12/13/2012	14.68	ND	98.98	84.30	NA	NA	NA		
	12/21/2012	14.52	ND	98.98	84.46	NA	NA	NA		
	12/28/2012	14.64	ND	98.98	84.34	NA	NA	NA		
	1/4/2013	13.32	ND	98.98	85.66	NA	NA	NA		0.14
	1/9/2013	13.60	ND	98.98	85.38	NA	NA	NA		
	1/16/2013	12.02	ND	98.98	86.96	NA	NA	NA		
	1/21/2013*	11.79	ND	98.98	87.19	NA	NA	NA		
	2/8/2013	13.38	ND	98.98	85.60	NA	NA	NA		0.15
	3/8/2013	11.84	ND	98.98	87.14	NA	NA	NA	Slight Odor	0.07
	4/16/2013	12.12	ND	98.98	86.86	NA	NA	NA	Slight Odor	0.10
	4/17/2013*	10.87	ND	98.98	88.11	NA	NA	NA	Moderate odor	
	5/3/2013	11.67	ND	98.98	87.31	NA	NA	NA	Slight Odor	0.03
	6/13/2013	10.23	ND	98.98	88.75	NA	NA	NA	Slight Odor	0.09
	7/11/2013	11.97	ND	98.98	87.01	NA	NA	NA		0.02
	7/19/2013*	11.00	ND	98.98	87.98	NA	NA	NA		
	8/1/2013	11.97	ND	98.98	87.01	NA	NA	NA		0.00
	9/5/2013	15.04	ND	98.98	83.94	NA	NA	NA	Slight Odor	
	10/7/2013	14.87	ND	98.98	84.11	NA	NA	NA		
	10/8/2013*	13.04	ND	98.98	85.94	NA	NA	NA	Strong odor	0.00
	10/22/2013*	11.24	ND	98.98	87.74	NA	NA	NA	Slight Odor	
	11/6/2013	14.07	ND	98.98	84.91	NA	NA	NA		0.00
	12/4/2013	14.60	ND	98.98	84.38	NA	NA	NA	Moderate odor	0.16
	1/6/2014*	11.70	ND	98.98	87.28	NA	NA	NA	Moderate odor	
	2/24/2014	11.98	ND	98.98	87.00	NA	NA	NA		
	3/10/2014	11.36	ND	98.98	87.62	NA	NA	NA	Slight odor	0.0
	4/22/2014	12.85	ND	98.98	86.13	NA	NA	NA	Moderate odor	0.0
	4/23/2014*	10.63	ND	98.98	88.35	NA	NA	NA		
	5/7/2014	10.40	ND	98.98	88.58	NA	NA	NA		0.0
	6/3/2014	13.25	ND	98.98	85.73	NA	NA	NA		0.2
	7/3/2014	10.93	ND	98.98	88.05	NA	NA	NA		
	7/17/2014	9.30	ND	98.98	89.68	NA	NA	NA		
	8/25/2014	11.20	ND	98.98	87.78	NA	NA	NA		0.1
	9/9/2014	13.25	ND	98.98	85.73	NA	NA	NA	Slight Odor	0.03
	10/7/2014	14.44	ND	98.98	84.54	NA	NA	NA		
	10/8/2014*	12.90	ND	98.98	86.08	NA	NA	NA	Slight Odor	0.02
	11/4/2014	12.73	ND	98.98	86.25	NA	NA	NA		
	12/1/2014	12.72	ND	98.98	86.26	NA	NA	NA		0.04
	1/7/2015	11.00	ND	98.98	87.98	NA	NA	NA		
	1/9/2015*	10.03	ND	98.98	88.95	NA	NA	NA	Strong odor	

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	2/3/2015	11.51	ND	98.98	87.47	NA	NA	NA	Moderate odor	0.00
	3/17/2015	10.25	ND	98.98	88.73	NA	NA	NA		0.00
	4/14/2015	10.56	ND	98.98	88.42	NA	NA	NA		
	4/15/2015*	9.47	ND	98.98	89.51	NA	NA	NA		
	5/12/2015	10.88	ND	98.98	88.10	NA	NA	NA		0.00
	6/9/2015	10.39	ND	98.98	88.59	NA	NA	NA	Slight Odor	0.04
MW-2R	12/14/2011	11.81	ND	96.61	84.80	NA	NA	NA	Recovery Well	
	12/19/2011	15.21	ND	96.61	81.40	NA	NA	NA	Slight Odor	
	12/29/2011	15.61	ND	96.61	81.00	NA	NA	NA	Slight Odor	
	1/5/2012	14.83	ND	96.61	81.78	NA	NA	NA	stagnant odor	
	1/9/2012	14.91	ND	96.61	81.70	NA	NA	NA	stagnant odor	
	1/10/2012	14.33	14.33	96.61	82.28	82.28	82.28	0.00	Sheen	
	1/18/2012	15.15	ND	96.61	81.46	NA	NA	NA	stagnant odor	
	1/25/2012	14.53	ND	96.61	82.08	NA	NA	NA		
	2/13/2012	14.50	ND	96.61	82.11	NA	NA	NA	Moderate odor	
	3/29/2012	12.50	ND	96.61	84.11	NA	NA	NA	Slight Odor	
	4/11/2012	12.98	ND	96.61	83.63	NA	NA	NA	Moderate odor	
	5/8/2012*	14.34	ND	96.61	82.27	NA	NA	NA	Slight Odor	
	6/7/2012*	14.58	ND	96.61	82.03	NA	NA	NA	**Stinger depth: 17.00 ft.**	
	7/6/2012*	14.28	ND	96.61	82.33	NA	NA	NA		
	8/14/2012	16.03	ND	96.61	80.58	NA	NA	NA		
	9/5/2012	14.97	ND	96.61	81.64	NA	NA	NA		
	10/5/2012*	16.24	ND	96.61	80.37	NA	NA	NA	Slight Odor	
	11/13/2012	15.76	ND	96.61	80.85	NA	NA	NA		
	12/4/2012	16.20	ND	96.61	80.41	NA	NA	NA	Slight Odor	
	1/9/2013	16.40	ND	96.61	80.21	NA	NA	NA		
	1/21/2013*	15.02	ND	96.61	81.59	NA	NA	NA		
	2/8/2013	15.29	ND	96.61	81.32	NA	NA	NA		
	3/8/2013	14.17	ND	96.61	82.44	NA	NA	NA		
	4/16/2013	15.25	ND	96.61	81.36	NA	NA	NA	Slight Odor	
	5/3/2013	14.98	ND	96.61	81.63	NA	NA	NA		
	6/13/2013	12.90	ND	96.61	83.71	NA	NA	NA		
	7/11/2013	14.65	ND	96.61	81.96	NA	NA	NA		
	7/19/2013*	14.05	ND	96.61	82.56	NA	NA	NA		
	8/1/2013	16.04	ND	96.61	80.57	NA	NA	NA		
	9/5/2013	15.57	ND	96.61	81.04	NA	NA	NA		
	10/8/2013*	14.90	ND	96.61	81.71	NA	NA	NA		
	10/22/2013*	9.81	ND	96.61	86.80	NA	NA	NA		
	11/6/2013	14.76	ND	96.61	81.85	NA	NA	NA		
	12/16/2013	17.10	ND	96.61	79.51	NA	NA	NA		
	1/6/2014*	15.28	ND	96.61	81.33	NA	NA	NA	slight odor	
	2/24/2014	15.25	ND	96.61	81.36	NA	NA	NA		
	3/10/2014	13.66	ND	96.61	82.95	NA	NA	NA		
	4/22/2014	16.19	ND	96.61	80.42	NA	NA	NA		
	5/7/2014	15.31	ND	96.61	81.30	NA	NA	NA		
	6/3/2014	16.03	ND	96.61	80.58	NA	NA	NA		
	7/3/2014	13.56	ND	96.61	83.05	NA	NA	NA		
	7/17/2014	12.41	ND	96.61	84.20	NA	NA	NA	**Stinger Depth: 15.90**	
	8/25/2014	13.99	ND	96.61	82.62	NA	NA	NA		
	9/9/2014	14.91	ND	96.61	81.70	NA	NA	NA		
	10/8/2014	14.36	ND	96.61	82.25	NA	NA	NA		

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7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	11/4/2014	14.86	ND	96.61	81.75	NA	NA	NA		
	12/1/2014	15.07	ND	96.61	81.54	NA	NA	NA		
	1/9/2015*	12.25	ND	96.61	84.36	NA	NA	NA		
	2/3/2015	14.17	ND	96.61	82.44	NA	NA	NA		
	3/17/2015	13.51	ND	96.61	83.10	NA	NA	NA		
	4/14/2015	13.60	ND	96.61	83.01	NA	NA	NA		
	4/15/2015*	12.13	ND	96.61	84.48	NA	NA	NA		
	5/12/2015	13.07	ND	96.61	83.54	NA	NA	NA		
	6/9/2015	13.21	ND	96.61	83.40	NA	NA	NA		
MW-3	12/14/2011	6.72	ND	92.95	86.23	NA	NA	NA		
	12/15/2011	11.14	ND	92.95	81.81	NA	NA	NA		0.34
	12/16/2011	11.34	ND	92.95	81.61	NA	NA	NA		0.45
	12/19/2011	11.02	ND	92.95	81.93	NA	NA	NA		0.29
	12/20/2011	11.44	ND	92.95	81.51	NA	NA	NA	stagnant odor	0.46
	12/21/2011	11.54	ND	92.95	81.41	NA	NA	NA		0.37
	12/22/2011	11.41	ND	92.95	81.54	NA	NA	NA		0.32
	12/23/2011	11.82	ND	92.95	81.13	NA	NA	NA		0.40
	12/27/2011	11.03	ND	92.95	81.92	NA	NA	NA		0.29
	12/28/2011	11.79	ND	92.95	81.16	NA	NA	NA		0.17
	12/29/2011	11.64	ND	92.95	81.31	NA	NA	NA		0.18
	12/30/2011	11.72	ND	92.95	81.23	NA	NA	NA		0.30
	1/3/2012	11.30	ND	92.95	81.65	NA	NA	NA		0.30
	1/5/2012	11.51	ND	92.95	81.44	NA	NA	NA		0.59
	1/9/2012	11.16	ND	92.95	81.79	NA	NA	NA		
	1/10/2012	9.33	ND	92.95	83.62	NA	NA	NA		
	1/18/2012	11.63	ND	92.95	81.32	NA	NA	NA		
	1/25/2012	11.34	ND	92.95	81.61	NA	NA	NA		
	1/30/2012	11.36	ND	92.95	81.59	NA	NA	NA		
	2/6/2012	11.58	ND	92.95	81.37	NA	NA	NA		
	2/13/2012	11.73	ND	92.95	81.22	NA	NA	NA		
	2/20/2012	12.02	ND	92.95	80.93	NA	NA	NA		0.11
	2/28/2012	12.12	ND	92.95	80.83	NA	NA	NA		0.13
	3/5/2012	11.74	ND	92.95	81.21	NA	NA	NA		
	3/12/2012	11.78	ND	92.95	81.17	NA	NA	NA		
	3/19/2012	11.74	ND	92.95	81.21	NA	NA	NA		0.08
	3/29/2012	7.45	ND	92.95	85.50	NA	NA	NA		
	4/2/2012	10.18	ND	92.95	82.77	NA	NA	NA		
	4/10/2012	9.55	ND	92.95	83.40	NA	NA	NA		
	4/16/2012	11.45	ND	92.95	81.50	NA	NA	NA		0.07
	4/23/2012	10.91	ND	92.95	82.04	NA	NA	NA		
	4/30/2012	11.61	ND	92.95	81.34	NA	NA	NA		
	5/8/2012*	9.85	ND	92.95	83.10	NA	NA	NA		
	5/15/2012	10.13	ND	92.95	82.82	NA	NA	NA		
	5/21/2012	10.57	ND	92.95	82.38	NA	NA	NA		0.07
	5/31/2012	11.28	ND	92.95	81.67	NA	NA	NA		
	6/7/2012*	10.21	ND	92.95	82.74	NA	NA	NA		
	6/11/2012	11.46	ND	92.95	81.49	NA	NA	NA		0.04
	6/18/2012	11.44	ND	92.95	81.51	NA	NA	NA		
	6/25/2012	10.90	ND	92.95	82.05	NA	NA	NA		
	7/6/2012*	9.49	ND	92.95	83.46	NA	NA	NA		
	7/10/2012	11.20	ND	92.95	81.75	NA	NA	NA		

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Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	7/17/2012	11.42	ND	92.95	81.53	NA	NA	NA		0.05
	7/24/2012	11.39	ND	92.95	81.56	NA	NA	NA		
	7/31/2012	11.41	ND	92.95	81.54	NA	NA	NA		
	8/7/2012	11.45	ND	92.95	81.50	NA	NA	NA		0.00
	8/14/2012	11.50	ND	92.95	81.45	NA	NA	NA		
	8/21/2012	12.09	ND	92.95	80.86	NA	NA	NA		
	8/28/2012	9.71	ND	92.95	83.24	NA	NA	NA		
	9/5/2012	11.76	ND	92.95	81.19	NA	NA	NA		0.09
	9/13/2012	12.51	ND	92.95	80.44	NA	NA	NA		
	9/18/2012	12.22	ND	92.95	80.73	NA	NA	NA		
	9/26/2012	11.28	ND	92.95	81.67	NA	NA	NA		
	10/5/2012*	10.32	ND	92.95	82.63	NA	NA	NA		
	10/11/2012	11.90	ND	92.95	81.05	NA	NA	NA		0.07
	10/16/2012	11.69	ND	92.95	81.26	NA	NA	NA		
	10/22/2012	12.03	ND	92.95	80.92	NA	NA	NA		
	10/31/2012	10.86	ND	92.95	82.09	NA	NA	NA		
	11/7/2012	10.99	ND	92.95	81.96	NA	NA	NA		
	11/13/2012	10.18	ND	92.95	82.77	NA	NA	NA		
	11/21/2012	11.31	ND	92.95	81.64	NA	NA	NA		
	11/27/2012	11.91	ND	92.95	81.04	NA	NA	NA		
	12/4/2012	12.51	ND	92.95	80.44	NA	NA	NA		
	12/13/2012	12.43	ND	92.95	80.52	NA	NA	NA		
	12/21/2012	11.52	ND	92.95	81.43	NA	NA	NA		
	12/28/2012	12.87	ND	92.95	80.08	NA	NA	NA		
	1/4/2013	12.84	ND	92.95	80.11	NA	NA	NA		
	1/9/2013	12.86	ND	92.95	80.09	NA	NA	NA		
	1/16/2013	11.39	ND	92.95	81.56	NA	NA	NA		
	1/21/2013*	10.42	ND	92.95	82.53	NA	NA	NA		
	2/8/2013	12.14	ND	92.95	80.81	NA	NA	NA		0.04
	3/8/2013	11.13	ND	92.95	81.82	NA	NA	NA		0.04
	4/16/2013	15.32	ND	92.95	77.63	NA	NA	NA	V. Slight	0.03
	4/17/2013*	9.70	ND	92.95	83.25	NA	NA	NA		
	5/3/2013	10.55	ND	92.95	82.40	NA	NA	NA		0.03
	6/13/2013	10.60	ND	92.95	82.35	NA	NA	NA		0.02
	7/11/2013	10.66	ND	92.95	82.29	NA	NA	NA		0.00
	7/19/2013*	9.10	ND	92.95	83.85	NA	NA	NA		
	8/1/2013	11.29	ND	92.95	81.66	NA	NA	NA		0.20
	9/5/2013	11.67	ND	92.95	81.28	NA	NA	NA		
	10/7/2013	2.40	ND	92.95	90.55	NA	NA	NA		0.50
	10/8/2013*	10.04	ND	92.95	82.91	NA	NA	NA		
	10/22/2013*	9.32	ND	92.95	83.63	NA	NA	NA		
	11/6/2013	11.24	ND	92.95	81.71	NA	NA	NA		0.30
	12/4/2013	12.15	ND	92.95	80.80	NA	NA	NA		0.06
	1/6/2014*	7.69	ND	92.95	85.26	NA	NA	NA		
	2/24/2014	10.40	ND	92.95	82.55	NA	NA	NA		
	3/10/2014	9.34	ND	92.95	83.61	NA	NA	NA		0.0
	4/22/2014	11.72	ND	93.15	81.43	NA	NA	NA		0.1
	4/23/2014*	9.65	ND	93.15	83.50	NA	NA	NA		
	5/7/2014	6.88	ND	93.15	86.27	NA	NA	NA		0.0
	6/3/2014	11.72	ND	93.15	81.43	NA	NA	NA		
	7/3/2014	8.58	ND	93.15	84.57	NA	NA	NA		0.5

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	7/17/2014	6.75	ND	93.15	86.40	NA	NA	NA		
	8/25/2014	10.50	ND	93.15	82.65	NA	NA	NA		0.08
	9/9/2014	10.84	ND	93.15	82.31	NA	NA	NA		0.38
	10/7/2014	11.18	ND	93.15	81.97	NA	NA	NA		0.38
	10/8/2014*	9.40	ND	93.15	83.75	NA	NA	NA		
	11/4/2014	10.54	ND	93.15	82.61	NA	NA	NA		0.30
	12/1/2014	10.20	ND	93.15	82.95	NA	NA	NA		0.22
	1/7/2015	7.90	ND	93.15	85.25	NA	NA	NA		0.24
	1/9/2015*	6.60	ND	93.15	86.55	NA	NA	NA		
	2/3/2015	9.47	ND	93.15	83.68	NA	NA	NA		0.12
	3/17/2015	8.32	ND	93.15	84.83	NA	NA	NA		0.00
	4/14/2015	8.32	ND	93.15	84.83	NA	NA	NA		
	4/15/2015*	6.35	ND	93.15	86.80	NA	NA	NA		
	5/12/2015	7.92	ND	93.15	85.23	NA	NA	NA		0.22
	6/9/2015	8.88	ND	93.15	84.27	NA	NA	NA		0.10
MW-4R	12/14/2011	6.97	6.97	93.05	86.08	86.08	86.08	0.00	Sheen	
	12/19/2011	9.65	9.65	93.05	83.40	83.40	83.40	0.00	Spotty Sheen	NM
	12/29/2011	11.16	11.16	93.05	81.89	81.89	81.89	0.00	sheen	
	1/5/2012	9.91	ND	93.05	83.14	NA	NA	NA	Moderate odor	
	1/9/2012	9.50	9.50	93.05	83.55	83.55	83.55	0.00	Sheen	
	1/10/2012	9.34	9.34	93.05	83.71	83.71	83.71	0.00	Spotty Sheen	
	1/18/2012	9.84	ND	93.05	83.21	NA	NA	NA	Moderate odor	
	1/25/2012	9.72	ND	93.05	83.33	NA	NA	NA	Slight Odor	
	2/13/2012	9.91	ND	93.05	83.14	NA	NA	NA	Slight Odor	
	3/29/2012	7.66	ND	93.05	85.39	NA	NA	NA		
	4/11/2012	8.16	ND	93.05	84.89	NA	NA	NA	Slight Odor	
	5/8/2012*	9.78	ND	93.05	83.27	NA	NA	NA		
	6/7/2012*	10.09	ND	93.05	82.96	NA	NA	NA	**Stinger depth: 12.20 ft.**	
	7/6/2012*	9.61	ND	93.05	83.44	NA	NA	NA		
	8/14/2012	11.42	ND	93.05	81.63	NA	NA	NA		
	9/5/2012	11.72	ND	93.05	81.33	NA	NA	NA		
	10/5/2012*	10.30	ND	93.05	82.75	NA	NA	NA		
	11/13/2012	10.70	ND	93.05	82.35	NA	NA	NA		
	12/4/2012	11.85	ND	93.05	81.20	NA	NA	NA		
	1/9/2013	12.10	ND	93.05	80.95	NA	NA	NA		
	1/21/2013*	10.32	ND	93.05	82.73	NA	NA	NA		
	2/8/2013	11.34	ND	93.05	81.71	NA	NA	NA		
	3/8/2013	11.09	ND	93.05	81.96	NA	NA	NA		
	4/16/2013	12.25	ND	93.05	80.80	NA	NA	NA		
	5/3/2013	10.26	ND	93.05	82.79	NA	NA	NA		
	6/13/2013	8.60	ND	93.05	84.45	NA	NA	NA		
	7/11/2013	10.64	ND	93.05	82.41	NA	NA	NA		
	7/19/2013*	9.63	ND	93.05	83.42	NA	NA	NA		
	8/1/2013	12.12	ND	93.05	80.93	NA	NA	NA		
	9/5/2013	11.21	ND	93.05	81.84	NA	NA	NA		
	10/8/2013*	10.21	ND	93.05	82.84	NA	NA	NA		
	10/22/2013*	9.81	ND	93.05	83.24	NA	NA	NA		
	11/6/2013	10.91	ND	93.05	82.14	NA	NA	NA		
	12/16/2013	12.20	ND	93.05	80.85	NA	NA	NA		
	1/6/2014*	9.43	ND	93.05	83.62	NA	NA	NA		
	2/24/2014	11.60	ND	93.05	81.45	NA	NA	NA		

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	3/10/2014	8.72	ND	93.05	84.33	NA	NA	NA		
	4/22/2014	11.55	ND	93.05	81.50	NA	NA	NA		
	5/7/2014	7.95	ND	93.05	85.10	NA	NA	NA		
	6/3/2014	11.60	ND	93.05	81.45	NA	NA	NA		
	7/3/2014	9.65	ND	93.05	83.40	NA	NA	NA		
	7/17/2014	7.40	ND	93.05	85.65	NA	NA	NA	**Stinger Depth 11.15**	
	8/25/2014	10.65	ND	93.05	82.40	NA	NA	NA		
	9/9/2014	11.87	ND	93.05	81.18	NA	NA	NA		
	10/8/2014	9.78	ND	93.05	83.27	NA	NA	NA		
	11/4/2014	10.93	ND	93.05	82.12	NA	NA	NA		
	12/1/2014	11.58	ND	93.05	81.47	NA	NA	NA		
	1/9/2015*	7.30	ND	93.05	85.75	NA	NA	NA		
	2/3/2015	12.02	ND	93.05	81.03	NA	NA	NA		
	3/17/2015	10.25	ND	93.05	82.80	NA	NA	NA		
	4/14/2015	10.00	ND	93.05	83.05	NA	NA	NA		
	4/15/2015*	7.30	ND	93.05	85.75	NA	NA	NA		
	5/12/2015	8.47	ND	93.05	84.58	NA	NA	NA		
	6/9/2015	8.49	ND	93.05	84.56	NA	NA	NA		
MW-5R	12/14/2011	4.95	ND	91.35	86.40	NA	NA	NA	Recovery Well	
	12/19/2011	8.19	ND	91.35	83.16	NA	NA	NA	stagnant odor	NM
	12/29/2011	8.58	8.58	91.35	82.77	82.77	82.77	0.00	thin sheen	
	1/5/2012	8.17	8.17	91.35	83.18	83.18	83.18	0.00	thin sheen	
	1/9/2012	8.19	8.19	91.35	83.16	83.16	83.16	0.00	Sheen	
	1/10/2012	7.55	7.55	91.35	83.80	83.80	83.80	0.00	Sheen	
	1/18/2012	8.51	ND	91.35	82.84	NA	NA	NA	stagnant odor	
	1/25/2012	8.23	ND	91.35	83.12	NA	NA	NA	Moderate odor	
	2/13/2012	8.12	ND	91.35	83.23	NA	NA	NA	Slight Odor	
	3/5/2012	8.79	ND	91.35	82.56	NA	NA	NA		
	3/29/2012	5.71	ND	91.35	85.64	NA	NA	NA		
	4/11/2012	6.31	6.31	91.35	85.04	85.04	85.04	0.00	Sheen	
	5/8/2012*	8.12	ND	91.35	83.23	NA	NA	NA	Slight Odor	
	5/15/2012	8.35	ND	91.35	83.00	NA	NA	NA		
	6/7/2012*	8.49	ND	91.35	82.86	NA	NA	NA	**Stinger depth: 11.25 ft.**	
	7/6/2012*	7.96	ND	91.35	83.39	NA	NA	NA		
	8/14/2012	10.90	ND	91.35	80.45	NA	NA	NA	Slight odor	
	9/5/2012	11.18	ND	91.35	80.17	NA	NA	NA		
	10/5/2012*	8.63	ND	91.35	82.72	NA	NA	NA		
	11/13/2012	8.97	ND	91.35	82.38	NA	NA	NA		
	12/4/2012	11.09	ND	91.35	80.26	NA	NA	NA		
	1/9/2013	10.38	ND	91.35	80.97	NA	NA	NA		
	1/21/2013*	8.71	ND	91.35	82.64	NA	NA	NA		
	2/8/2013	13.41	ND	91.35	77.94	NA	NA	NA		
	3/8/2013	13.60	ND	91.35	77.75	NA	NA	NA		
	4/16/2013	13.57	ND	91.35	77.78	NA	NA	NA		
	5/3/2013	8.75	ND	91.35	82.60	NA	NA	NA		
	6/13/2013	7.35	ND	91.35	84.00	NA	NA	NA		
	7/11/2013	9.11	ND	91.35	82.24	NA	NA	NA		
	7/19/2013*	7.70	ND	91.35	83.65	NA	NA	NA		
	8/1/2013	10.65	ND	91.35	80.70	NA	NA	NA		
	9/5/2013	9.84	ND	91.35	81.51	NA	NA	NA		
	10/8/2013*	8.43	ND	91.35	82.92	NA	NA	NA		

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Gasoline Fueling Station – Royal Farms #64
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	10/22/2013*	7.58	ND	91.35	83.77	NA	NA	NA		
	11/6/2013	9.28	ND	91.35	82.07	NA	NA	NA		
	12/16/2013	10.49	ND	91.35	80.86	NA	NA	NA		
	1/6/2014*	8.49	ND	91.35	82.86	NA	NA	NA		
	2/24/2014	9.46	ND	91.35	81.89	NA	NA	NA		
	3/10/2014	6.99	ND	91.35	84.36	NA	NA	NA		
	4/22/2014	9.79	ND	91.35	81.56	NA	NA	NA		
	5/7/2014	6.19	ND	91.35	85.16	NA	NA	NA		
	6/3/2014	9.62	ND	91.35	81.73	NA	NA	NA		
	7/3/2014	7.59	ND	91.35	83.76	NA	NA	NA		
	7/17/2014	5.30	ND	91.35	86.05	NA	NA	NA	**Stinger Depth: 9.20**	
	8/25/2014	8.92	ND	91.35	82.43	NA	NA	NA		
	9/9/2014	9.81	ND	91.35	81.54	NA	NA	NA		
	10/8/2014	8.02	ND	91.35	83.33	NA	NA	NA		
	11/4/2014	8.70	ND	91.35	82.65	NA	NA	NA		
	12/1/2014	8.98	ND	91.35	82.37	NA	NA	NA		
	1/9/2015*	5.29	ND	91.35	86.06	NA	NA	NA		
	2/3/2015	7.95	ND	91.35	83.40	NA	NA	NA		
	3/17/2015	7.31	ND	91.35	84.04	NA	NA	NA		
	4/14/2015	7.20	ND	91.35	84.15	NA	NA	NA		
	4/15/2015*	5.20	ND	91.35	86.15	NA	NA	NA		
	5/12/2015	6.54	ND	91.35	84.81	NA	NA	NA		
	6/9/2015	6.61	ND	91.35	84.74	NA	NA	NA		
MW-6	12/14/2011	12.91	ND	99.15	86.24	NA	NA	NA		
	12/15/2011	16.19	ND	99.15	82.96	NA	NA	NA		0.12
	12/16/2011	16.36	ND	99.15	82.79	NA	NA	NA	stagnant odor	0.11
	12/19/2011	16.02	ND	99.15	83.13	NA	NA	NA	stagnant odor	0.08
	12/20/2011	16.33	ND	99.15	82.82	NA	NA	NA	stagnant odor	0.10
	12/21/2011	16.39	ND	99.15	82.76	NA	NA	NA		0.06
	12/22/2011	16.15	ND	99.15	83.00	NA	NA	NA		0.08
	12/23/2011	16.54	ND	99.15	82.61	NA	NA	NA	Stagnant odor	0.16
	12/27/2011	15.89	ND	99.15	83.26	NA	NA	NA	Stagnant odor	0.05
	12/28/2011	16.43	ND	99.15	82.72	NA	NA	NA	stagnant odor	0.11
	12/29/2011	16.33	ND	99.15	82.82	NA	NA	NA	Slight Odor	0.07
	12/30/2011	16.27	ND	99.15	82.88	NA	NA	NA		0.06
	1/3/2012	16.00	ND	99.15	83.15	NA	NA	NA	Slight Odor	0.05
	1/5/2012	16.09	ND	99.15	83.06	NA	NA	NA		0.16
	1/9/2012	16.02	ND	99.15	83.13	NA	NA	NA		
	1/10/2012	14.67	ND	99.15	84.48	NA	NA	NA	stagnant odor	
	1/18/2012	16.19	16.19	99.15	82.96	82.96	82.96	0.00	thick sheen	
	1/25/2012	15.68	15.68	99.15	83.47	83.47	83.47	0.00	thick sheen	
	1/30/2012	15.56	15.56	99.15	83.59	83.59	83.59	0.00	Sheen	
	2/6/2012	15.68	15.68	99.15	83.47	83.47	83.47	0.00	Sheen	
	2/13/2012	15.79	15.79	99.15	83.36	83.36	83.36	0.00	Sheen	
	2/20/2012	15.96	15.96	99.15	83.19	83.19	83.19	0.00	Sheen	0.17
	2/28/2012	16.08	16.08	99.15	83.07	83.07	83.07	0.00	Sheen	0.09
	3/5/2012	15.83	15.82	99.15	83.32	83.33	83.33	0.01	Sheen	
	3/12/2012	15.84	15.84	99.15	83.31	83.31	83.31	0.00	Sheen	
	3/19/2012	15.82	15.82	99.15	83.33	83.33	83.33	0.00	Sheen	0.06
	3/29/2012	13.51	13.51	99.15	85.64	85.64	85.64	0.00	Sheen	
	4/2/2012	14.94	14.94	99.15	84.21	84.21	84.21	0.00	Sheen	

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	4/10/2012	14.42	14.42	99.15	84.73	84.73	84.73	0.00	Sheen	
	4/16/2012	15.72	15.72	99.15	83.43	83.43	83.43	0.00	Sheen	0.08
	4/23/2012	15.42	15.42	99.15	83.73	83.73	83.73	0.00	Sheen	
	4/30/2012	15.74	15.74	99.15	83.41	83.41	83.41	0.00	Sheen	
	5/8/2012*	14.92	ND	99.15	84.23	NA	NA	NA	Slight Odor	
	5/15/2012	15.35	ND	99.15	83.80	NA	NA	NA	Moderate odor	
	5/21/2012	15.72	15.72	99.15	83.43	83.43	83.43	0.00	Sheen	0.07
	5/31/2012	15.79	15.79	99.15	83.36	83.36	83.36	0.00	Sheen	
	6/7/2012*	15.13	15.12	99.15	84.02	84.03	84.03	0.01		
	6/11/2012	15.86	15.86	99.15	83.29	83.29	83.29	0.00	Sheen	0.15
	6/18/2012	15.87	15.86	99.15	83.28	83.29	83.29	0.01		
	6/25/2012	15.61	15.61	99.15	83.54	83.54	83.54	0.00	Sheen	
	7/6/2012*	14.78	14.76	99.15	84.37	84.39	84.38	0.02		
	7/10/2012	15.89	15.86	99.15	83.26	83.29	83.28	0.03		
	7/17/2012	15.96	15.94	99.15	83.19	83.21	83.20	0.02		0.03
	7/24/2012	15.96	15.95	99.15	83.19	83.20	83.20	0.01		
	7/31/2012	16.02	16.01	99.15	83.13	83.14	83.14	0.01		
	8/7/2012	16.12	16.10	99.15	83.03	83.05	83.04	0.02	Used for Recovery**	
	8/14/2012	16.19	16.19	99.15	82.96	82.96	82.96	0.00	Used for Recovery**	
	8/21/2012	16.61	ND	99.15	82.54	NA	NA	NA	Strong odor	
	8/28/2012	14.84	ND	99.15	84.31	NA	NA	NA	Used for Recovery**	
	9/5/2012	16.13	ND	99.15	83.02	NA	NA	NA	Used for Recovery**	
	9/13/2012	16.86	ND	99.15	82.29	NA	NA	NA	No odor	
	9/18/2012	15.74	ND	99.15	83.41	NA	NA	NA	Moderate odor	
	9/26/2012	16.20	ND	99.15	82.95	NA	NA	NA	Slight Odor	
	10/5/2012*	15.66	ND	99.15	83.49	NA	NA	NA	Moderate odor	
	10/9/2012	NG	NG	99.15	NA	NA	NA	NA	Used for Recovery**	
	10/11/2012	16.44	ND	99.15	82.71	NA	NA	NA	Slight Odor	0.04
	10/16/2012	16.15	ND	99.15	83.00	NA	NA	NA	Slight Odor	
	10/22/2012	16.46	ND	99.15	82.69	NA	NA	NA	Slight Odor	
	10/31/2012	14.18	ND	99.15	84.97	NA	NA	NA	Strong odor	
	11/7/2012	15.30	ND	99.15	83.85	NA	NA	NA		
	11/13/2012	15.75	ND	99.15	83.40	NA	NA	NA		0.02
	11/21/2012	16.27	ND	99.15	82.88	NA	NA	NA		
	11/27/2012	16.21	ND	99.15	82.94	NA	NA	NA		
	12/4/2012	16.45	ND	99.15	82.70	NA	NA	NA	Used for Recovery**	
	12/13/2012	16.52	ND	99.15	82.63	NA	NA	NA		
	12/21/2012	16.45	ND	99.15	82.70	NA	NA	NA		
	12/28/2012	15.27	ND	99.15	83.88	NA	NA	NA		
	1/4/2013	15.65	ND	99.15	83.50	NA	NA	NA		0.02
	1/9/2013	15.81	ND	99.15	83.34	NA	NA	NA		
	1/16/2013	14.40	ND	99.15	84.75	NA	NA	NA		
	1/21/2013*	14.54	ND	99.15	84.61	NA	NA	NA		
	2/8/2013	14.89	ND	99.15	84.26	NA	NA	NA		0.00
	3/8/2013	14.14	ND	99.15	85.01	NA	NA	NA	Used for Recovery**	
	3/21/2013	NG	NG	99.15	NA	NA	NA	NA	Used for Recovery**	
	4/16/2013	19.58	19.58	99.15	79.57	79.57	79.57	0.00	Sheen	0.00
	4/17/2013*	14.76	ND	99.15	84.39	NA	NA	NA	Strong odor	
	5/3/2013	16.19	16.19	99.15	82.96	82.96	82.96	0.00	Used for Recovery**	
	5/3/2013	15.34	ND	99.15	83.81	NA	NA	NA	Strong odor	0.00
	6/13/2013	10.85	ND	99.15	88.30	NA	NA	NA	Strong odor	0.00

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	7/11/2013	15.30	ND	99.15	83.85	NA	NA	NA	Slight odor	0.02
	7/19/2013*	14.35	ND	99.15	84.80	NA	NA	NA		
	8/1/2013	16.13	ND	99.15	83.02	NA	NA	NA	Moderate odor	0.00
	9/5/2013	16.10	ND	99.15	83.05	NA	NA	NA	Slight Odor	
	10/7/2013	16.05	ND	99.15	83.10	NA	NA	NA		
	10/8/2013*	15.44	ND	99.15	83.71	NA	NA	NA	Moderate odor	
	10/22/2013*	14.81	ND	99.15	84.34	NA	NA	NA	Strong odor	
	11/6/2013	16.30	16.30	99.15	82.85	82.85	82.85	0.00	Sheen	0.00
	12/4/2013	16.50	16.50	99.15	82.65	82.65	82.65	0.00	Sheen	0.03
	1/6/2014*	14.09	16.50	99.15	85.06	NA	NA	NA	Strong odor	
	2/24/2014	14.27	ND	99.15	84.88	NA	NA	NA		
	3/10/2014	14.04	ND	99.15	85.11	NA	NA	NA	Moderate odor	0.0
	3/12/2014	MW-6 converted to a recovery well (hooked into the remediation system)							**Stinger depth - 18.75 ft**	
	4/22/2014	18.14	ND	99.15	81.01	NA	NA	NA		
	5/7/2014	13.06	ND	99.15	86.09	NA	NA	NA		
	6/3/2014	7.07	ND	99.15	92.08	NA	NA	NA		
	7/3/2014	15.25	ND	99.15	83.90	NA	NA	NA	3/4 Open	
	7/17/2014	12.73	ND	99.15	86.42	NA	NA	NA	**Stinger Depth: 18.20**	
	8/25/2014	NG	ND	99.15	NG	NA	NA	NA	3/4 Open	
	9/9/2014	17.08	ND	99.15	82.07	NA	NA	NA		
	10/8/2014	14.38	ND	99.15	84.77	NA	NA	NA		
	11/4/2014	6.91	ND	99.15	92.24	NA	NA	NA	3/4 Open	
	12/1/2014	17.31	ND	99.15	81.84	NA	NA	NA		
	1/9/2015*	12.03	ND	99.15	87.12	NA	NA	NA		
	2/3/2015	17.00	ND	99.15	82.15	NA	NA	NA		
	3/17/2015	15.78	ND	99.15	83.37	NA	NA	NA		
	4/14/2015	13.95	ND	99.15	85.20	NA	NA	NA		
	4/15/2015*	12.53	ND	99.15	86.62	NA	NA	NA		
	5/12/2015	13.81	ND	99.15	85.34	NA	NA	NA		
	6/9/2015	14.00	ND	99.15	85.15	NA	NA	NA		
MW-7R	12/14/2011	12.88	ND	99.38	86.50	NA	NA	NA	Recovery Well	
	12/19/2011	15.27	ND	99.38	84.11	NA	NA	NA		
	12/29/2011	16.55	ND	99.38	82.83	NA	NA	NA		
	1/5/2012	16.18	ND	99.38	83.20	NA	NA	NA		
	1/9/2012	16.39	ND	99.38	82.99	NA	NA	NA	stagnant odor	
	1/10/2012	15.27	ND	99.38	84.11	NA	NA	NA	Slight Odor	
	1/18/2012	16.31	ND	99.38	83.07	NA	NA	NA	Stagnant odor	
	1/25/2012	15.57	ND	99.38	83.81	NA	NA	NA		
	2/13/2012	16.59	ND	99.38	82.79	NA	NA	NA		
	3/5/2012	18.00	ND	99.38	81.38	NA	NA	NA		
	3/29/2012	13.68	ND	99.38	85.70	NA	NA	NA	Slight Odor	
	4/11/2012	15.12	ND	99.38	84.26	NA	NA	NA	Slight Odor	
	5/8/2012*	15.98	ND	99.38	83.40	NA	NA	NA		
	5/15/2012	20.10	ND	99.38	79.28	NA	NA	NA		
	6/7/2012*	16.81	ND	99.38	82.57	NA	NA	NA	**Stinger depth - 20.25 ft**	
	7/6/2012*	16.20	ND	99.38	83.18	NA	NA	NA	Slight Odor	
	8/14/2012	20.20	ND	99.38	79.18	NA	NA	NA		
	9/5/2012	18.30	ND	99.38	81.08	NA	NA	NA		
	10/5/2012*	16.15	ND	99.38	83.23	NA	NA	NA		
	11/13/2012	13.59	ND	99.38	85.79	NA	NA	NA		
	12/4/2012	15.96	ND	99.38	83.42	NA	NA	NA		

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	1/9/2013	14.37	ND	99.38	85.01	NA	NA	NA		
	1/21/2013*	13.09	ND	99.38	86.29	NA	NA	NA		
	2/8/2013	14.30	ND	99.38	85.08	NA	NA	NA		
	3/8/2013	13.62	ND	99.38	85.76	NA	NA	NA		
	4/16/2013	13.99	ND	99.38	85.39	NA	NA	NA		
	5/3/2013	13.65	ND	99.38	85.73	NA	NA	NA		
	6/13/2013	11.80	ND	99.38	87.58	NA	NA	NA		
	7/11/2013	19.68	ND	99.38	79.70	NA	NA	NA		
	7/19/2013*	14.26	ND	99.38	85.12	NA	NA	NA		
	8/1/2013	15.57	ND	99.38	83.81	NA	NA	NA		
	9/5/2013	16.23	ND	99.38	83.15	NA	NA	NA		
	10/8/2013*	15.46	ND	99.38	83.92	NA	NA	NA		
	10/22/2013*	14.21	ND	99.38	85.17	NA	NA	NA		
	11/6/2013	19.30	ND	99.38	80.08	NA	NA	NA		
	12/16/2013	10.20	ND	99.38	89.18	NA	NA	NA		
	1/6/2014*	13.04	ND	99.38	86.34	NA	NA	NA		
	2/24/2014	11.27	ND	99.38	88.11	NA	NA	NA		
	3/10/2014	12.11	ND	99.38	87.27	NA	NA	NA		
	4/22/2014	13.15	ND	99.38	86.23	NA	NA	NA		
	5/7/2014	8.84	ND	99.38	90.54	NA	NA	NA		
	6/3/2014	14.30	ND	99.38	85.08	NA	NA	NA		
	7/3/2014	11.51	ND	99.38	87.87	NA	NA	NA		
	7/17/2014	12.09	ND	99.38	87.29	NA	NA	NA	**Stinger Depth: 17.20**	
	8/25/2014	11.81	ND	99.38	87.57	NA	NA	NA		
	9/9/2014	12.20	ND	99.38	87.18	NA	NA	NA		
	10/8/2014	15.59	ND	99.38	83.79	NA	NA	NA		
	11/4/2014	14.87	ND	99.38	84.51	NA	NA	NA		
	12/1/2014	14.70	ND	99.38	84.68	NA	NA	NA		
	1/9/2015*	10.15	ND	99.38	89.23	NA	NA	NA		
	2/3/2015	12.05	ND	99.38	87.33	NA	NA	NA		
	3/17/2015	10.75	ND	99.38	88.63	NA	NA	NA		
	4/14/2015	11.81	ND	99.38	87.57	NA	NA	NA		
	4/15/2015*	11.60	ND	99.38	87.78	NA	NA	NA		
	5/12/2015	12.09	ND	99.38	87.29	NA	NA	NA		
	6/9/2015	18.34	ND	99.38	81.04	NA	NA	NA		
MW-8R	12/14/2011	12.11	ND	99.22	87.11	NA	NA	NA	Recovery Well	
	12/19/2011	15.33	ND	99.22	83.89	NA	NA	NA	stagnant odor	
	12/29/2011	16.54	ND	99.22	82.68	NA	NA	NA		
	1/5/2012	16.37	ND	99.22	82.85	NA	NA	NA		
	1/9/2012	16.44	ND	99.22	82.78	NA	NA	NA		
	1/10/2012	15.24	ND	99.22	83.98	NA	NA	NA		
	1/18/2012	16.77	ND	99.22	82.45	NA	NA	NA		
	1/25/2012	16.54	ND	99.22	82.68	NA	NA	NA		
	2/13/2012	16.76	ND	99.22	82.46	NA	NA	NA		
	3/29/2012	12.98	ND	99.22	86.24	NA	NA	NA		
	4/11/2012	13.55	ND	99.22	85.67	NA	NA	NA		
	5/8/2012*	15.75	ND	99.22	83.47	NA	NA	NA		
	6/7/2012*	15.97	ND	99.22	83.25	NA	NA	NA	**Stinger depth - 18.75 ft**	
	7/6/2012*	15.34	ND	99.22	83.88	NA	NA	NA		
	8/14/2012	16.85	ND	99.22	82.37	NA	NA	NA		
	9/5/2012	16.89	ND	99.22	82.33	NA	NA	NA		

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	10/5/2012*	16.37	ND	99.22	82.85	NA	NA	NA		
	11/13/2012	16.77	ND	99.22	82.45	NA	NA	NA		
	12/4/2012	17.53	ND	99.22	81.69	NA	NA	NA		
	1/9/2013	17.86	ND	99.22	81.36	NA	NA	NA		
	1/21/2013*	16.58	ND	99.22	82.64	NA	NA	NA		
	2/8/2013	16.94	ND	99.22	82.28	NA	NA	NA		
	3/8/2013	16.59	ND	99.22	82.63	NA	NA	NA		
	4/16/2013	16.46	ND	99.22	82.76	NA	NA	NA		
	5/3/2013	15.67	ND	99.22	83.55	NA	NA	NA		
	6/13/2013	15.30	ND	99.22	83.92	NA	NA	NA		
	7/11/2013	15.85	ND	99.22	83.37	NA	NA	NA		
	7/19/2013*	15.05	ND	99.22	84.17	NA	NA	NA		
	8/1/2013	17.30	ND	99.22	82.95	NA	NA	NA		
	9/5/2013	16.84	ND	99.22	83.41	NA	NA	NA		
	10/8/2013*	15.94	ND	99.22	83.28	NA	NA	NA		
	10/22/2013*	15.11	ND	99.22	84.11	NA	NA	NA		
	11/6/2013	16.71	ND	99.22	82.51	NA	NA	NA		
	12/16/2013	11.15	ND	99.22	88.07	NA	NA	NA		
	1/6/2014*	16.74	ND	99.22	82.48	NA	NA	NA		
	2/24/2014	15.50	ND	99.22	83.72	NA	NA	NA		
	3/10/2014	14.80	ND	99.22	84.42	NA	NA	NA		
	4/22/2014	16.96	ND	99.22	82.26	NA	NA	NA		
	5/7/2014	12.58	ND	99.22	86.64	NA	NA	NA		
	6/3/2014	16.62	ND	99.22	82.60	NA	NA	NA		
	7/3/2014	13.75	ND	99.22	85.47	NA	NA	NA		
	7/17/2014	12.64	ND	99.22	86.58	NA	NA	NA		
	8/25/2014	14.15	ND	99.22	85.07	NA	NA	NA	No Pipe	
	9/9/2014	15.20	ND	99.22	84.02	NA	NA	NA		
	10/8/2014	15.51	ND	99.22	83.71	NA	NA	NA		
	11/4/2014	15.70	ND	99.22	83.52	NA	NA	NA		
	12/1/2014	16.01	ND	99.22	83.21	NA	NA	NA		
	1/7/2015	13.75	ND	99.22	85.47	NA	NA	NA		
	1/9/2015*	12.45	ND	99.22	86.77	NA	NA	NA		
	2/3/2015	15.07	ND	99.22	84.15	NA	NA	NA		0.0
	3/17/2015	14.12	ND	99.22	85.10	NA	NA	NA		0.0
	4/14/2015	17.03	ND	99.22	82.19	NA	NA	NA		
	4/15/2015*	12.27	ND	99.22	86.95	NA	NA	NA		
	5/12/2015	13.81	ND	99.22	85.41	NA	NA	NA		
	6/9/2015	14.09	ND	99.22	85.13	NA	NA	NA		
MW-9	12/14/2011	13.23	ND	100.25	87.02	NA	NA	NA		
	12/15/2011	18.19	ND	100.25	82.06	NA	NA	NA		0.10
	12/16/2011	18.41	ND	100.25	81.84	NA	NA	NA		0.21
	12/19/2011	17.72	ND	100.25	82.53	NA	NA	NA		0.06
	12/20/2011	17.88	ND	100.25	82.37	NA	NA	NA	stagnant odor	0.27
	12/21/2011	17.96	ND	100.25	82.29	NA	NA	NA		0.22
	12/22/2011	17.58	ND	100.25	82.67	NA	NA	NA	Slight Odor	0.24
	12/23/2011	18.95	ND	100.25	81.30	NA	NA	NA		0.53
	12/27/2011	17.47	ND	100.25	82.78	NA	NA	NA		0.26
	12/28/2011	18.92	ND	100.25	81.33	NA	NA	NA		0.44
	12/29/2011	18.64	ND	100.25	81.61	NA	NA	NA		0.37
	12/30/2011	18.24	ND	100.25	82.01	NA	NA	NA		0.12

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Gasoline Fueling Station – Royal Farms #64
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	1/3/2012	17.83	ND	100.25	82.42	NA	NA	NA		0.32
	1/5/2012	17.82	ND	100.25	82.43	NA	NA	NA		0.97
	1/9/2012	17.94	ND	100.25	82.31	NA	NA	NA		
	1/10/2012	15.79	ND	100.25	84.46	NA	NA	NA		
	1/18/2012	18.29	ND	100.25	81.96	NA	NA	NA		
	1/25/2012	17.02	ND	100.25	83.23	NA	NA	NA		
	1/30/2012	16.82	ND	100.25	83.43	NA	NA	NA		
	2/6/2012	16.83	ND	100.25	83.42	NA	NA	NA		
	2/13/2012	17.07	ND	100.25	83.18	NA	NA	NA		
	2/20/2012	17.39	ND	100.25	82.86	NA	NA	NA		0.48
	2/28/2012	17.42	ND	100.25	82.83	NA	NA	NA		0.21
	3/5/2012	17.19	ND	100.25	83.06	NA	NA	NA		
	3/12/2012	17.08	ND	100.25	83.17	NA	NA	NA		
	3/19/2012	16.96	ND	100.25	83.29	NA	NA	NA		0.11
	3/29/2012	14.02	ND	100.25	86.23	NA	NA	NA		
	4/2/2012	15.89	ND	100.25	84.36	NA	NA	NA		
	4/10/2012	15.12	ND	100.25	85.13	NA	NA	NA		
	4/16/2012	17.04	ND	100.25	83.21	NA	NA	NA		0.08
	4/23/2012	16.59	ND	100.25	83.66	NA	NA	NA		
	4/30/2012	17.19	ND	100.25	83.06	NA	NA	NA		
	5/8/2012*	15.99	ND	100.25	84.26	NA	NA	NA		
	5/15/2012	16.69	ND	100.25	83.56	NA	NA	NA		
	5/21/2012	17.03	ND	100.25	83.22	NA	NA	NA		0.68
	5/31/2012	17.04	ND	100.25	83.21	NA	NA	NA		
	6/7/2012*	16.81	ND	100.25	83.44	NA	NA	NA		
	6/11/2012	17.11	ND	100.25	83.14	NA	NA	NA		0.44
	6/18/2012	17.80	ND	100.25	82.45	NA	NA	NA		
	6/25/2012	16.74	ND	100.25	83.51	NA	NA	NA		
	7/6/2012*	15.82	ND	100.25	84.43	NA	NA	NA		
	7/10/2012	17.08	ND	100.25	83.17	NA	NA	NA		
	7/17/2012	17.20	ND	100.25	83.05	NA	NA	NA		0.00
	7/24/2012	17.21	ND	100.25	83.04	NA	NA	NA		
	7/31/2012	17.07	ND	100.25	83.18	NA	NA	NA		
	8/7/2012	17.54	ND	100.25	82.71	NA	NA	NA		0.18
	8/14/2012	17.58	ND	100.25	82.67	NA	NA	NA		
	8/21/2012	17.96	ND	100.25	82.29	NA	NA	NA		
	8/28/2012	16.57	ND	100.25	83.68	NA	NA	NA		
	9/5/2012	17.64	ND	100.25	82.61	NA	NA	NA		< 0.00
	9/13/2012	18.93	ND	100.25	81.32	NA	NA	NA		
	9/18/2012	18.86	ND	100.25	81.39	NA	NA	NA		
	9/26/2012	17.40	ND	100.25	82.85	NA	NA	NA		
	10/5/2012*	16.53	ND	100.25	83.72	NA	NA	NA		
	10/11/2012	18.47	ND	100.25	81.78	NA	NA	NA		< 0.00
	10/16/2012	17.42	ND	100.25	82.83	NA	NA	NA		
	10/22/2012	17.68	ND	100.25	82.57	NA	NA	NA		
	10/31/2012	16.80	ND	100.25	83.45	NA	NA	NA		
	11/7/2012	15.30	ND	100.25	84.95	NA	NA	NA		
	11/13/2012	17.50	ND	100.25	82.75	NA	NA	NA		0.20
	11/21/2012	17.79	ND	100.25	82.46	NA	NA	NA		
	11/27/2012	17.87	ND	100.25	82.38	NA	NA	NA		
	12/4/2012	18.04	ND	100.25	82.21	NA	NA	NA		0.34

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	12/13/2012	18.02	ND	100.25	82.23	NA	NA	NA		
	12/21/2012	18.03	ND	100.25	82.22	NA	NA	NA		
	12/28/2012	18.09	ND	100.25	82.16	NA	NA	NA		
	1/4/2013	18.10	ND	100.25	82.15	NA	NA	NA		0.42
	1/9/2013	18.14	ND	100.25	82.11	NA	NA	NA		
	1/16/2013	17.35	ND	100.25	82.90	NA	NA	NA		
	1/21/2013*	16.59	ND	100.25	83.66	NA	NA	NA		
	2/8/2013	17.62	ND	100.25	82.63	NA	NA	NA		0.20
	3/8/2013	17.07	ND	100.25	83.18	NA	NA	NA		0.25
	4/16/2013	21.03	ND	100.25	79.22	NA	NA	NA	Slight odor	0.02
	4/17/2013*	15.95	ND	100.25	84.30	NA	NA	NA		
	5/3/2013	16.51	ND	100.25	83.74	NA	NA	NA		0.00
	6/13/2013	15.92	ND	100.25	84.33	NA	NA	NA	Slight odor	0.02
	7/11/2013	16.66	ND	100.25	83.59	NA	NA	NA		0.00
	7/19/2013*	15.58	ND	100.25	84.67	NA	NA	NA		
	8/1/2013	17.59	ND	100.25	82.66	NA	NA	NA		0.00
	9/5/2013	17.21	ND	100.25	83.04	NA	NA	NA		
	10/7/2013	16.97	ND	100.25	83.28	NA	NA	NA		0.00
	10/8/2013*	16.48	ND	100.25	83.77	NA	NA	NA		
	10/22/2013*	15.85	ND	100.25	84.40	NA	NA	NA		
	11/6/2013	18.06	ND	100.25	82.19	NA	NA	NA		0.00
	12/4/2013	17.93	ND	100.25	82.32	NA	NA	NA		0.06
	1/6/2014*	16.40	ND	100.25	83.85	NA	NA	NA		
	2/24/2014	17.50	ND	100.25	82.75	NA	NA	NA		
	3/10/2014	17.11	ND	100.25	83.14	NA	NA	NA		0.00
	4/22/2014	17.73	ND	100.25	82.52	NA	NA	NA		0.00
	4/23/2014*	16.12	ND	100.25	84.13	NA	NA	NA		
	5/7/2014	15.60	ND	100.25	84.65	NA	NA	NA		
	6/3/2014	17.65	ND	100.25	82.60	NA	NA	NA		
	7/3/2014	14.93	ND	100.25	85.32	NA	NA	NA		0.14
	7/17/2014	14.22	ND	100.25	86.03	NA	NA	NA		
	8/25/2014	12.10	ND	100.25	88.15	NA	NA	NA		0.08
	9/9/2014	16.90	ND	100.25	83.35	NA	NA	NA		0.00
	10/7/2014	17.18	ND	100.25	83.07	NA	NA	NA		0.08
	10/8/2014*	16.15	ND	100.25	84.10	NA	NA	NA		
	11/4/2014	16.75	ND	100.25	83.50	NA	NA	NA		
	12/1/2014	16.85	ND	100.25	83.40	NA	NA	NA		0.02
	1/7/2015	15.80	ND	100.25	84.45	NA	NA	NA		
	1/9/2015*	14.02	ND	100.25	86.23	NA	NA	NA	Slight odor	
	2/3/2015	16.27	ND	100.25	83.98	NA	NA	NA		0.00
	3/17/2015	15.50	ND	100.25	84.75	NA	NA	NA		0.00
	4/14/2015	15.45	ND	100.25	84.80	NA	NA	NA		
	4/15/2015*	13.90	ND	100.25	86.35	NA	NA	NA		
	5/12/2015	15.75	ND	100.25	84.50	NA	NA	NA		0.00
	6/9/2015	15.87	ND	100.25	84.38	NA	NA	NA		0.02
MW-10	12/14/2011	2.80	ND	89.17	86.37	NA	NA	NA		2.00
	12/15/2011	6.71	ND	89.17	82.46	NA	NA	NA		0.20
	12/16/2011	6.86	ND	89.17	82.31	NA	NA	NA	stagnant odor	0.14
	12/19/2011	6.77	ND	89.17	82.40	NA	NA	NA	stagnant odor	0.02
	12/20/2011	7.06	ND	89.17	82.11	NA	NA	NA	metalic odor	0.10
	12/21/2011	7.27	ND	89.17	81.90	NA	NA	NA	stagnant odor	0.07

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	12/22/2011	7.21	ND	89.17	81.96	NA	NA	NA	stagnant odor	0.05
	12/23/2011	7.37	ND	89.17	81.80	NA	NA	NA	stagnant odor	1.40
	12/27/2011	6.78	ND	89.17	82.39	NA	NA	NA	stagnant odor	0.13
	12/28/2011	7.19	ND	89.17	81.98	NA	NA	NA	stagnant odor	1.70
	12/29/2011	7.24	ND	89.17	81.93	NA	NA	NA	stagnant odor	0.81
	12/30/2011	7.38	ND	89.17	81.79	NA	NA	NA	stagnant odor	0.42
	1/3/2012	7.04	ND	89.17	82.13	NA	NA	NA	stagnant odor	0.17
	1/5/2012	7.09	ND	89.17	82.08	NA	NA	NA	stagnant odor	0.09
	1/9/2012	7.02	ND	89.17	82.15	NA	NA	NA	stagnant odor	
	1/10/2012	5.16	ND	89.17	84.01	NA	NA	NA	Stagnant odor	
	1/18/2012	7.35	ND	89.17	81.82	NA	NA	NA	Stagnant odor	
	1/25/2012	7.07	ND	89.17	82.10	NA	NA	NA	Stagnant odor	
	1/30/2012	7.15	ND	89.17	82.02	NA	NA	NA		
	2/6/2012	7.41	ND	89.17	81.76	NA	NA	NA	Slight odor	
	2/13/2012	7.57	ND	89.17	81.60	NA	NA	NA	Moderate odor	
	2/20/2012	7.93	ND	89.17	81.24	NA	NA	NA		0.07
	2/28/2012	8.12	ND	89.17	81.05	NA	NA	NA	Slight odor	0.13
	3/5/2012	7.47	ND	89.17	81.70	NA	NA	NA		
	3/12/2012	7.83	ND	89.17	81.34	NA	NA	NA		
	3/19/2012	7.78	ND	89.17	81.39	NA	NA	NA		< 0.00
	3/29/2012	3.50	ND	89.17	85.67	NA	NA	NA		
	4/2/2012	6.28	ND	89.17	82.89	NA	NA	NA		
	4/10/2012	5.81	ND	89.17	83.36	NA	NA	NA		
	4/16/2012	7.57	ND	89.17	81.60	NA	NA	NA		0.05
	4/23/2012	7.02	ND	89.17	82.15	NA	NA	NA		
	4/30/2012	7.62	ND	89.17	81.55	NA	NA	NA		
	5/8/2012*	5.71	ND	89.17	83.46	NA	NA	NA		
	5/15/2012	6.74	ND	89.17	82.43	NA	NA	NA		
	5/21/2012	7.33	ND	89.17	81.84	NA	NA	NA		1.40
	5/31/2012	7.21	ND	89.17	81.96	NA	NA	NA		
	6/7/2012*	6.08	ND	89.17	83.09	NA	NA	NA		
	6/11/2012	7.54	ND	89.17	81.63	NA	NA	NA		< 0.00
	6/18/2012	7.48	ND	89.17	81.69	NA	NA	NA		
	6/25/2012	6.95	ND	89.17	82.22	NA	NA	NA		
	7/6/2012*	5.45	ND	89.17	83.72	NA	NA	NA		
	7/10/2012	7.46	ND	89.17	81.71	NA	NA	NA		
	7/17/2012	7.56	ND	89.17	81.61	NA	NA	NA		< 0.00
	7/24/2012	7.51	ND	89.17	81.66	NA	NA	NA		
	7/31/2012	7.21	ND	89.17	81.96	NA	NA	NA		
	8/7/2012	7.53	ND	89.17	81.64	NA	NA	NA		< 0.00
	8/14/2012	7.56	ND	89.17	81.61	NA	NA	NA		
	8/21/2012	8.23	ND	89.17	80.94	NA	NA	NA		
	8/28/2012	5.96	ND	89.17	83.21	NA	NA	NA		
	9/5/2012	7.87	ND	89.17	81.30	NA	NA	NA		< 0.00
	9/13/2012	8.42	ND	89.17	80.75	NA	NA	NA		
	9/18/2012	8.25	ND	89.17	80.92	NA	NA	NA		
	9/26/2012	8.26	ND	89.17	80.91	NA	NA	NA		
	10/5/2012*	6.28	ND	89.17	82.89	NA	NA	NA		
	10/11/2012	7.98	ND	89.17	81.19	NA	NA	NA		< 0.00
	10/16/2012	7.89	ND	89.17	81.28	NA	NA	NA		
	10/22/2012	8.00	ND	89.17	81.17	NA	NA	NA		

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	10/31/2012	5.79	ND	89.17	83.38	NA	NA	NA		
	11/7/2012	7.07	ND	89.17	82.10	NA	NA	NA		
	11/13/2012	7.92	ND	89.17	81.25	NA	NA	NA		0.22
	11/21/2012	8.22	ND	89.17	80.95	NA	NA	NA		
	11/27/2012	8.36	ND	89.17	80.81	NA	NA	NA		
	12/4/2012	8.49	ND	89.17	80.68	NA	NA	NA		0.03
	12/13/2012	8.38	ND	89.17	80.79	NA	NA	NA		
	12/21/2012	8.66	ND	89.17	80.51	NA	NA	NA		
	12/28/2012	8.43	ND	89.17	80.74	NA	NA	NA		
	1/4/2013	8.67	ND	89.17	80.50	NA	NA	NA		0.42
	1/9/2013	8.72	ND	89.17	80.45	NA	NA	NA		
	1/16/2013	8.78	ND	89.17	80.39	NA	NA	NA		
	1/21/2013*	6.24	ND	89.17	82.93	NA	NA	NA		
	2/8/2013	8.24	ND	89.17	80.93	NA	NA	NA		0.00
	3/8/2013	7.32	ND	89.17	81.85	NA	NA	NA		0.42
	4/16/2013	7.61	ND	89.17	81.56	NA	NA	NA		0.03
	4/17/2013*	5.62	ND	89.17	83.55	NA	NA	NA		
	5/3/2013	6.55	ND	89.17	82.62	NA	NA	NA		0.32
	6/13/2013	6.60	ND	89.17	82.57	NA	NA	NA		0.01
	7/11/2013	7.03	ND	89.17	82.14	NA	NA	NA		0.00
	7/19/2013*	5.12	ND	89.17	84.05	NA	NA	NA		
	8/1/2013	8.33	ND	89.17	80.84	NA	NA	NA		0.02
	9/5/2013	7.63	ND	89.17	81.54	NA	NA	NA		
	10/7/2013	7.68	ND	89.17	81.49	NA	NA	NA		0.00
	10/8/2013*	6.20	ND	89.17	82.97	NA	NA	NA		
	10/22/2013*	5.62	ND	89.17	83.55	NA	NA	NA		
	11/6/2013	7.31	ND	89.17	81.86	NA	NA	NA		0.00
	12/4/2013	8.10	ND	89.17	81.07	NA	NA	NA		0.23
	1/6/2014*	6.20	ND	89.17	82.97	NA	NA	NA		
	2/24/2014	6.68	ND	89.17	82.49	NA	NA	NA		
	3/10/2014	5.39	ND	89.17	83.78	NA	NA	NA		3.3
	4/22/2014	8.02	ND	89.17	81.15	NA	NA	NA		0.0
	4/23/2014*	5.92	ND	89.17	83.25	NA	NA	NA		
	5/7/2014	2.43	ND	89.17	86.74	NA	NA	NA		4.5
	6/3/2014	7.92	ND	89.17	81.25	NA	NA	NA		
	7/3/2014	5.01	ND	89.17	84.16	NA	NA	NA		0.0
	7/17/2014	3.38	ND	89.17	85.79	NA	NA	NA		
	8/25/2014	9.30	ND	89.17	79.87	NA	NA	NA		0.14
	9/9/2014	6.90	ND	89.17	82.27	NA	NA	NA		0.08
	10/7/2014	7.28	ND	89.17	81.89	NA	NA	NA		
	10/8/2014*	5.90	ND	89.17	83.27	NA	NA	NA		
	11/4/2014	6.60	ND	89.17	82.57	NA	NA	NA		
	12/1/2014	6.50	ND	89.17	82.67	NA	NA	NA		
	1/7/2015	4.30	ND	89.17	84.87	NA	NA	NA		
	1/9/2015*	3.09	ND	89.17	86.08	NA	NA	NA		
	2/3/2015	5.86	ND	89.17	83.31	NA	NA	NA		0.00
	3/17/2015	5.08	ND	89.17	84.09	NA	NA	NA		-0.18
	4/14/2015	4.98	ND	89.17	84.19	NA	NA	NA		
	4/15/2015*	3.05	ND	89.17	86.12	NA	NA	NA		
	5/12/2015	4.21	ND	89.17	84.96	NA	NA	NA		0.00
	6/9/2015	5.12	ND	89.17	84.05	NA	NA	NA		0.12

Table 1 - Well Gauging Summary
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
MW-11	12/14/2011	5.10	ND	90.51	85.41	NA	NA	NA		3.30
	12/15/2011	7.77	ND	90.51	82.74	NA	NA	NA		0.34
	12/16/2011	8.02	ND	90.51	82.49	NA	NA	NA		0.00
	12/19/2011	7.82	ND	90.51	82.69	NA	NA	NA		0.52
	12/20/2011	8.11	ND	90.51	82.40	NA	NA	NA	Slight Odor	0.35
	12/21/2011	8.39	ND	90.51	82.12	NA	NA	NA		0.19
	12/22/2011	9.62	ND	90.51	80.89	NA	NA	NA		-0.02
	12/23/2011	8.42	ND	90.51	82.09	NA	NA	NA		0.60
	12/27/2011	8.30	ND	90.51	82.21	NA	NA	NA		-0.02
	12/28/2011	8.63	ND	90.51	81.88	NA	NA	NA		-0.02
	12/29/2011	8.27	ND	90.51	82.24	NA	NA	NA		0.24
	12/30/2011	8.42	ND	90.51	82.09	NA	NA	NA		0.23
	1/3/2012	8.59	ND	90.51	81.92	NA	NA	NA		-0.02
	1/5/2012	8.34	ND	90.51	82.17	NA	NA	NA		0.50
	1/9/2012	8.46	ND	90.51	82.05	NA	NA	NA		
	1/10/2012	7.45	ND	90.51	83.06	NA	NA	NA		
	1/18/2012	8.72	ND	90.51	81.79	NA	NA	NA		
	1/25/2012	8.76	ND	90.51	81.75	NA	NA	NA		
	1/30/2012	8.60	ND	90.51	81.91	NA	NA	NA		
	2/6/2012	9.12	ND	90.51	81.39	NA	NA	NA		
	2/13/2012	9.34	ND	90.51	81.17	NA	NA	NA		
	2/20/2012	9.72	ND	90.51	80.79	NA	NA	NA		0.04
	2/28/2012	9.90	ND	90.51	80.61	NA	NA	NA		0.21
	3/5/2012	9.16	ND	90.51	81.35	NA	NA	NA		
	3/12/2012	9.43	ND	91.51	82.08	NA	NA	NA		
	3/19/2012	9.42	ND	90.51	81.09	NA	NA	NA		0.49
	3/29/2012	6.09	ND	90.51	84.42	NA	NA	NA		
	4/2/2012	7.50	ND	90.51	83.01	NA	NA	NA		
	4/10/2012	7.04	ND	90.51	83.47	NA	NA	NA		
	4/16/2012	9.08	ND	90.51	81.43	NA	NA	NA	Slight odor	0.42
	4/23/2012	8.70	ND	90.51	81.81	NA	NA	NA		
	4/30/2012	9.20	ND	90.51	81.31	NA	NA	NA		
	5/8/2012*	7.94	ND	90.51	82.57	NA	NA	NA		
	5/15/2012	8.28	ND	90.51	82.23	NA	NA	NA		
	5/21/2012	9.05	ND	90.51	81.46	NA	NA	NA		0.06
	5/31/2012	8.90	ND	90.51	81.61	NA	NA	NA		
	6/7/2012*	7.92	ND	90.51	82.59	NA	NA	NA		
	6/11/2012	9.12	ND	90.51	81.39	NA	NA	NA		0.03
	6/18/2012	9.09	ND	90.51	81.42	NA	NA	NA		
	6/25/2012	8.53	ND	90.51	81.98	NA	NA	NA		
	7/6/2012*	7.71	ND	90.51	82.80	NA	NA	NA		
	7/10/2012	9.07	ND	90.51	81.44	NA	NA	NA		
	7/17/2012	9.10	ND	90.51	81.41	NA	NA	NA		< 0.00
	7/24/2012	9.22	ND	90.51	81.29	NA	NA	NA		
	7/31/2012	9.05	ND	90.51	81.46	NA	NA	NA		
	8/7/2012	9.21	ND	90.51	81.30	NA	NA	NA		0.05
	8/14/2012	9.28	ND	90.51	81.23	NA	NA	NA		
	8/21/2012	9.97	ND	90.51	80.54	NA	NA	NA		
	8/28/2012	7.62	ND	90.51	82.89	NA	NA	NA		
	9/5/2012	9.55	ND	90.51	80.96	NA	NA	NA		0.05
	9/13/2012	9.97	ND	90.51	80.54	NA	NA	NA		

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Gasoline Fueling Station – Royal Farms #64
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	9/18/2012	9.86	ND	90.51	80.65	NA	NA	NA		
	9/26/2012	9.89	ND	90.51	80.62	NA	NA	NA		
	10/5/2012*	8.02	ND	90.51	82.49	NA	NA	NA		
	10/11/2012	9.59	ND	90.51	80.92	NA	NA	NA		0.21
	10/16/2012	9.51	ND	90.51	81.00	NA	NA	NA		
	10/22/2012	9.70	ND	90.51	80.81	NA	NA	NA		
	10/31/2012	8.36	ND	90.51	82.15	NA	NA	NA		
	11/7/2012	8.67	ND	90.51	81.84	NA	NA	NA		
	11/13/2012	9.64	ND	90.51	80.87	NA	NA	NA	stagnant odor	0.28
	11/21/2012	9.90	ND	90.51	80.61	NA	NA	NA		
	11/27/2012	10.02	ND	90.51	80.49	NA	NA	NA		
	12/4/2012	10.12	ND	90.51	80.39	NA	NA	NA		0.19
	12/13/2012	10.12	ND	90.51	80.39	NA	NA	NA		
	12/21/2012	10.43	ND	90.51	80.08	NA	NA	NA		
	12/28/2012	10.41	ND	90.51	80.10	NA	NA	NA		
	1/4/2013	10.32	ND	90.51	80.19	NA	NA	NA		0.62
	1/9/2013	10.35	ND	90.51	80.16	NA	NA	NA		
	1/16/2013	9.54	ND	90.51	80.97	NA	NA	NA		
	1/21/2013*	8.23	ND	90.51	82.28	NA	NA	NA		
	2/8/2013	9.66	ND	90.51	80.85	NA	NA	NA		0.28
	3/8/2013	8.99	ND	90.51	81.52	NA	NA	NA		0.00
	4/16/2013	9.08	ND	90.51	81.43	NA	NA	NA		0.25
	4/17/13*	7.87	ND	90.51	82.64	NA	NA	NA		
	5/3/2013	7.95	ND	90.51	82.56	NA	NA	NA		0.45
	6/13/2013	7.16	ND	90.51	83.35	NA	NA	NA		0.22
	7/11/2013	8.53	ND	90.51	81.98	NA	NA	NA		0.00
	7/19/2013*	7.57	ND	90.51	82.94	NA	NA	NA		
	8/1/2013	9.98	ND	90.51	80.53	NA	NA	NA		0.20
	9/5/2013	9.28	ND	90.51	81.23	NA	NA	NA		
	10/7/2013	9.38	ND	90.51	81.13	NA	NA	NA		0.00
	10/8/2013*	7.95	ND	90.51	82.56	NA	NA	NA		
	10/22/2013*	7.65	ND	90.51	82.86	NA	NA	NA		
	11/6/2013	8.86	ND	90.51	81.65	NA	NA	NA		0.80
	12/4/2013	9.70	ND	90.51	80.81	NA	NA	NA		0.04
	1/6/2014*	7.87	ND	90.51	82.64	NA	NA	NA		
	2/24/2014	8.09	ND	90.51	82.42	NA	NA	NA		
	3/10/2014	7.12	ND	90.51	83.39	NA	NA	NA		0.0
	4/22/2014	9.25	ND	90.51	81.26	NA	NA	NA		0.5
	4/23/2014*	8.04	ND	90.51	82.47	NA	NA	NA		
	5/7/2014	4.03	ND	90.51	86.48	NA	NA	NA		0.0
	6/3/2014	9.43	ND	90.51	81.08	NA	NA	NA		
	7/3/2014	5.49	ND	90.51	85.02	NA	NA	NA		1.5
	7/17/2014	5.67	ND	90.51	84.84	NA	NA	NA		
	8/25/2014	8.88	ND	90.51	81.63	NA	NA	NA		0.84
	9/9/2014	8.50	ND	90.51	82.01	NA	NA	NA		0.0
	10/7/2014	8.96	ND	90.51	81.55	NA	NA	NA		
	10/8/2014*	7.74	ND	90.51	82.77	NA	NA	NA		
	11/4/2014	8.26	ND	90.51	82.25	NA	NA	NA		
	12/1/2014	7.90	ND	90.51	82.61	NA	NA	NA		
	1/7/2015	6.57	ND	90.51	83.94	NA	NA	NA		0.0
	1/9/2015*	5.22	ND	90.51	85.29	NA	NA	NA		

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Gasoline Fueling Station – Royal Farms #64
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	2/3/2015	6.70	ND	90.51	83.81	NA	NA	NA		0.0
	3/17/2015	6.75	ND	90.51	83.76	NA	NA	NA		positve pressur
	4/14/2015	5.59	ND	90.51	84.92	NA	NA	NA		
	4/15/2015*	5.40	ND	90.51	85.11	NA	NA	NA		
	5/12/2015	5.84	ND	90.51	84.67	NA	NA	NA		2.00
	6/9/2015	5.83	ND	90.51	84.68	NA	NA	NA		0.95
MW-12	12/14/2011	5.91	ND	93.12	87.21	NA	NA	NA		
	12/15/2011	7.05	ND	93.12	86.07	NA	NA	NA		1.50
	12/16/2011	7.33	ND	93.12	85.79	NA	NA	NA		2.25
	12/19/2011	7.88	ND	93.12	85.24	NA	NA	NA		0.21
	12/20/2011	7.96	ND	93.12	85.16	NA	NA	NA		0.31
	12/21/2011	8.03	ND	93.12	85.09	NA	NA	NA		0.22
	12/22/2011	8.10	ND	93.12	85.02	NA	NA	NA		0.25
	12/23/2011	7.67	ND	93.12	85.45	NA	NA	NA		-0.02
	12/27/2011	7.77	ND	93.12	85.35	NA	NA	NA		0.08
	12/28/2011	7.60	ND	93.12	85.52	NA	NA	NA		-0.02
	12/29/2011	7.43	ND	93.12	85.69	NA	NA	NA		-0.01
	12/30/2011	7.52	ND	93.12	85.60	NA	NA	NA		0.53
	1/3/2012	8.01	ND	93.12	85.11	NA	NA	NA		0.26
	1/5/2012	8.12	ND	93.12	85.00	NA	NA	NA		0.38
	1/9/2012	8.32	ND	93.12	84.80	NA	NA	NA		
	1/10/2012	8.06	ND	93.12	85.06	NA	NA	NA		
	1/18/2012	8.22	ND	93.12	84.90	NA	NA	NA		
	1/25/2012	8.42	ND	93.12	84.70	NA	NA	NA		
	1/30/2012	8.18	ND	93.12	84.94	NA	NA	NA		
	2/6/2012	8.55	ND	93.12	84.57	NA	NA	NA		
	2/13/2012	8.73	ND	93.12	84.39	NA	NA	NA		
	2/20/2012	8.84	ND	93.12	84.28	NA	NA	NA		0.02
	2/28/2012	9.03	ND	93.12	84.09	NA	NA	NA		0.09
	3/5/2012	8.00	ND	93.12	85.12	NA	NA	NA		
	3/12/2012	8.50	ND	93.12	84.62	NA	NA	NA		
	3/19/2012	8.74	ND	93.12	84.38	NA	NA	NA		0.19
	3/29/2012	7.59	ND	93.12	85.53	NA	NA	NA		
	4/2/2012	8.25	ND	93.12	84.87	NA	NA	NA		
	4/10/2012	8.18	ND	93.12	84.94	NA	NA	NA		
	4/16/2012	8.77	ND	93.12	84.35	NA	NA	NA		0.11
	4/23/2012	8.92	ND	93.12	84.20	NA	NA	NA		
	4/30/2012	9.10	ND	93.12	84.02	NA	NA	NA		
	5/8/2012*	8.90	ND	93.12	84.22	NA	NA	NA		
	5/15/2012	8.81	ND	93.12	84.31	NA	NA	NA		
	5/21/2012	8.98	ND	93.12	84.14	NA	NA	NA		0.03
	5/31/2012	9.00	ND	93.12	84.12	NA	NA	NA		
	6/7/2012*	8.65	ND	93.12	84.47	NA	NA	NA		
	6/11/2012	9.10	ND	93.12	84.02	NA	NA	NA		0.01
	6/18/2012	9.13	ND	93.12	83.99	NA	NA	NA		
	6/25/2012	9.06	ND	93.12	84.06	NA	NA	NA		
	7/6/2012*	8.93	ND	93.12	84.19	NA	NA	NA		
	7/10/2012	9.17	ND	93.12	83.95	NA	NA	NA		
	7/17/2012	9.29	ND	93.12	83.83	NA	NA	NA		0.02
	7/24/2012	8.81	ND	93.12	84.31	NA	NA	NA		
	7/31/2012	9.00	ND	93.12	84.12	NA	NA	NA		

Table 1 - Well Gauging Summary
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	8/7/2012	9.07	ND	93.12	84.05	NA	NA	NA		0.05
	8/14/2012	9.10	ND	93.12	84.02	NA	NA	NA		
	8/21/2012	9.30	ND	93.12	83.82	NA	NA	NA		
	8/28/2012	8.56	ND	93.12	84.56	NA	NA	NA		
	9/5/2012	9.02	ND	93.12	84.10	NA	NA	NA		0.06
	9/13/2012	9.39	ND	93.12	83.73	NA	NA	NA		
	9/18/2012	9.44	ND	93.12	83.68	NA	NA	NA		
	9/26/2012	9.46	ND	93.12	83.66	NA	NA	NA		
	10/5/2012*	9.42	ND	93.12	83.70	NA	NA	NA		
	10/11/2012	9.52	ND	93.12	83.60	NA	NA	NA		0.05
	10/16/2012	9.65	ND	93.12	83.47	NA	NA	NA		
	10/22/2012	9.79	ND	93.12	83.33	NA	NA	NA		
	10/31/2012	8.01	ND	93.12	85.11	NA	NA	NA		
	11/7/2012	8.23	ND	93.12	84.89	NA	NA	NA		
	11/13/2012	8.63	ND	93.12	84.49	NA	NA	NA		0.08
	11/21/2012	8.98	ND	93.12	84.14	NA	NA	NA		
	11/27/2012	9.22	ND	93.12	83.90	NA	NA	NA		
	12/4/2012	9.38	ND	93.12	83.74	NA	NA	NA		0.04
	12/13/2012	9.59	ND	93.12	83.53	NA	NA	NA		
	12/21/2012	9.54	ND	93.12	83.58	NA	NA	NA		
	12/28/2012	8.73	ND	93.12	84.39	NA	NA	NA		
	1/4/2013	8.63	ND	93.12	84.49	NA	NA	NA		0.05
	1/9/2013	8.88	ND	93.12	84.24	NA	NA	NA		
	1/16/2013	8.78	ND	93.12	84.34	NA	NA	NA		
	1/21/2013*	7.94	ND	93.12	85.18	NA	NA	NA		
	2/8/2013	8.03	ND	93.12	85.09	NA	NA	NA		0.12
	3/8/2013	7.45	ND	93.12	85.67	NA	NA	NA		0.00
	4/16/2013	8.22	ND	93.12	84.90	NA	NA	NA		0.11
	4/17/2013*	8.03	ND	93.12	85.09	NA	NA	NA		
	5/3/2013	8.19	ND	93.12	84.93	NA	NA	NA		0.03
	6/13/2013	6.51	ND	93.12	86.61	NA	NA	NA		0.10
	7/11/2013	8.14	ND	93.12	84.98	NA	NA	NA		0.00
	7/19/2013*	8.09	ND	93.12	85.03	NA	NA	NA		
	8/1/2013	8.88	ND	93.12	84.24	NA	NA	NA		0.00
	9/5/2013	9.35	ND	93.12	83.77	NA	NA	NA		
	10/7/2013	9.65	ND	93.12	83.47	NA	NA	NA		0.00
	10/8/2013*	9.56	ND	93.12	83.56	NA	NA	NA		
	10/22/2013*	8.41	ND	93.12	84.71	NA	NA	NA		
	11/6/2013	9.10	ND	93.12	84.02	NA	NA	NA		0.00
	12/4/2013	9.24	ND	93.12	83.88	NA	NA	NA		0.00
	1/6/2014*	7.46	ND	93.12	85.66	NA	NA	NA		
	2/24/2014	6.31	ND	93.12	86.81	NA	NA	NA		
	3/10/2014	6.42	ND	93.12	86.70	NA	NA	NA		0.0
	4/22/2014	7.05	ND	93.12	86.07	NA	NA	NA		0.0
	4/23/2014*	6.98	ND	93.12	86.14	NA	NA	NA		
	5/7/2014	4.77	ND	93.12	88.35	NA	NA	NA		0.0
	6/3/2014	8.31	ND	93.12	84.81	NA	NA	NA		
	7/3/2014	6.53	ND	93.12	86.59	NA	NA	NA		0.02
	7/17/2014	6.89	ND	93.12	86.23	NA	NA	NA		
	8/25/2014	8.62	ND	93.12	84.50	NA	NA	NA		0.02
	9/9/2014	8.47	ND	93.12	84.65	NA	NA	NA		0.02

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	10/7/2014	9.27	ND	93.12	83.85	NA	NA	NA		
	10/8/2014*	9.20	ND	93.12	83.92	NA	NA	NA		
	11/4/2014	8.98	ND	93.12	84.14	NA	NA	NA		
	12/1/2014	8.56	ND	93.12	84.56	NA	NA	NA		
	1/7/2015	6.50	ND	93.12	86.62	NA	NA	NA		
	1/9/2015*	6.35	ND	93.12	86.77	NA	NA	NA		
	2/3/2015	7.19	ND	93.12	85.93	NA	NA	NA		0.00
	3/17/2015	5.70	ND	93.12	87.42	NA	NA	NA		positive pressur
	4/14/2015	6.62	ND	93.12	86.50	NA	NA	NA		
	4/15/2015*	6.42	ND	93.12	86.70	NA	NA	NA		
	5/12/2015	6.94	ND	93.12	86.18	NA	NA	NA		0.00
	6/9/2015	7.81	ND	93.12	85.31	NA	NA	NA		0.00
MW-13	12/14/2011	10.51	ND	99.80	89.29	NA	NA	NA		
	12/15/2011	13.01	ND	99.80	86.79	NA	NA	NA		0.00
	12/16/2011	13.17	ND	99.80	86.63	NA	NA	NA		0.06
	12/19/2011	12.99	ND	99.80	86.81	NA	NA	NA		0.03
	12/20/2011	13.16	ND	99.80	86.64	NA	NA	NA		0.07
	12/21/2011	13.25	ND	99.80	86.55	NA	NA	NA		0.03
	12/22/2011	13.04	ND	99.80	86.76	NA	NA	NA		0.08
	12/23/2011	14.01	ND	99.80	85.79	NA	NA	NA		0.14
	12/27/2011	13.09	ND	99.80	86.71	NA	NA	NA		0.02
	12/28/2011	13.76	ND	99.80	86.04	NA	NA	NA		0.13
	12/29/2011	13.60	ND	99.80	86.20	NA	NA	NA		0.11
	12/30/2011	13.42	ND	99.80	86.38	NA	NA	NA		0.05
	1/3/2012	13.20	ND	99.80	86.60	NA	NA	NA		0.07
	1/5/2012	13.27	ND	99.80	86.53	NA	NA	NA		0.06
	1/9/2012	13.19	ND	99.80	86.61	NA	NA	NA		
	1/10/2012	12.04	ND	99.80	87.76	NA	NA	NA	stagnant odor	
	1/18/2012	13.34	ND	99.80	86.46	NA	NA	NA		
	1/25/2012	12.71	ND	99.80	87.09	NA	NA	NA		
	1/30/2012	12.61	ND	99.80	87.19	NA	NA	NA		
	2/6/2012	12.59	ND	99.80	87.21	NA	NA	NA		
	2/13/2012	12.73	ND	99.80	87.07	NA	NA	NA		
	2/20/2012	12.79	ND	99.80	87.01	NA	NA	NA		0.01
	2/28/2012	12.82	ND	99.80	86.98	NA	NA	NA		0.05
	3/5/2012	12.65	ND	99.80	87.15	NA	NA	NA		
	3/12/2012	12.55	ND	99.80	87.25	NA	NA	NA		
	3/19/2012	12.54	ND	99.80	87.26	NA	NA	NA		0.05
	3/29/2012	10.68	ND	99.80	89.12	NA	NA	NA		
	4/2/2012	11.86	ND	99.80	87.94	NA	NA	NA		
	4/10/2012	11.46	ND	99.80	88.34	NA	NA	NA		
	4/16/2012	13.02	ND	99.80	86.78	NA	NA	NA		0.05
	4/23/2012	12.72	ND	99.80	87.08	NA	NA	NA		
	4/30/2012	12.95	ND	99.80	86.85	NA	NA	NA		
	5/8/2012*	12.20	ND	99.80	87.60	NA	NA	NA		
	5/15/2012	12.38	ND	99.80	87.42	NA	NA	NA		
	5/21/2012	12.59	ND	99.80	87.21	NA	NA	NA		0.07
	5/31/2012	12.58	ND	99.80	87.22	NA	NA	NA		
	6/7/2012*	12.18	ND	99.80	87.62	NA	NA	NA		
	6/11/2012	12.62	ND	99.80	87.18	NA	NA	NA		0.02
	6/18/2012	12.59	ND	99.80	87.21	NA	NA	NA		

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	6/25/2012	12.37	ND	99.80	87.43	NA	NA	NA		
	7/6/2012*	11.96	ND	99.80	87.84	NA	NA	NA		
	7/10/2012	12.58	ND	99.80	87.22	NA	NA	NA		
	7/17/2012	12.69	ND	99.80	87.11	NA	NA	NA		0.04
	7/24/2012	12.57	ND	99.80	87.23	NA	NA	NA		
	7/31/2012	12.54	ND	99.80	87.26	NA	NA	NA		
	8/7/2012	12.58	ND	99.80	87.22	NA	NA	NA		
	8/14/2012	12.67	ND	99.80	87.13	NA	NA	NA		
	8/21/2012	12.84	ND	99.80	86.96	NA	NA	NA		
	8/28/2012	12.04	ND	99.80	87.76	NA	NA	NA		
	9/5/2012	12.76	ND	99.80	87.04	NA	NA	NA		0.08
	9/13/2012	13.36	ND	99.80	86.44	NA	NA	NA		
	9/18/2012	13.26	ND	99.80	86.54	NA	NA	NA		
	9/26/2012	13.30	ND	99.80	86.50	NA	NA	NA		
	10/5/2012*	12.54	ND	99.80	87.26	NA	NA	NA		
	10/11/2012	13.75	ND	99.80	86.05	NA	NA	NA		0.05
	10/16/2012	13.31	ND	99.80	86.49	NA	NA	NA		
	10/22/2012	13.43	ND	99.80	86.37	NA	NA	NA		
	10/31/2012	12.59	ND	99.80	87.21	NA	NA	NA		
	11/7/2012	12.61	ND	99.80	87.19	NA	NA	NA		
	11/13/2012	12.86	ND	99.80	86.94	NA	NA	NA		0.20
	11/21/2012	13.19	ND	99.80	86.61	NA	NA	NA		
	11/27/2012	13.20	ND	99.80	86.60	NA	NA	NA		
	12/4/2012	13.33	ND	99.80	86.47	NA	NA	NA		0.07
	12/13/2012	13.32	ND	99.80	86.48	NA	NA	NA		
	12/21/2012	13.33	ND	99.80	86.47	NA	NA	NA		
	12/28/2012	13.30	ND	99.80	86.50	NA	NA	NA		
	1/4/2013	13.17	ND	99.80	86.63	NA	NA	NA		0.10
	1/9/2013	13.14	ND	99.80	86.66	NA	NA	NA		
	1/16/2013	NG	ND	99.80	NG	NA	NA	NA	Blocked	
	1/21/2013*	12.29	ND	99.80	87.51	NA	NA	NA		
	2/8/2013	12.52	ND	99.80	87.28	NA	NA	NA		0.10
	3/8/2013	12.10	ND	99.80	87.70	NA	NA	NA		0.03
	4/16/2013	15.82	ND	99.80	83.98	NA	NA	NA	Slight Odor	0.05
	4/17/2013*	11.47	ND	99.80	88.33	NA	NA	NA		
	5/3/2013	11.85	ND	99.80	87.95	NA	NA	NA		0.00
	6/13/2013	11.40	ND	99.80	88.40	NA	NA	NA		0.05
	7/11/2013	11.85	ND	99.80	87.95	NA	NA	NA		0.02
	7/19/2013*	11.40	ND	99.80	88.40	NA	NA	NA		
	8/1/2013	12.80	ND	99.80	87.00	NA	NA	NA		0.00
	9/5/2013	12.75	ND	99.80	87.05	NA	NA	NA		
	10/7/2013	13.70	ND	99.80	86.10	NA	NA	NA		0.00
	10/8/2013*	13.37	ND	99.80	86.43	NA	NA	NA		
	10/22/2013*	12.12	ND	99.80	87.68	NA	NA	NA		
	11/6/2013	13.11	ND	99.80	86.69	NA	NA	NA		0.00
	12/4/2013	13.24	ND	99.80	86.56	NA	NA	NA		0.02
	1/6/2014*	12.02	ND	99.80	87.78	NA	NA	NA		
	2/24/2014	10.72	ND	99.80	89.08	NA	NA	NA		
	3/10/2014	10.21	ND	99.80	89.59	NA	NA	NA		0.0
	4/22/2014	10.58	ND	99.80	89.22	NA	NA	NA		0.0
	4/23/2014*	10.26	ND	99.80	89.54	NA	NA	NA		

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Gasoline Fueling Station – Royal Farms #64
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	5/7/2014	9.75	ND	99.80	90.05	NA	NA	NA		0.0
	6/3/2014	11.05	ND	99.80	88.75	NA	NA	NA		
	7/3/2014	9.30	ND	99.80	90.50	NA	NA	NA		
	7/17/2014	9.30	ND	99.80	90.50	NA	NA	NA		
	8/25/2014	11.50	ND	99.80	88.30	NA	NA	NA		
	9/9/2014	11.27	ND	99.80	88.53	NA	NA	NA		0.05
	10/7/2014	11.50	ND	99.80	88.30	NA	NA	NA		
	10/8/2014*	11.11	ND	99.80	88.69	NA	NA	NA		
	11/4/2014	12.05	ND	99.80	87.75	NA	NA	NA		0.02
	12/1/2014	12.02	ND	99.80	87.78	NA	NA	NA		
	1/7/2015	10.60	ND	99.80	89.20	NA	NA	NA		
	1/9/2015*	10.01	ND	99.80	89.79	NA	NA	NA		
	2/3/2015	11.21	ND	99.80	88.59	NA	NA	NA		0.00
	3/17/2015	9.73	ND	99.80	90.07	NA	NA	NA		0.00
	4/14/2015	9.83	ND	99.80	89.97	NA	NA	NA		
	4/15/2015*	9.12	ND	99.80	90.68	NA	NA	NA		
	5/12/2015	10.36	ND	99.80	89.44	NA	NA	NA		0.00
	6/9/2015	10.61	ND	99.80	89.19	NA	NA	NA		0.06
MW-14	12/14/2011	11.74	11.73	99.24	87.50	87.51	87.51	0.01	Recovery Well	
	12/19/2011	14.92	ND	98.38	83.46	NA	NA	NA	Moderate odor	
	12/21/2012	15.15	15.15	98.38	83.23	83.23	83.23	0.00	Sheen	
	12/29/2011	15.05	15.05	98.38	83.33	83.33	83.33	0.00	thin sheen	
	1/5/2012	14.87	14.87	98.38	83.51	83.51	83.51	0.00	thin sheen	
	1/9/2012	14.81	14.81	98.38	83.57	83.57	83.57	0.00	thin sheen	
	1/10/2012	14.31	14.28	98.38	84.07	84.10	84.09	0.03		
	1/18/2012	14.96	ND	98.38	83.42	NA	NA	NA	Slight Odor	
	1/25/2012	14.44	ND	98.38	83.94	NA	NA	NA	Strong Odor	
	2/13/2012	15.69	ND	98.38	82.69	NA	NA	NA	Moderate odor	
	3/5/2012	15.33	ND	98.38	83.05	NA	NA	NA	Slight odor	
	3/29/2012	12.45	12.45	98.38	85.93	85.93	85.93	0.00	Sheen	
	4/11/2012	13.90	13.90	98.38	84.48	84.48	84.48	0.00	Sheen	
	5/8/2012*	14.86	ND	98.38	83.52	NA	NA	NA	Strong Odor	
	5/15/2012	15.14	ND	98.38	83.24	NA	NA	NA		
	6/7/2012*	15.16	ND	98.38	83.22	NA	NA	NA	**Stinger depth: 17.75 ft.**	
	7/6/2012*	14.59	ND	98.38	83.79	NA	NA	NA	Slight Odor	
	8/14/2012	17.67	ND	98.38	80.71	NA	NA	NA	**Stinger depth: 19.25 ft.**	
	9/5/2012	18.84	ND	98.38	79.54	NA	NA	NA		
	10/5/2012*	15.39	ND	98.38	82.99	NA	NA	NA	Slight Odor	
	11/13/2012	15.15	ND	98.38	83.23	NA	NA	NA		
	12/4/2012	NG	ND	98.38	NG	NA	NA	NA		
	1/9/2013	17.51	ND	98.38	NG	NA	NA	NA	**Stinger depth: 20.25 ft.**	
	1/21/2013*	15.47	ND	98.38	82.91	NA	NA	NA		
	2/8/2013	20.87	ND	98.38	NG	NA	NA	NA		
	3/8/2013	20.90	ND	98.38	77.48	NA	NA	NA		
	4/16/2013	15.53	ND	98.38	82.85	NA	NA	NA	Slight Odor	
	5/3/2013	15.65	ND	98.38	82.73	NA	NA	NA		
	6/13/2013	19.10	ND	98.38	79.28	NA	NA	NA		
	7/11/2013	15.58	ND	98.38	82.80	NA	NA	NA		
	7/19/2013*	14.63	ND	98.38	83.75	NA	NA	NA		
	8/1/2013	15.58	ND	98.38	82.80	NA	NA	NA		0.00
	9/5/2013	16.28	ND	98.38	82.10	NA	NA	NA		

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	10/8/2013*	15.20	ND	98.38	83.18	NA	NA	NA		
	10/22/2013*	14.37	ND	98.38	84.01	NA	NA	NA		
	11/6/2013	16.49	ND	98.38	81.89	NA	NA	NA		
	12/16/2013	18.80	ND	98.38	79.58	NA	NA	NA		
	1/6/2014*	15.98	ND	98.38	82.40	NA	NA	NA	Slight odor	
	2/24/2014	15.68	ND	98.38	82.70	NA	NA	NA		
	3/10/2014	13.64	ND	98.38	84.74	NA	NA	NA		
	4/22/2014	16.67	ND	98.38	81.71	NA	NA	NA		
	5/7/2014	17.20	ND	98.38	81.18	NA	NA	NA		
	6/3/2014	15.82	ND	98.38	82.56	NA	NA	NA		
	7/3/2014	14.86	ND	98.38	83.52	NA	NA	NA		
	7/17/2014	12.30	ND	98.38	86.08	NA	NA	NA	**tinger broken in half 19.35-> 9.3**	
	8/25/2014	14.66	ND	98.38	83.72	NA	NA	NA	Slight Odor	
	9/9/2014	16.52	ND	98.38	81.86	NA	NA	NA		
	10/8/2014	15.75	ND	98.38	82.63	NA	NA	NA	Slight Odor	
	11/4/2014	15.23	ND	98.38	83.15	NA	NA	NA		
	12/1/2014	15.55	ND	98.38	82.83	NA	NA	NA		
	1/9/2015*	10.91	ND	98.38	87.47	NA	NA	NA		
	2/3/2015	14.83	ND	98.38	83.55	NA	NA	NA		
	3/17/2015	14.09	ND	98.38	84.29	NA	NA	NA		
	4/14/2015	13.95	ND	98.38	84.43	NA	NA	NA		
	4/15/2015*	12.00	ND	98.38	86.38	NA	NA	NA		
	5/12/2015	13.19	ND	98.38	85.19	NA	NA	NA		
	6/9/2015	13.56	ND	98.38	84.82	NA	NA	NA		
MW-15	12/14/2011	5.15	ND	91.16	86.01	NA	NA	NA	Recovery Well	
	12/19/2011	9.26	ND	91.16	81.90	NA	NA	NA		
	12/29/2011	9.72	ND	91.16	81.44	NA	NA	NA		
	1/5/2012	9.50	ND	91.16	81.66	NA	NA	NA		
	1/9/2012	9.41	ND	91.16	81.75	NA	NA	NA		
	1/10/2012	7.55	ND	91.16	83.61	NA	NA	NA		
	1/18/2012	9.78	ND	91.16	81.38	NA	NA	NA		
	1/25/2012	14.70	ND	91.16	76.46	NA	NA	NA		
	2/13/2012	14.47	ND	91.16	76.69	NA	NA	NA		
	3/5/2012	11.03	ND	91.16	80.13	NA	NA	NA		
	3/29/2012	5.88	ND	91.16	85.28	NA	NA	NA		
	4/11/2012	6.65	ND	91.16	84.51	NA	NA	NA		
	5/8/2012*	8.08	ND	91.16	83.08	NA	NA	NA		
	5/15/2012	10.06	ND	91.16	81.10	NA	NA	NA		
	6/7/2012*	8.45	ND	91.16	82.71	NA	NA	NA	**Stinger depth: 12.75 ft.**	
	7/6/2012*	8.03	ND	91.16	83.13	NA	NA	NA		
	8/14/2012	12.55	ND	91.16	78.61	NA	NA	NA	**Stinger depth: 11.75 ft.**	
	9/5/2012	12.55	ND	91.16	78.61	NA	NA	NA		
	10/5/2012*	8.64	ND	91.16	82.52	NA	NA	NA		
	11/13/2012	10.01	ND	91.16	81.15	NA	NA	NA		
	12/4/2012	10.96	ND	91.16	80.20	NA	NA	NA		
	1/9/2013	10.96	ND	91.16	80.20	NA	NA	NA		
	1/21/2013*	8.63	ND	91.16	82.53	NA	NA	NA		
	2/8/2013	13.68	ND	91.16	77.48	NA	NA	NA	**Stinger depth: 12.5 ft.**	
	3/8/2013	13.60	ND	91.16	77.56	NA	NA	NA		
	4/16/2013	11.04	ND	91.16	80.12	NA	NA	NA	V. Slight	
	5/3/2013	9.81	ND	91.16	81.35	NA	NA	NA		

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	6/13/2013	9.62	ND	91.16	81.54	NA	NA	NA		
	7/11/2013	10.01	ND	91.16	81.15	NA	NA	NA		
	7/19/2013*	7.64	ND	91.16	83.52	NA	NA	NA		
	8/1/2013	12.35	ND	91.16	78.81	NA	NA	NA		
	9/5/2013	9.88	ND	91.16	81.28	NA	NA	NA		
	10/8/2013*	8.52	ND	91.16	82.64	NA	NA	NA		
	10/22/2013*	7.67	ND	91.16	83.49	NA	NA	NA		
	11/6/2013	10.03	ND	91.16	81.13	NA	NA	NA		
	12/16/2013	10.80	ND	91.16	80.36	NA	NA	NA		
	1/6/2014*	7.35	ND	91.16	83.81	NA	NA	NA		
	2/24/2014	9.08	ND	91.16	82.08	NA	NA	NA		
	3/10/2014	7.25	ND	91.16	83.91	NA	NA	NA		
	4/22/2014	9.83	ND	91.16	81.33	NA	NA	NA		
	5/7/2014	7.08	ND	91.16	84.08	NA	NA	NA		
	6/3/2014	10.19	ND	91.16	80.97	NA	NA	NA		
	7/3/2014	7.75	ND	91.16	83.41	NA	NA	NA		
	7/17/2014	5.80	ND	91.16	85.36	NA	NA	NA	**Stinger Depth: 11.15**	
	8/25/2014	9.56	ND	91.16	81.60	NA	NA	NA		
	9/9/2014	9.95	ND	91.16	81.21	NA	NA	NA		
	10/8/2014	8.13	ND	91.16	83.03	NA	NA	NA		
	11/4/2014	8.95	ND	91.16	82.21	NA	NA	NA		
	12/1/2014	9.30	ND	91.16	81.86	NA	NA	NA		
	1/9/2015*	5.45	ND	91.16	85.71	NA	NA	NA		
	2/3/2015	8.10	ND	91.16	83.06	NA	NA	NA		
	3/17/2015	9.03	ND	91.16	82.13	NA	NA	NA		
	4/14/2015	8.75	ND	91.16	82.41	NA	NA	NA		
	4/15/2015*	5.55	ND	91.16	85.61	NA	NA	NA		
	5/12/2015	6.81	ND	91.16	84.35	NA	NA	NA		
	6/9/2015	6.84	ND	91.16	84.32	NA	NA	NA		
MW-16	12/14/2011	4.66	ND	90.75	86.09	NA	NA	NA	Recovery Well	
	12/19/2011	8.45	ND	90.75	82.30	NA	NA	NA		
	12/29/2011	9.37	ND	90.75	81.38	NA	NA	NA	Stagnant odor	
	1/5/2012	9.20	ND	90.75	81.55	NA	NA	NA		
	1/9/2012	9.13	ND	90.75	81.62	NA	NA	NA		
	1/10/2012	7.14	ND	90.75	83.61	NA	NA	NA		
	1/18/2012	9.59	ND	90.75	81.16	NA	NA	NA		
	1/25/2012	11.18	ND	90.75	79.57	NA	NA	NA		
	2/13/2012	11.18	ND	90.75	79.57	NA	NA	NA		
	3/5/2012	14.27	ND	90.75	76.48	NA	NA	NA		
	3/29/2012	5.41	ND	90.75	85.34	NA	NA	NA		
	4/11/2012	7.20	ND	90.75	83.55	NA	NA	NA		
	5/8/2012*	7.70	ND	90.75	83.05	NA	NA	NA		
	5/15/2012	8.39	ND	90.75	82.36	NA	NA	NA		
	6/7/2012*	8.39	ND	90.75	82.36	NA	NA	NA	**Stinger depth: 11.50 ft.**	
	7/6/2012*	7.57	ND	90.75	83.18	NA	NA	NA		
	8/14/2012	10.65	ND	90.75	80.10	NA	NA	NA	**Stinger depth: 12.25 ft.**	
	9/5/2012	11.07	ND	90.75	79.68	NA	NA	NA		
	10/5/2012*	8.25	ND	90.75	82.50	NA	NA	NA		
	11/13/2012	9.02	ND	90.75	81.73	NA	NA	NA		
	12/4/2012	11.20	ND	90.75	79.55	NA	NA	NA		
	1/9/2013	10.20	ND	90.75	80.55	NA	NA	NA		

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	1/21/2013*	8.25	ND	90.75	82.50	NA	NA	NA		
	2/8/2013	12.45	ND	90.75	78.30	NA	NA	NA	**Stinger depth: 13.0 ft.**	
	3/8/2013	12.32	ND	90.75	78.43	NA	NA	NA		
	4/16/2013	9.59	ND	90.75	81.16	NA	NA	NA	Slight	
	5/3/2013	8.60	ND	90.75	82.15	NA	NA	NA		
	6/13/2013	7.48	ND	90.75	83.27	NA	NA	NA		
	7/11/2013	9.24	ND	90.75	81.51	NA	NA	NA		
	7/19/2013*	7.50	ND	90.75	83.25	NA	NA	NA		
	8/1/2013	11.09	ND	90.75	79.66	NA	NA	NA		
	9/5/2013	9.53	ND	90.75	81.22	NA	NA	NA		
	10/8/2013*	8.09	ND	90.75	82.66	NA	NA	NA		
	10/22/2013*	7.20	ND	90.75	83.55	NA	NA	NA		
	11/6/2013	9.35	ND	90.75	81.40	NA	NA	NA		
	12/16/2013	10.49	ND	90.75	80.26	NA	NA	NA		
	1/6/2014*	7.34	ND	90.75	83.41	NA	NA	NA		
	2/24/2014	9.25	ND	90.75	81.50	NA	NA	NA		
	3/10/2014	6.72	ND	90.75	84.03	NA	NA	NA		
	4/22/2014	10.50	ND	90.75	80.25	NA	NA	NA		
	5/7/2014	5.93	ND	90.75	84.82	NA	NA	NA		
	6/3/2014	9.80	ND	90.75	80.95	NA	NA	NA		
	7/3/2014	7.40	ND	90.75	83.35	NA	NA	NA		
	7/17/2014	5.30	ND	90.75	85.45	NA	NA	NA	**Stinger Depth: 9.20**	
	8/25/2014	9.65	ND	90.75	81.10	NA	NA	NA		
	9/9/2014	9.41	ND	90.75	81.34	NA	NA	NA		
	10/8/2014	7.80	ND	90.75	82.95	NA	NA	NA		
	11/4/2014	8.58	ND	90.75	82.17	NA	NA	NA		
	12/1/2014	9.25	ND	90.75	81.50	NA	NA	NA		
	1/9/2015*	4.95	ND	90.75	85.80	NA	NA	NA		
	2/3/2015	8.76	ND	90.75	81.99	NA	NA	NA		
	3/17/2015	8.35	ND	90.75	82.40	NA	NA	NA		
	4/14/2015	8.66	ND	90.75	82.09	NA	NA	NA		
	4/15/2015*	5.10	ND	90.75	85.65	NA	NA	NA		
	5/12/2015	5.11	ND	90.75	85.64	NA	NA	NA		
	6/9/2015	5.33	ND	90.75	85.42	NA	NA	NA		
MW-17	12/14/2011	10.32	ND	95.32	85.00	NA	NA	NA	Recovery Well	
	12/19/2011	12.96	ND	95.32	82.36	NA	NA	NA	stagnant odor	
	12/29/2011	12.90	ND	95.32	82.42	NA	NA	NA		
	1/5/2012	12.52	ND	95.32	82.80	NA	NA	NA	Stagnant odor	
	1/9/2012	12.64	ND	95.32	82.68	NA	NA	NA		
	1/10/2012	11.42	ND	95.32	83.90	NA	NA	NA		
	1/18/2012	12.21	ND	95.32	83.11	NA	NA	NA		
	1/25/2012	12.06	ND	95.32	83.26	NA	NA	NA		
	2/13/2012	12.85	ND	95.32	82.47	NA	NA	NA		
	3/5/2012	13.22	ND	95.32	82.10	NA	NA	NA		
	3/29/2012	10.55	ND	95.32	84.77	NA	NA	NA		
	4/11/2012	10.91	ND	95.32	84.41	NA	NA	NA		
	5/8/2012*	11.57	ND	95.32	83.75	NA	NA	NA		
	5/15/2012	13.70	ND	95.32	81.62	NA	NA	NA		
	6/7/2012*	11.76	ND	95.32	83.56	NA	NA	NA	**Stinger depth: 15.10 ft.**	
	7/6/2012*	11.72	ND	95.32	83.60	NA	NA	NA		
	8/14/2012	16.10	ND	95.32	79.22	NA	NA	NA		

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	9/5/2012	13.07	ND	95.32	82.25	NA	NA	NA		
	10/5/2012*	12.12	ND	95.32	83.20	NA	NA	NA		
	11/13/2012	12.41	ND	95.32	82.91	NA	NA	NA		
	12/4/2012	12.85	ND	95.32	82.47	NA	NA	NA		
	1/9/2013	12.89	ND	95.32	82.43	NA	NA	NA		
	1/21/2013*	12.00	ND	95.32	83.32	NA	NA	NA		
	2/8/2013	12.66	ND	95.32	82.66	NA	NA	NA		
	3/8/2013	12.15	ND	95.32	83.17	NA	NA	NA		
	4/16/2013	12.47	ND	95.32	82.85	NA	NA	NA		
	5/3/2013	11.99	ND	95.32	83.33	NA	NA	NA		
	6/13/2013	10.72	ND	95.32	84.60	NA	NA	NA		
	7/11/2013	12.05	ND	95.32	83.27	NA	NA	NA		
	7/19/2013*	11.68	ND	95.32	83.64	NA	NA	NA		
	8/1/2013	12.55	ND	95.32	82.77	NA	NA	NA		
	9/5/2013	12.58	ND	95.32	82.74	NA	NA	NA		
	10/8/2013*	12.18	ND	95.32	83.14	NA	NA	NA		
	10/22/2013*	11.69	ND	95.32	83.63	NA	NA	NA		
	11/6/2013	13.27	ND	95.32	82.05	NA	NA	NA		
	12/16/2013	14.50	ND	95.32	80.82	NA	NA	NA		
	1/6/2014*	10.93	ND	95.32	84.39	NA	NA	NA		
	2/24/2014	15.30	ND	95.32	80.02	NA	NA	NA		
	3/10/2014	11.48	ND	95.32	83.84	NA	NA	NA		
	4/22/2014	14.41	ND	95.32	80.91	NA	NA	NA		
	5/7/2014	13.15	ND	95.32	82.17	NA	NA	NA		
	6/3/2014	14.31	ND	95.32	81.01	NA	NA	NA		
	7/3/2014	13.91	ND	95.32	81.41	NA	NA	NA		
	7/17/2014	10.74	ND	95.32	84.58	NA	NA	NA	**Stinger Depth: 16.55**	
	8/25/2014	15.08	ND	95.32	80.24	NA	NA	NA		
	9/9/2014	15.57	ND	95.32	79.75	NA	NA	NA		
	10/7/2014	11.75	ND	95.32	83.57	NA	NA	NA		
	11/4/2014	14.22	ND	95.32	81.10	NA	NA	NA		
	12/1/2014	14.65	ND	95.32	80.67	NA	NA	NA		
	1/9/2015*	10.38	ND	95.32	84.94	NA	NA	NA		
	2/3/2015	15.49	ND	95.32	79.83	NA	NA	NA		
	3/17/2015	13.97	ND	95.32	81.35	NA	NA	NA		
	4/14/2015	14.53	ND	95.32	80.79	NA	NA	NA		
	4/15/2015*	10.42	ND	95.32	84.90	NA	NA	NA		
	5/12/2015	12.55	ND	95.32	82.77	NA	NA	NA		
	6/9/2015	12.49	ND	95.32	82.83	NA	NA	NA		
MW-18	12/14/2011	4.59	4.59	90.72	86.13	86.13	86.13	0.00	Slight Sheen	4.20
	12/15/2011	8.97	ND	90.72	81.75	NA	NA	NA		>5
	12/16/2011	9.10	9.10	90.72	81.62	81.62	81.62	0.00	sheen	>5
	12/19/2011	8.94	ND	90.72	81.78	NA	NA	NA	Strong Odor	0.37
	12/20/2011	9.26	9.26	90.72	81.46	81.46	81.46	0.00	Spotty Sheen	0.74
	12/21/2011	9.48	9.48	90.72	81.24	81.24	81.24	0.00	Spotty Sheen	0.84
	12/22/2011	9.40	ND	90.72	81.32	NA	NA	NA	Slight Odor	0.27
	12/23/2011	9.56	ND	90.72	81.16	NA	NA	NA	Strong Odor	3.35
	12/27/2011	8.97	ND	90.72	81.75	NA	NA	NA		>5
	12/28/2011	9.59	ND	90.72	81.13	NA	NA	NA	Moderate odor	>5
	12/29/2011	9.48	9.48	90.72	81.24	81.24	81.24	0.00	Slight Sheen	4.10
	12/30/2011	9.70	9.70	90.72	81.02	81.02	81.02	0.00	thin sheen	4.45

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	1/3/2012	9.24	ND	90.72	81.48	NA	NA	NA	Slight Odor	4.70
	1/5/2012	9.34	ND	90.72	81.38	NA	NA	NA	Stagnant odor	1.04
	1/9/2012	9.20	9.20	90.72	81.52	81.52	81.52	0.00	dirty sheen	
	1/10/2012	7.12	7.12	90.72	83.60	83.60	83.60	0.00	sheen	
	1/18/2012	9.58	ND	90.72	81.14	NA	NA	NA		
	1/25/2012	9.02	ND	90.72	81.70	NA	NA	NA		
	1/30/2012	8.62	ND	90.72	82.10	NA	NA	NA		
	2/6/2012	9.54	ND	90.72	81.18	NA	NA	NA	Slight Odor	
	2/13/2012	9.28	ND	90.72	81.44	NA	NA	NA		
	2/20/2012	9.24	ND	90.72	81.48	NA	NA	NA		13.25
	2/28/2012	9.50	ND	90.72	81.22	NA	NA	NA	Moderate odor	2.45
	3/5/2012	8.92	ND	90.72	81.80	NA	NA	NA		
	3/12/2012	9.31	ND	90.72	81.41	NA	NA	NA		
	3/19/2012	9.34	ND	90.72	81.38	NA	NA	NA	Slight Odor	2.55
	3/29/2012	5.35	ND	90.72	85.37	NA	NA	NA	Slight Odor	
	4/2/2012	8.16	ND	90.72	82.56	NA	NA	NA	Moderate odor	
	4/10/2012	7.84	ND	90.72	82.88	NA	NA	NA	Slight Odor	
	4/16/2012	9.54	ND	90.72	81.18	NA	NA	NA	Slight Odor	1.01
	4/23/2012	8.75	ND	90.72	81.97	NA	NA	NA	Slight Odor	
	4/30/2012	9.63	ND	90.72	81.09	NA	NA	NA		
	5/8/2012*	7.90	ND	90.72	82.82	NA	NA	NA		
	5/15/2012	8.38	ND	90.72	82.34	NA	NA	NA		
	5/21/2012	8.77	ND	90.72	81.95	NA	NA	NA		3.50
	5/31/2012	9.18	ND	90.72	81.54	NA	NA	NA		
	6/7/2012*	8.08	ND	90.72	82.64	NA	NA	NA		
	6/11/2012	9.54	ND	90.72	81.18	NA	NA	NA		2.10
	6/18/2012	9.48	ND	90.72	81.24	NA	NA	NA	Slight Odor	
	6/25/2012	8.93	ND	90.72	81.79	NA	NA	NA		
	7/6/2012*	7.39	ND	90.72	83.33	NA	NA	NA		
	7/10/2012	9.47	ND	90.72	81.25	NA	NA	NA		
	7/17/2012	9.57	ND	90.72	81.15	NA	NA	NA		2.80
	7/24/2012	9.16	ND	90.72	81.56	NA	NA	NA		
	7/31/2012	9.34	ND	90.72	81.38	NA	NA	NA		
	8/7/2012	9.56	ND	90.72	81.16	NA	NA	NA		0.12
	8/14/2012	9.60	ND	90.72	81.12	NA	NA	NA		
	8/21/2012	9.98	ND	90.72	80.74	NA	NA	NA		
	8/28/2012	8.22	ND	90.72	82.50	NA	NA	NA		
	9/5/2012	9.78	ND	90.72	80.94	NA	NA	NA		3.00
	9/13/2012	10.43	ND	90.72	80.29	NA	NA	NA		
	9/18/2012	10.13	ND	90.72	80.59	NA	NA	NA		
	9/26/2012	9.18	ND	90.72	81.54	NA	NA	NA		
	10/5/2012*	8.24	ND	90.72	82.48	NA	NA	NA		
	10/11/2012	9.97	ND	90.72	80.75	NA	NA	NA		0.44
	10/16/2012	9.91	ND	90.72	80.81	NA	NA	NA		
	10/22/2012	10.01	ND	90.72	80.71	NA	NA	NA		
	10/31/2012	9.14	ND	90.72	81.58	NA	NA	NA		
	11/7/2012	8.82	ND	90.72	81.90	NA	NA	NA		
	11/13/2012	10.02	ND	90.72	80.70	NA	NA	NA		4.00
	11/21/2012	10.32	ND	90.72	80.40	NA	NA	NA		
	11/27/2012	10.52	ND	90.72	80.20	NA	NA	NA		
	12/4/2012	10.48	ND	90.72	80.24	NA	NA	NA		>5.0

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	12/13/2012	10.57	ND	90.72	80.15	NA	NA	NA		
	12/21/2012	10.82	ND	90.72	79.90	NA	NA	NA		
	12/28/2012	11.91	ND	90.72	78.81	NA	NA	NA		
	1/4/2013	10.84	ND	90.72	79.88	NA	NA	NA		6.50
	1/9/2013	10.95	ND	90.72	79.77	NA	NA	NA		
	1/16/2013	9.87	ND	90.72	80.85	NA	NA	NA		
	1/21/2013*	8.25	ND	90.72	82.47	NA	NA	NA		
	2/8/2013	10.29	ND	90.72	80.43	NA	NA	NA		5.00
	3/8/2013	9.41	ND	90.72	81.31	NA	NA	NA		10.50
	4/16/2013	9.56	ND	90.72	81.16	NA	NA	NA		1.70
	4/17/2013*	7.59	ND	90.72	83.13	NA	NA	NA		
	5/3/2013	8.66	ND	90.72	82.06	NA	NA	NA		0.04
	6/13/2013	8.50	ND	90.72	82.22	NA	NA	NA		1.70
	7/11/2013	9.01	ND	90.72	81.71	NA	NA	NA		1.50
	7/19/2013*	7.07	ND	90.72	83.65	NA	NA	NA		
	8/1/2013	10.30	ND	90.72	80.42	NA	NA	NA		6.50
	9/5/2013	9.60	ND	90.72	81.12	NA	NA	NA		
	10/7/2013	8.88	ND	90.72	81.84	NA	NA	NA		0.40
	10/8/2013*	8.10	ND	90.72	82.62	NA	NA	NA		
	10/22/2013*	7.24	ND	90.72	83.48	NA	NA	NA		
	11/6/2013	9.20	ND	90.72	81.52	NA	NA	NA		0.30
	12/4/2013	10.13	ND	90.72	80.59	NA	NA	NA		2.60
	1/6/2014*	7.97	ND	90.72	82.75	NA	NA	NA		
	2/24/2014	8.80	ND	90.72	81.92	NA	NA	NA		
	3/10/2014	8.01	ND	90.72	82.71	NA	NA	NA		0.0
	4/22/2014	10.07	ND	90.72	80.65	NA	NA	NA		0.2
	4/23/2014*	7.91	ND	90.72	82.81	NA	NA	NA		
	5/7/2014	6.08	ND	90.72	84.64	NA	NA	NA		0.0
	6/3/2014	9.85	ND	90.72	80.87	NA	NA	NA		
	7/3/2014	6.92	ND	90.72	83.80	NA	NA	NA		0.08
	7/17/2014	5.20	ND	90.72	85.52	NA	NA	NA		
	8/25/2014	10.30	ND	90.72	80.42	NA	NA	NA		0.08
	9/9/2014	9.03	ND	90.72	81.69	NA	NA	NA		1.2
	10/7/2014	9.30	ND	90.72	81.42	NA	NA	NA		2.5
	10/8/2014*	7.81	ND	90.72	82.91	NA	NA	NA		
	11/4/2014	8.70	ND	90.72	82.02	NA	NA	NA		1.2
	12/1/2014	8.35	ND	90.72	82.37	NA	NA	NA		3.0
	1/7/2015	6.32	ND	90.72	84.40	NA	NA	NA		
	1/9/2015*	5.00	ND	90.72	85.72	NA	NA	NA		
	2/3/2015	7.87	ND	90.72	82.85	NA	NA	NA		1.0
	3/17/2015	7.01	ND	90.72	83.71	NA	NA	NA		0.0
	4/14/2015	6.82	ND	90.72	83.90	NA	NA	NA		
	4/15/2015*	5.20	ND	90.72	85.52	NA	NA	NA		
	5/12/2015	6.11	ND	90.72	84.61	NA	NA	NA		0.00
	6/9/2015	6.93	ND	90.72	83.79	NA	NA	NA		0.06
MW-19	12/14/2011	9.10	ND	95.01	85.91	NA	NA	NA		
	12/15/2011	12.79	ND	95.01	82.22	NA	NA	NA		0.65
	12/16/2011	13.01	ND	95.01	82.00	NA	NA	NA	Moderate odor	0.88
	12/19/2011	12.63	ND	95.01	82.38	NA	NA	NA	Moderate odor	0.79
	12/20/2011	13.03	ND	95.01	81.98	NA	NA	NA	Strong Odor	0.81
	12/21/2011	13.03	ND	95.01	81.98	NA	NA	NA	Moderate odor	0.76

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	12/22/2011	12.85	ND	95.01	82.16	NA	NA	NA	Moderate odor	0.62
	12/23/2011	13.20	13.20	95.01	81.81	81.81	81.81	0.00	Spotty Sheen	0.81
	12/27/2011	12.52	12.52	95.01	82.49	82.49	82.49	0.00	sheen	0.66
	12/28/2011	13.04	13.04	95.01	81.97	81.97	81.97	0.00	Spotty Sheen	0.65
	12/29/2011	13.01	ND	95.01	82.00	NA	NA	NA	Moderate odor	0.60
	12/30/2011	13.03	13.03	95.01	81.98	81.98	81.98	0.00	sheen	0.62
	1/3/2012	12.73	ND	95.01	82.28	NA	NA	NA	Moderate odor	0.54
	1/5/2012	13.03	ND	95.01	81.98	NA	NA	NA	Strong Odor	0.53
	1/9/2012	12.67	12.67	95.01	82.34	82.34	82.34	0.00	sheen	
	1/10/2012	11.24	ND	95.01	83.77	NA	NA	NA	Stagnant odor	
	1/18/2012	12.99	12.99	95.01	82.02	82.02	82.02	0.00	whispy sheen	
	1/25/2012	12.71	ND	95.01	82.30	NA	NA	NA	Slight Odor	
	1/30/2012	12.54	ND	95.01	82.47	NA	NA	NA	Slight Odor	
	2/6/2012	12.69	ND	95.01	82.32	NA	NA	NA	Moderate odor	
	2/13/2012	12.88	ND	95.01	82.13	NA	NA	NA		
	2/20/2012	13.09	ND	95.01	81.92	NA	NA	NA	Moderate odor	0.53
	2/28/2012	13.22	ND	95.01	81.79	NA	NA	NA	Strong Odor	0.33
	3/5/2012	13.09	ND	95.01	81.92	NA	NA	NA	Slight odor	
	3/12/2012	12.90	ND	95.01	82.11	NA	NA	NA		
	3/19/2012	12.93	ND	95.01	82.08	NA	NA	NA		0.30
	3/29/2012	9.71	ND	95.01	85.30	NA	NA	NA		
	4/2/2012	11.71	ND	95.01	83.30	NA	NA	NA		
	4/10/2012	10.83	ND	95.01	84.18	NA	NA	NA		
	4/16/2012	12.68	12.68	95.01	82.33	82.33	82.33	0.00	Sheen	0.08
	4/23/2012	12.24	ND	95.01	82.77	NA	NA	NA	Slight Odor	
	4/30/2012	12.88	ND	95.01	82.13	NA	NA	NA		
	5/8/2012*	11.55	ND	95.01	83.46	NA	NA	NA	Slight Odor	
	5/15/2012	11.97	ND	95.01	83.04	NA	NA	NA		
	5/21/2012	12.53	ND	95.01	82.48	NA	NA	NA		0.26
	5/31/2012	12.68	ND	95.01	82.33	NA	NA	NA		
	6/7/2012*	11.82	ND	95.01	83.19	NA	NA	NA	Slight Odor	
	6/11/2012	12.80	ND	95.01	82.21	NA	NA	NA		0.17
	6/18/2012	12.77	ND	95.01	82.24	NA	NA	NA		
	6/25/2012	12.92	ND	95.01	82.09	NA	NA	NA		
	7/6/2012*	11.35	ND	95.01	83.66	NA	NA	NA		
	7/10/2012	12.74	ND	95.01	82.27	NA	NA	NA	Slight Odor	
	7/17/2012	12.87	ND	95.01	82.14	NA	NA	NA		0.82
	7/24/2012	12.90	ND	95.01	82.11	NA	NA	NA		
	7/31/2012	12.94	ND	95.01	82.07	NA	NA	NA		
	8/7/2012	13.23	ND	95.01	81.78	NA	NA	NA		0.60
	8/14/2012	13.10	ND	95.01	81.91	NA	NA	NA		
	8/21/2012	13.52	ND	95.01	81.49	NA	NA	NA		
	8/28/2012	11.29	ND	95.01	83.72	NA	NA	NA		
	9/5/2012	13.19	ND	95.01	81.82	NA	NA	NA		0.05
	9/13/2012	13.80	ND	95.01	81.21	NA	NA	NA		
	9/18/2012	13.64	ND	95.01	81.37	NA	NA	NA		
	9/26/2012	13.03	ND	95.01	81.98	NA	NA	NA		
	10/5/2012*	12.15	ND	95.01	82.86	NA	NA	NA		
	10/11/2012	13.40	ND	95.01	81.61	NA	NA	NA		0.02
	10/16/2012	13.04	ND	95.01	81.97	NA	NA	NA		
	10/22/2012	13.44	ND	95.01	81.57	NA	NA	NA		

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	10/31/2012	12.18	ND	95.01	82.83	NA	NA	NA		
	11/7/2012	12.63	ND	95.01	82.38	NA	NA	NA		
	11/13/2012	12.86	ND	95.01	82.15	NA	NA	NA		0.20
	11/21/2012	13.55	ND	95.01	81.46	NA	NA	NA		
	11/27/2012	13.53	ND	95.01	81.48	NA	NA	NA		
	12/4/2012	13.75	ND	95.01	81.26	NA	NA	NA		0.04
	12/13/2012	13.64	ND	95.01	81.37	NA	NA	NA		
	12/21/2012	13.09	ND	95.01	81.92	NA	NA	NA		
	12/28/2012	13.80	ND	95.01	81.21	NA	NA	NA		
	1/4/2013	13.85	ND	95.01	81.16	NA	NA	NA		0.04
	1/9/2013	13.91	ND	95.01	81.10	NA	NA	NA		
	1/16/2013	12.44	ND	95.01	82.57	NA	NA	NA		
	1/21/2013*	11.97	ND	95.01	83.04	NA	NA	NA		
	2/8/2013	13.28	ND	95.01	81.73	NA	NA	NA		0.04
	3/8/2013	12.41	ND	95.01	82.60	NA	NA	NA		0.02
	4/16/2013	16.76	ND	95.01	78.25	NA	NA	NA		0.03
	4/17/2013*	11.45	ND	95.01	83.56	NA	NA	NA		
	5/3/2013	12.23	ND	95.01	82.78	NA	NA	NA		0.02
	6/13/2013	10.31	ND	95.01	84.70	NA	NA	NA		0.02
	7/11/2013	12.33	ND	95.01	82.68	NA	NA	NA		0.06
	7/19/2013*	11.04	ND	95.01	83.97	NA	NA	NA		
	8/1/2013	13.26	ND	95.01	81.75	NA	NA	NA		0.15
	9/5/2013	13.24	ND	95.01	81.77	NA	NA	NA		
	10/7/2013	10.87	ND	95.01	84.14	NA	NA	NA		0.00
	10/8/2013*	12.00	ND	95.01	83.01	NA	NA	NA		
	10/22/2013*	11.22	ND	95.01	83.79	NA	NA	NA		
	11/6/2013	13.10	ND	95.01	81.91	NA	NA	NA		0.00
	12/4/2013	13.58	ND	95.01	81.43	NA	NA	NA		0.10
	1/6/2014*	10.80	ND	95.01	84.21	NA	NA	NA		
	2/24/2014	12.25	ND	95.01	82.76	NA	NA	NA		
	3/10/2014	11.40	ND	95.01	83.61	NA	NA	NA		0.0
	4/22/2014	13.09	ND	95.01	81.92	NA	NA	NA		0.0
	4/23/2014*	11.55	ND	95.01	83.46	NA	NA	NA		
	5/7/2014	9.13	ND	95.01	85.88	NA	NA	NA		0.50
	6/3/2014	13.35	ND	95.01	81.66	NA	NA	NA		
	7/3/2014	10.39	ND	95.01	84.62	NA	NA	NA		
	7/17/2014	9.11	ND	95.01	85.90	NA	NA	NA		1.1
	8/25/2014	12.86	ND	95.01	82.15	NA	NA	NA		0.20
	9/9/2014	12.71	ND	95.01	82.30	NA	NA	NA		1.0
	10/7/2014	12.98	ND	95.01	82.03	NA	NA	NA		1.0
	10/8/2014*	11.63	ND	95.01	83.38	NA	NA	NA		
	11/4/2014	12.57	ND	95.01	82.44	NA	NA	NA		0.8
	12/1/2014	12.00	ND	95.01	83.01	NA	NA	NA		0.76
	1/7/2015	10.54	ND	95.01	84.47	NA	NA	NA		0.62
	1/9/2015*	8.87	ND	95.01	86.14	NA	NA	NA		
	2/3/2015	11.60	ND	95.01	83.41	NA	NA	NA		0.54
	3/17/2015	10.58	ND	95.01	84.43	NA	NA	NA		0.24
	4/14/2015	10.53	ND	95.01	84.48	NA	NA	NA		
	4/15/2015*	8.95	ND	95.01	86.06	NA	NA	NA		
	5/12/2015	10.21	ND	95.01	84.80	NA	NA	NA		0.22
	6/9/2015	10.16	ND	95.01	84.85	NA	NA	NA		0.40

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
MW-20	12/14/2011	8.03	ND	95.40	87.37	NA	NA	NA		0.01
	12/15/2011	8.90	ND	95.40	86.50	NA	NA	NA		0.00
	12/16/2011	9.18	ND	95.40	86.22	NA	NA	NA		0.01
	12/19/2011	9.49	ND	95.40	85.91	NA	NA	NA		0.00
	12/20/2011	9.57	ND	95.40	85.83	NA	NA	NA		0.02
	12/21/2011	9.64	ND	95.40	85.76	NA	NA	NA		0.02
	12/22/2011	9.71	ND	95.40	85.69	NA	NA	NA		0.00
	12/23/2011	9.27	ND	95.40	86.13	NA	NA	NA		0.02
	12/27/2011	9.46	ND	95.40	85.94	NA	NA	NA		0.01
	12/28/2011	8.87	ND	95.40	86.53	NA	NA	NA		0.02
	12/29/2011	9.12	ND	95.40	86.28	NA	NA	NA		0.02
	12/30/2011	9.30	ND	95.40	86.10	NA	NA	NA		0.01
	1/3/2012	9.70	ND	95.40	85.70	NA	NA	NA		0.00
	1/5/2012	9.83	ND	95.40	85.57	NA	NA	NA		0.04
	1/9/2012	10.03	ND	95.40	85.37	NA	NA	NA		
	1/10/2012	9.88	ND	95.40	85.52	NA	NA	NA		
	1/18/2012	9.99	ND	95.40	85.41	NA	NA	NA		
	1/25/2012	10.24	ND	95.40	85.16	NA	NA	NA		
	1/30/2012	9.97	ND	95.40	85.43	NA	NA	NA		
	2/6/2012	10.33	ND	95.40	85.07	NA	NA	NA		
	2/13/2012	10.50	ND	95.40	84.90	NA	NA	NA		
	2/20/2012	10.61	ND	95.40	84.79	NA	NA	NA		0.00
	2/28/2012	10.79	ND	95.40	84.61	NA	NA	NA		0.02
	3/5/2012	9.84	ND	95.40	85.56	NA	NA	NA		
	3/12/2012	10.29	ND	95.40	85.11	NA	NA	NA		
	3/19/2012	10.51	ND	95.40	84.89	NA	NA	NA		0.03
	3/29/2012	9.66	ND	95.40	85.74	NA	NA	NA		
	4/2/2012	10.12	ND	95.40	85.28	NA	NA	NA		
	4/10/2012	10.15	ND	95.40	85.25	NA	NA	NA		
	4/16/2012	10.60	ND	95.40	84.80	NA	NA	NA		0.03
	4/23/2012	10.78	ND	95.40	84.62	NA	NA	NA		
	4/30/2012	10.92	ND	95.40	84.48	NA	NA	NA		
	5/8/2012*	10.78	ND	95.40	84.62	NA	NA	NA		
	5/15/2012	10.64	ND	95.40	84.76	NA	NA	NA		
	5/21/2012	10.82	ND	95.40	84.58	NA	NA	NA		0.03
	5/31/2012	10.80	ND	95.40	84.60	NA	NA	NA		
	6/7/2012*	10.78	ND	95.40	84.62	NA	NA	NA		
	6/11/2012	10.90	ND	95.40	84.50	NA	NA	NA		<0.00
	6/18/2012	10.96	ND	95.40	84.44	NA	NA	NA		
	6/25/2012	10.90	ND	95.40	84.50	NA	NA	NA		
	7/6/2012*	10.88	ND	95.40	84.52	NA	NA	NA		
	7/10/2012	11.03	ND	95.40	84.37	NA	NA	NA		
	7/17/2012	11.11	ND	95.40	84.29	NA	NA	NA		0.02
	7/24/2012	10.62	ND	95.40	84.78	NA	NA	NA		
	7/31/2012	10.78	ND	95.40	84.62	NA	NA	NA		
	8/7/2012	10.91	ND	95.40	84.49	NA	NA	NA		0.06
	8/14/2012	10.95	ND	95.40	84.45	NA	NA	NA		
	8/21/2012	11.05	ND	95.40	84.35	NA	NA	NA		
	8/28/2012	10.54	ND	95.40	84.86	NA	NA	NA		
	9/5/2012	10.84	ND	95.40	84.56	NA	NA	NA		0.02
	9/13/2012	11.20	ND	95.40	84.20	NA	NA	NA		

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	9/18/2012	11.26	ND	95.40	84.14	NA	NA	NA		
	9/26/2012	11.35	ND	95.40	84.05	NA	NA	NA		
	10/5/2012*	11.48	ND	95.40	83.92	NA	NA	NA		
	10/11/2012	11.43	ND	95.40	83.97	NA	NA	NA		0.03
	10/16/2012	11.53	ND	95.40	83.87	NA	NA	NA		
	10/22/2012	11.71	ND	95.40	83.69	NA	NA	NA		
	10/31/2012	9.73	ND	95.40	85.67	NA	NA	NA		
	11/7/2012	9.98	ND	95.40	85.42	NA	NA	NA		
	11/13/2012	10.38	ND	95.40	85.02	NA	NA	NA		0.00
	11/21/2012	10.27	ND	95.40	85.13	NA	NA	NA		
	11/27/2012	10.95	ND	95.40	84.45	NA	NA	NA		
	12/4/2012	11.13	ND	95.40	84.27	NA	NA	NA		0.00
	12/13/2012	11.37	ND	95.40	84.03	NA	NA	NA		
	12/21/2012	11.31	ND	95.40	84.09	NA	NA	NA		
	12/28/2012	10.41	ND	95.40	84.99	NA	NA	NA		
	1/4/2013	10.32	ND	95.40	85.08	NA	NA	NA		0.02
	1/9/2013	10.57	ND	95.40	84.83	NA	NA	NA		
	1/16/2013	10.58	ND	95.40	84.82	NA	NA	NA		
	1/21/2013*	9.76	ND	95.40	85.64	NA	NA	NA		
	2/8/2013	9.75	ND	95.40	85.65	NA	NA	NA		0.05
	3/8/2013	9.25	ND	95.40	86.15	NA	NA	NA		0.00
	4/16/2013	9.97	ND	95.40	85.43	NA	NA	NA		0.00
	4/17/2013*	9.84	ND	95.40	85.56	NA	NA	NA		
	5/3/2013	9.96	ND	95.40	85.44	NA	NA	NA		0.00
	6/13/2013	8.23	ND	95.40	87.17	NA	NA	NA		0.00
	7/11/2013	9.92	ND	95.40	85.48	NA	NA	NA		0.00
	7/19/2013*	10.00	ND	95.40	85.40	NA	NA	NA		
	8/1/2013	10.63	ND	95.40	84.77	NA	NA	NA		0.00
	9/5/2013	11.18	ND	95.40	84.22	NA	NA	NA		
	10/7/2013	11.56	ND	95.40	83.84	NA	NA	NA		0.04
	10/8/2013*	11.53	ND	95.40	83.87	NA	NA	NA		
	10/22/2013*	10.45	ND	95.40	84.95	NA	NA	NA		
	11/6/2013	10.97	ND	95.40	84.43	NA	NA	NA		0.00
	12/4/2013	11.05	ND	95.40	84.35	NA	NA	NA		0.00
	1/6/2014*	9.28	ND	95.40	86.12	NA	NA	NA		
	2/24/2014	7.37	ND	95.40	88.03	NA	NA	NA		
	3/10/2014	8.23	ND	95.40	87.17	NA	NA	NA		0.0
	4/22/2014	8.38	ND	95.40	87.02	NA	NA	NA		0.0
	4/23/2014*	8.52	ND	95.40	86.88	NA	NA	NA		
	5/7/2014	6.75	ND	95.40	88.65	NA	NA	NA		0.0
	6/3/2014	10.00	ND	95.40	85.40	NA	NA	NA		
	7/3/2014	8.45	ND	95.40	86.95	NA	NA	NA		0.04
	7/17/2014	8.91	ND	95.40	86.49	NA	NA	NA		
	8/25/2014	10.50	ND	95.40	84.90	NA	NA	NA		
	9/9/2014	10.35	ND	95.40	85.05	NA	NA	NA		0.03
	10/7/2014	11.20	ND	95.40	84.20	NA	NA	NA		
	10/8/2014*	11.17	ND	95.40	84.23	NA	NA	NA		
	11/4/2014	10.97	ND	95.40	84.43	NA	NA	NA		
	12/1/2014	10.53	ND	95.40	84.87	NA	NA	NA		0.02
	1/7/2015	8.90	ND	95.40	86.50	NA	NA	NA		
	1/9/2015*	8.43	ND	95.40	86.97	NA	NA	NA		

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	2/3/2015	9.05	ND	95.40	86.35	NA	NA	NA		0.00
	3/17/2015	6.91	ND	95.40	88.49	NA	NA	NA		0.00
	4/14/2015	8.53	ND	95.40	86.87	NA	NA	NA		
	4/15/2015*	8.42	ND	95.40	86.98	NA	NA	NA		
	5/12/2015	8.85	ND	95.40	86.55	NA	NA	NA		0.00
	6/9/2015	8.98	ND	95.40	86.42	NA	NA	NA		0.00
MW-21	12/14/2011	11.84	11.84	99.03	87.19	87.19	87.19	0.00	Slight Sheen	0.12
	12/15/2011	16.39	16.38	99.03	82.64	82.65	82.65	0.01		0.14
	12/16/2011	16.54	16.53	99.03	82.49	82.50	82.50	0.01		0.22
	12/19/2011	16.43	16.41	99.03	82.60	82.62	82.61	0.02		0.22
	12/20/2011	16.61	16.60	99.03	82.42	82.43	82.43	0.01		0.35
	12/21/2011	16.85	16.84	99.03	82.18	82.19	82.19	0.01		0.39
	12/22/2011	16.73	16.72	99.03	82.30	82.31	82.31	0.01		0.37
	12/23/2011	17.21	17.21	99.03	81.82	81.82	81.82	0.00	thick sheen	0.63
	12/27/2011	16.41	16.40	99.03	82.62	82.63	82.63	0.01		1.45
	12/28/2011	17.04	17.04	99.03	81.99	81.99	81.99	0.00	Sheen	2.40
	12/29/2011	16.97	16.97	99.03	82.06	82.06	82.06	0.00	thick sheen	2.05
	12/30/2011	17.02	17.02	99.03	82.01	82.01	82.01	0.00	thick sheen	2.00
	1/3/2012	16.62	16.62	99.03	82.41	82.41	82.41	0.00	Sheen	1.50
	1/5/2012	16.63	16.63	99.03	82.40	82.40	82.40	0.00	Sheen	1.80
	1/9/2012	16.57	16.57	99.03	82.46	82.46	82.46	0.00	Sheen	
	1/10/2012	14.32	ND	99.03	84.71	NA	NA	NA	Moderate odor	
	1/18/2012	16.82	16.82	99.03	82.21	82.21	82.21	0.00	thin sheen	
	1/25/2012	16.31	16.31	99.03	82.72	82.72	82.72	0.00	thin sheen	
	1/30/2012	16.44	16.44	99.03	82.59	82.59	82.59	0.00	thin sheen	
	2/6/2012	16.58	ND	99.03	82.45	NA	NA	NA	Strong Odor	
	2/13/2012	16.90	ND	99.03	82.13	NA	NA	NA	Moderate odor	
	2/20/2012	17.09	ND	99.03	81.94	NA	NA	NA	Strong Odor	0.58
	2/28/2012	17.26	17.26	99.03	81.77	81.77	81.77	0.00	Sheen	0.53
	3/5/2012	17.20	17.20	99.03	81.83	81.83	81.83	0.00	Sheen	
	3/12/2012	17.00	17.00	99.03	82.03	82.03	82.03	0.00	Sheen	
	3/19/2012	16.95	ND	99.03	82.08	NA	NA	NA	Strong Odor	0.42
	3/29/2012	12.41	ND	99.03	86.62	NA	NA	NA	Moderate odor	
	4/2/2012	14.93	ND	99.03	84.10	NA	NA	NA	Moderate odor	
	4/10/2012	14.23	ND	99.03	84.80	NA	NA	NA	Slight Odor	
	4/16/2012	16.81	ND	99.03	82.22	NA	NA	NA	Moderate odor	0.21
	4/23/2012	16.34	ND	99.03	82.69	NA	NA	NA	Strong Odor	
	4/30/2012	16.87	ND	99.03	82.16	NA	NA	NA	Strong Odor	
	5/8/2012*	14.84	ND	99.03	84.19	NA	NA	NA		
	5/15/2012	16.04	ND	99.03	82.99	NA	NA	NA	Moderate odor	
	5/21/2012	16.52	ND	99.03	82.51	NA	NA	NA	Moderate odor	0.49
	5/31/2012	16.69	ND	99.03	82.34	NA	NA	NA	Strong Odor	
	6/7/2012*	15.15	ND	99.03	83.88	NA	NA	NA	Strong Odor	
	6/11/2012	16.73	ND	99.03	82.30	NA	NA	NA	Moderate odor	0.39
	6/18/2012	16.72	ND	99.03	82.31	NA	NA	NA	Strong Odor	
	6/25/2012	16.22	ND	99.03	82.81	NA	NA	NA	Moderate odor	
	7/6/2012*	14.37	ND	99.03	84.66	NA	NA	NA	Slight Odor	
	7/10/2012	16.63	ND	99.03	82.40	NA	NA	NA	Slight Odor	
	7/17/2012	16.66	ND	99.03	82.37	NA	NA	NA	Slight Odor	0.30
	7/24/2012	16.79	ND	99.03	82.24	NA	NA	NA	Slight Odor	
	7/31/2012	16.69	ND	99.03	82.34	NA	NA	NA	Moderate odor	

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	8/7/2012	16.79	ND	99.03	82.24	NA	NA	NA	Slight Odor	0.36
	8/14/2012	16.90	ND	99.03	82.13	NA	NA	NA	Moderate odor	
	8/21/2012	17.54	ND	99.03	81.49	NA	NA	NA	Moderate odor	
	8/28/2012	14.91	ND	99.03	84.12	NA	NA	NA	Slight Odor	
	9/5/2012	17.18	17.18	99.03	81.85	81.85	81.85	0.00	Sheen	0.40
	9/13/2012	17.80	ND	99.03	81.23	NA	NA	NA	Moderate odor	
	9/18/2012	17.63	ND	99.03	81.40	NA	NA	NA	Moderate odor	
	9/26/2012	16.83	ND	99.03	82.20	NA	NA	NA	Slight Odor	
	10/5/2012*	15.66	ND	99.03	83.37	NA	NA	NA	Moderate odor	
	10/11/2012	17.30	ND	99.03	81.73	NA	NA	NA	Slight Odor	0.25
	10/16/2012	17.23	ND	99.03	81.80	NA	NA	NA	Slight Odor	
	10/22/2012	16.52	ND	99.03	82.51	NA	NA	NA		
	10/31/2012	16.28	ND	99.03	82.75	NA	NA	NA	Slight Odor	
	11/7/2012	16.46	ND	99.03	82.57	NA	NA	NA		
	11/13/2012	17.13	ND	99.03	81.90	NA	NA	NA	stagnant odor	0.52
	11/21/2012	17.56	ND	99.03	81.47	NA	NA	NA		
	11/27/2012	17.65	ND	99.03	81.38	NA	NA	NA		
	12/4/2012	17.77	ND	99.03	81.26	NA	NA	NA	Slight odor	0.42
	12/13/2012	17.66	ND	99.03	81.37	NA	NA	NA	Moderate odor	
	12/21/2012	17.93	ND	99.03	81.10	NA	NA	NA	Moderate odor	
	12/28/2012	18.08	ND	99.03	80.95	NA	NA	NA	Strong Odor	
	1/4/2013	17.97	ND	99.03	81.06	NA	NA	NA	Moderate odor	0.45
	1/9/2013	18.03	ND	99.03	81.00	NA	NA	NA	Moderate odor	
	1/16/2013	17.33	ND	99.03	81.70	NA	NA	NA	Moderate odor	
	1/21/2013*	15.65	ND	99.03	83.38	NA	NA	NA		
	2/8/2013	17.60	ND	99.03	81.43	NA	NA	NA		0.50
	3/8/2013	16.48	ND	99.03	82.55	NA	NA	NA	Moderate odor	0.35
	4/16/2013	16.72	ND	99.03	82.31	NA	NA	NA	Moderate odor	0.25
	4/17/2013*	14.45	ND	99.03	84.58	NA	NA	NA	Slight Odor	
	5/3/2013	15.32	ND	99.03	83.71	NA	NA	NA	Slight Odor	0.04
	6/13/2013	15.52	ND	99.03	83.51	NA	NA	NA	Slight Odor	0.20
	7/11/2013	15.90	ND	99.03	83.13	NA	NA	NA		0.10
	7/19/2013*	13.94	ND	99.03	85.09	NA	NA	NA		
	8/1/2013	17.55	ND	99.03	81.48	NA	NA	NA		0.18
	9/5/2013	17.00	ND	99.03	82.03	NA	NA	NA		
	10/7/2013	6.90	ND	99.03	92.13	NA	NA	NA	Slight odor	0.00
	10/8/2013*	15.34	ND	99.03	83.69	NA	NA	NA	Slight odor	
	10/22/2013*	14.30	ND	99.03	84.73	NA	NA	NA	Slight odor	
	11/6/2013	16.77	ND	99.03	82.26	NA	NA	NA	Slight odor	0.10
	12/4/2013	17.50	ND	99.03	81.53	NA	NA	NA	Slight odor	0.32
	1/6/2014*	18.80	ND	99.03	80.23	NA	NA	NA	Moderate odor	
	2/24/2014	15.55	ND	99.03	83.48	NA	NA	NA		
	3/10/2014	14.42	ND	99.03	84.61	NA	NA	NA	Slight Odor	0.1
	4/22/2014	17.30	ND	99.03	81.73	NA	NA	NA	Moderate odor	0.0
	4/23/2014*	14.37	ND	99.03	84.66	NA	NA	NA		
	5/7/2013	12.41	ND	99.03	86.62	NA	NA	NA		0.0
	6/3/2014	16.80	ND	99.03	82.23	NA	NA	NA		0.2
	7/3/2014	13.26	ND	99.03	85.77	NA	NA	NA		
	7/17/2014	12.02	ND	99.03	87.01	NA	NA	NA		
	8/25/2014	15.85	ND	99.03	83.18	NA	NA	NA		0.0
	9/9/2014	15.48	ND	99.03	83.55	NA	NA	NA	Slight Odor	0.03

Table 1 - Well Gauging Summary
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	10/7/2014	16.28	ND	99.03	82.75	NA	NA	NA		
	10/8/2014*	14.78	ND	99.03	84.25	NA	NA	NA		
	11/4/2014	15.15	ND	99.03	83.88	NA	NA	NA		
	12/1/2014	15.25	ND	99.03	83.78	NA	NA	NA		0.08
	1/7/2015	12.90	ND	99.03	86.13	NA	NA	NA		
	1/9/2015*	11.81	ND	99.03	87.22	NA	NA	NA	Moderate odor	
	2/3/2015	14.46	ND	99.03	84.57	NA	NA	NA	slight odor	0.00
	3/17/2015	13.17	ND	99.03	85.86	NA	NA	NA		0.40
	4/14/2015	13.15	ND	99.03	85.88	NA	NA	NA		
	4/15/2015*	11.55	ND	99.03	87.48	NA	NA	NA		
	5/12/2015	12.99	ND	99.03	86.04	NA	NA	NA		0.00
	6/9/2015	13.53	ND	99.03	85.50	NA	NA	NA		0.04
MW-22	12/14/2011	1.35	ND	87.25	85.90	NA	NA	NA		
	12/15/2011	5.31	ND	87.25	81.94	NA	NA	NA		0.00
	12/16/2011	5.31	ND	87.25	81.94	NA	NA	NA		1.20
	12/19/2011	5.40	ND	87.25	81.85	NA	NA	NA	stagnant odor	-0.02
	12/20/2011	5.52	ND	87.25	81.73	NA	NA	NA	stagnant odor	0.03
	12/21/2011	5.70	ND	87.25	81.55	NA	NA	NA		0.93
	12/22/2011	5.74	ND	87.25	81.51	NA	NA	NA	Stagnant odor	0.34
	12/23/2011	5.89	ND	87.25	81.36	NA	NA	NA	Stagnant odor	4.20
	12/27/2011	5.33	ND	87.25	81.92	NA	NA	NA		-0.02
	12/28/2011	5.61	ND	87.25	81.64	NA	NA	NA		1.20
	12/29/2011	5.69	ND	87.25	81.56	NA	NA	NA		0.81
	12/30/2011	5.79	ND	87.25	81.46	NA	NA	NA		0.47
	1/3/2012	5.68	ND	87.25	81.57	NA	NA	NA		-0.02
	1/5/2012	5.71	ND	87.25	81.54	NA	NA	NA		0.37
	1/9/2012	5.48	ND	87.25	81.77	NA	NA	NA		
	1/10/2012	3.95	ND	87.25	83.30	NA	NA	NA		
	1/18/2012	5.31	ND	87.25	81.94	NA	NA	NA		
	1/25/2012	6.08	ND	87.25	81.17	NA	NA	NA		
	1/30/2012	5.85	ND	87.25	81.40	NA	NA	NA		
	2/6/2012	6.03	ND	87.25	81.22	NA	NA	NA		
	2/13/2012	6.16	ND	87.25	81.09	NA	NA	NA		
	2/20/2012	6.51	ND	87.25	80.74	NA	NA	NA		0.81
	2/28/2012	6.54	ND	87.25	80.71	NA	NA	NA		1.15
	3/5/2012	6.60	ND	87.25	80.65	NA	NA	NA		
	3/12/2012	6.48	ND	87.25	80.77	NA	NA	NA		
	3/19/2012	6.46	ND	87.25	80.79	NA	NA	NA		<0.00
	3/29/2012	2.57	ND	87.25	84.68	NA	NA	NA		
	4/2/2012	4.92	ND	87.25	82.33	NA	NA	NA		
	4/10/2012	3.95	ND	87.25	83.30	NA	NA	NA		
	4/16/2012	6.13	ND	87.25	81.12	NA	NA	NA		2.50
	4/23/2012	5.43	ND	87.25	81.82	NA	NA	NA		
	4/30/2012	5.52	ND	87.25	81.73	NA	NA	NA		
	5/8/2012*	4.89	ND	87.25	82.36	NA	NA	NA		
	5/15/2012	5.20	ND	87.25	82.05	NA	NA	NA		
	5/21/2012	5.64	ND	87.25	81.61	NA	NA	NA		3.10
	5/31/2012	5.67	ND	87.25	81.58	NA	NA	NA		
	6/7/2012*	5.31	ND	87.25	81.94	NA	NA	NA		
	6/11/2012	5.64	ND	87.25	81.61	NA	NA	NA		4.15
	6/18/2012	5.77	ND	87.25	81.48	NA	NA	NA		

Table 1 - Well Gauging Summary
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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	6/25/2012	5.73	ND	87.25	81.52	NA	NA	NA		
	7/6/2012*	4.67	ND	87.25	82.58	NA	NA	NA		
	7/10/2012	5.47	ND	87.25	81.78	NA	NA	NA		
	7/17/2012	5.80	ND	87.25	81.45	NA	NA	NA		3.60
	7/24/2012	5.34	ND	87.25	81.91	NA	NA	NA		
	7/31/2012	5.57	ND	87.25	81.68	NA	NA	NA		
	8/7/2012	5.64	ND	87.25	81.61	NA	NA	NA		3.60
	8/14/2012	5.89	ND	87.25	81.36	NA	NA	NA		
	8/21/2012	6.15	ND	87.25	81.10	NA	NA	NA		
	8/28/2012	4.56	ND	87.25	82.69	NA	NA	NA		
	9/5/2012	5.22	ND	87.25	82.03	NA	NA	NA		3.45
	9/13/2012	6.89	ND	87.25	80.36	NA	NA	NA		
	9/18/2012	6.78	ND	87.25	80.47	NA	NA	NA		
	9/26/2012	6.88	ND	87.25	80.37	NA	NA	NA		
	10/5/2012*	5.01	ND	87.25	82.24	NA	NA	NA		
	10/11/2012	5.70	ND	87.25	81.55	NA	NA	NA		> 5.0
	10/16/2012	6.33	ND	87.25	80.92	NA	NA	NA		
	10/22/2012	6.44	ND	87.25	80.81	NA	NA	NA		
	10/31/2012	5.30	ND	87.25	81.95	NA	NA	NA		
	11/7/2012	5.10	ND	87.25	82.15	NA	NA	NA		
	11/13/2012	6.02	ND	87.25	81.23	NA	NA	NA		2.50
	11/21/2012	6.33	ND	87.25	80.92	NA	NA	NA		
	11/27/2012	6.78	ND	87.25	80.47	NA	NA	NA		
	12/4/2012	6.92	ND	87.25	80.33	NA	NA	NA		1.30
	12/13/2012	7.08	ND	87.25	80.17	NA	NA	NA		
	12/21/2012	7.49	ND	87.25	79.76	NA	NA	NA		
	12/28/2012	7.32	ND	87.25	79.93	NA	NA	NA		
	1/4/2013	7.21	ND	87.25	80.04	NA	NA	NA		0.54
	1/9/2013	7.21	ND	87.25	80.04	NA	NA	NA		
	1/16/2013	7.88	ND	87.25	79.37	NA	NA	NA		
	1/21/2013*	5.36	ND	87.25	81.89	NA	NA	NA		
	2/8/2013	6.79	ND	87.25	80.46	NA	NA	NA		0.20
	3/8/2013	6.49	ND	87.25	80.76	NA	NA	NA		1.40
	4/16/2013	6.22	ND	87.25	81.03	NA	NA	NA		0.00
	4/17/2013*	5.16	ND	87.25	82.09	NA	NA	NA		
	5/3/2013	4.98	ND	87.25	82.27	NA	NA	NA		1.75
	6/13/2013	3.32	ND	87.25	83.93	NA	NA	NA		0.00
	7/11/2013	4.44	ND	87.25	82.81	NA	NA	NA		5.00
	7/19/2013*	4.85	ND	87.25	82.40	NA	NA	NA		
	8/1/2013	5.45	ND	87.25	81.80	NA	NA	NA		7.10
	9/5/2013	6.34	ND	87.25	80.91	NA	NA	NA		
	10/7/2013	6.18	ND	87.25	81.07	NA	NA	NA		0.00
	10/8/2013*	4.88	ND	87.25	82.37	NA	NA	NA		
	10/22/2013*	3.61	ND	87.25	83.64	NA	NA	NA		
	11/6/2013	5.25	ND	87.25	82.00	NA	NA	NA		3.20
	12/4/2013	6.50	ND	87.25	80.75	NA	NA	NA		0.42
	1/6/2014*	5.66	ND	87.25	81.59	NA	NA	NA		
	2/24/2014	3.75	ND	87.25	83.50	NA	NA	NA		
	3/10/2014	4.18	ND	87.25	83.07	NA	NA	NA		2.8
	4/22/2014	6.58	ND	87.25	80.67	NA	NA	NA		1.5
	4/23/2014*	4.81	ND	87.25	82.44	NA	NA	NA		

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	5/7/2014	1.80	ND	87.25	85.45	NA	NA	NA		1.2
	6/3/2014	5.77	ND	87.25	81.48	NA	NA	NA		
	7/3/2014	3.45	ND	87.25	83.80	NA	NA	NA		1.5
	7/17/2014	2.10	ND	87.25	85.15	NA	NA	NA		
	8/25/2014	5.05	ND	87.25	82.20	NA	NA	NA		1.6
	9/9/2014	4.44	ND	87.25	82.81	NA	NA	NA		5.4
	10/7/2014	4.90	ND	87.25	82.35	NA	NA	NA		
	10/8/2014*	4.82	ND	87.25	82.43	NA	NA	NA		
	11/4/2014	4.80	ND	87.25	82.45	NA	NA	NA		1.7
	12/1/2014	4.30	ND	87.25	82.95	NA	NA	NA		>5.0
	1/9/2015*	2.18	ND	87.25	85.07	NA	NA	NA		
	2/3/2015	3.88	ND	87.25	83.37	NA	NA	NA		2.0
	3/17/2015	4.00	ND	87.25	83.25	NA	NA	NA	positive pressure	
	4/14/2015	3.90	ND	87.25	83.35	NA	NA	NA		
	4/15/2015*	3.53	ND	87.25	83.72	NA	NA	NA		
	5/12/2015	3.33	ND	87.25	83.92	NA	NA	NA	positive pressure	
	6/9/2015	3.49	ND	87.25	83.76	NA	NA	NA		3.70
MW-23	11/13/2012	11.01	ND	85.83	74.82	NA	NA	NA		0.16
	11/21/2012	11.27	ND	85.83	74.56	NA	NA	NA		
	11/27/2012	11.64	ND	85.83	74.19	NA	NA	NA		
	12/4/2012	11.74	ND	85.83	74.09	NA	NA	NA		0.00
	12/13/2012	11.80	ND	85.83	74.03	NA	NA	NA		
	12/21/2012	11.83	ND	85.83	74.00	NA	NA	NA		
	12/28/2012	10.95	ND	85.83	74.88	NA	NA	NA		
	1/4/2013	10.80	ND	85.83	75.03	NA	NA	NA		0.00
	1/9/2013	10.66	ND	85.83	75.17	NA	NA	NA		
	1/16/2013	10.40	ND	85.83	75.43	NA	NA	NA		
	1/21/2013*	9.92	ND	85.83	75.91	NA	NA	NA		
	2/8/2013	9.63	ND	85.83	76.20	NA	NA	NA		0.00
	3/8/2013	9.38	ND	85.83	76.45	NA	NA	NA		1.00
	4/16/2013	9.57	ND	85.83	76.26	NA	NA	NA		0.00
	4/17/2013*	9.52	ND	85.83	76.31	NA	NA	NA		
	5/3/2013	9.41	ND	85.83	76.42	NA	NA	NA		0.00
	6/13/2013	9.29	ND	85.83	76.54	NA	NA	NA		0.00
	7/11/2013	9.58	ND	85.83	76.25	NA	NA	NA		0.00
	7/19/2013*	9.18	ND	85.83	76.65	NA	NA	NA		
	8/1/2013	9.54	ND	85.83	76.29	NA	NA	NA		0.00
	9/5/2013	9.88	ND	85.83	75.95	NA	NA	NA		
	10/7/2013	9.70	ND	85.83	76.13	NA	NA	NA		0.00
	10/8/2013*	9.18	ND	85.83	76.65	NA	NA	NA		
	10/22/2013*	8.75	ND	85.83	77.08	NA	NA	NA		
	11/6/2013	8.96	ND	85.83	76.87	NA	NA	NA		+0.7
	12/4/2013	9.18	ND	85.83	76.65	NA	NA	NA		0.00
	1/6/2014*	7.74	ND	85.83	78.09	NA	NA	NA		
	2/24/2014	7.77	ND	85.83	78.06	NA	NA	NA		
	3/10/2014	7.18	ND	85.83	78.65	NA	NA	NA		+2.4
	4/22/2014	7.68	ND	85.53	77.85	NA	NA	NA		+0.9
	4/23/2014*	7.03	ND	85.53	78.50	NA	NA	NA		
	5/7/2014	7.40	ND	85.53	78.13	NA	NA	NA		+5.0
	6/3/2014	7.24	ND	85.53	78.29	NA	NA	NA		
	7/3/2014	8.75	ND	85.53	76.78	NA	NA	NA	positive pressure	

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	7/17/2014	8.19	ND	85.53	77.34	NA	NA	NA		
	8/25/2014	9.37	ND	85.53	76.16	NA	NA	NA	positive pressure	
	9/9/2014	9.33	ND	85.53	76.20	NA	NA	NA		0.0
	10/7/2014	9.53	ND	85.53	76.00	NA	NA	NA		
	10/8/2014*	9.15	ND	85.53	76.38	NA	NA	NA		
	11/4/2014	9.11	ND	85.53	76.42	NA	NA	NA	positive pressure	
	12/1/2014	8.69	ND	85.53	76.84	NA	NA	NA		
	1/7/2015	7.41	ND	85.53	78.12	NA	NA	NA		0.0
	1/9/2015*	4.02	ND	85.53	81.51	NA	NA	NA		
	2/3/2015	4.12	ND	85.53	81.41	NA	NA	NA		-1.0
	3/17/2015	4.35	ND	85.53	81.18	NA	NA	NA	positive pressure	
	4/14/2015	4.65	ND	85.53	80.88	NA	NA	NA		
	4/15/2015*	4.49	ND	85.53	81.04	NA	NA	NA		
	5/12/2015	7.15	ND	85.53	78.38	NA	NA	NA	positive pressure	
	6/9/2015	5.66	ND	85.53	79.87	NA	NA	NA	positive pressure	
MW-24	11/13/2012	7.99	ND	88.66	80.67	NA	NA	NA		
	11/21/2012	8.29	ND	88.66	80.37	NA	NA	NA		
	11/27/2012	8.39	ND	88.66	80.27	NA	NA	NA		
	12/4/2012	8.50	ND	88.66	80.16	NA	NA	NA		0.00
	12/13/2012	8.55	ND	88.66	80.11	NA	NA	NA		
	12/21/2012	8.84	ND	88.66	79.82	NA	NA	NA		
	12/28/2012	8.73	ND	88.66	79.93	NA	NA	NA		
	1/4/2013	8.70	ND	88.66	79.96	NA	NA	NA		
	1/9/2013	8.71	ND	88.66	79.95	NA	NA	NA		
	1/16/2013	NG	ND	88.66	NG	NA	NA	NA		
	1/21/2013*	8.19	ND	88.66	80.47	NA	NA	NA		
	2/8/2013	7.94	ND	88.66	80.72	NA	NA	NA		0.60
	3/8/2013	8.04	ND	88.66	80.62	NA	NA	NA		1.00
	4/16/2013	7.42	ND	88.66	81.24	NA	NA	NA		
	4/17/2013*	6.34	ND	88.66	82.32	NA	NA	NA		
	5/3/2013	6.54	ND	88.66	82.12	NA	NA	NA		2.00
	7/11/2013	6.59	ND	88.66	82.07	NA	NA	NA		0.00
	6/13/2013	6.22	ND	88.66	82.44	NA	NA	NA		0.70
	7/19/2013*	5.12	ND	88.66	83.54	NA	NA	NA		
	8/1/2013	8.35	ND	88.66	80.31	NA	NA	NA		0.00
	9/5/2013	7.61	ND	88.66	81.05	NA	NA	NA		
	10/7/2013	7.65	ND	88.66	81.01	NA	NA	NA		0.00
	10/8/2013*	6.19	ND	88.66	82.47	NA	NA	NA		
	10/22/2013*	5.31	ND	88.66	83.35	NA	NA	NA		
	11/6/2013	7.15	ND	88.66	81.51	NA	NA	NA		0.00
	12/4/2013	8.02	ND	88.66	80.64	NA	NA	NA		0.00
	1/6/2014*	6.25	ND	88.66	82.41	NA	NA	NA		
	2/24/2014	5.96	ND	88.66	82.70	NA	NA	NA		
	3/10/2014	5.42	ND	88.66	83.24	NA	NA	NA		2.2
	4/22/2014	7.91	ND	88.66	80.75	NA	NA	NA		0.0
	4/23/2014*	5.87	ND	88.66	82.79	NA	NA	NA		
	5/7/2014	2.15	ND	88.66	86.51	NA	NA	NA		0.1
	6/3/2014	7.81	ND	88.66	80.85	NA	NA	NA		
	7/3/2014	4.99	ND	88.66	83.67	NA	NA	NA		0.02
	7/17/2014	3.31	ND	88.66	85.35	NA	NA	NA		
	8/25/2014	7.20	ND	88.66	81.46	NA	NA	NA		0.0

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	9/9/2014	6.42	ND	88.66	82.24	NA	NA	NA		0.02
	10/7/2014	7.25	ND	88.66	81.41	NA	NA	NA		
	10/8/2014*	5.88	ND	88.66	82.78	NA	NA	NA		
	11/4/2014	6.61	ND	88.66	82.05	NA	NA	NA		
	12/1/2014	6.30	ND	88.66	82.36	NA	NA	NA		
	1/7/2015	4.55	ND	88.66	84.11	NA	NA	NA		0.00
	1/9/2015*	3.41	ND	88.66	85.25	NA	NA	NA		
	2/3/2015	5.88	ND	88.66	82.78	NA	NA	NA		positive
	3/17/2015	4.61	ND	88.66	84.05	NA	NA	NA		-0.60
	4/14/2015	4.90	ND	88.66	83.76	NA	NA	NA		
	4/15/2015*	3.05	ND	88.66	85.61	NA	NA	NA		
	5/12/2015	4.72	ND	88.66	83.94	NA	NA	NA		0.00
	6/9/2015	4.93	ND	88.66	83.73	NA	NA	NA		0.05
MW-25	10/16/2013	10.92	ND	83.48	72.56	NA	NA	NA		
	10/22/2013*	11.01	ND	83.48	72.47	NA	NA	NA		
	11/6/2013	11.43	ND	83.48	72.05	NA	NA	NA		
	12/4/2013	11.03	ND	83.48	72.45	NA	NA	NA		
	1/6/2014*	10.35	ND	83.48	73.13	NA	NA	NA		
	2/24/2014	9.80	ND	83.48	73.68	NA	NA	NA		
	3/10/2014	10.00	ND	83.48	73.48	NA	NA	NA		
	4/22/2014	9.77	ND	83.48	73.71	NA	NA	NA		
	4/23/2014*	9.88	ND	83.48	73.60	NA	NA	NA		
	5/7/2014	9.62	ND	83.48	73.86	NA	NA	NA		
	6/3/2014	10.59	ND	83.48	72.89	NA	NA	NA		
	7/3/2014	10.42	ND	83.48	73.06	NA	NA	NA		
	7/17/2014	10.40	ND	83.48	73.08	NA	NA	NA		
	8/25/2014	11.30	ND	83.48	72.18	NA	NA	NA		
	9/9/2014	9.78	ND	83.48	73.70	NA	NA	NA		
	10/7/2014	11.41	ND	83.48	72.07	NA	NA	NA		
	10/8/2014*	11.47	ND	83.48	72.01	NA	NA	NA		
	11/4/2014	10.90	ND	83.48	72.58	NA	NA	NA		
	12/1/2014	10.13	ND	83.48	73.35	NA	NA	NA		
	1/7/2015	10.09	ND	83.48	73.39	NA	NA	NA		
	1/9/2015*	9.97	ND	83.48	73.51	NA	NA	NA		
	2/3/2015	9.99	ND	83.48	73.49	NA	NA	NA		
	3/17/2015	9.13	ND	83.48	74.35	NA	NA	NA		
	4/14/2015	10.01	ND	83.48	73.47	NA	NA	NA		
	4/15/2015*	10.01	ND	83.48	73.47	NA	NA	NA		
	5/12/2015	10.79	ND	83.48	72.69	NA	NA	NA		
	6/9/2015	10.14	ND	83.48	73.34	NA	NA	NA		
MW-26	10/16/2013	11.74	ND	83.89	72.15	NA	NA	NA		
	10/22/2013*	11.88	ND	83.89	72.01	NA	NA	NA		
	11/6/2013	12.33	ND	83.89	71.56	NA	NA	NA		
	12/4/2013	11.85	ND	83.89	72.04	NA	NA	NA		
	1/6/2014*	10.50	ND	83.89	73.39	NA	NA	NA		
	2/24/2014	9.15	ND	83.89	74.74	NA	NA	NA		
	3/10/2014	9.41	ND	83.89	74.48	NA	NA	NA		
	4/22/2014	9.69	ND	83.89	74.20	NA	NA	NA		
	4/23/2014*	9.69	ND	83.89	74.20	NA	NA	NA		
	5/7/2014	9.59	ND	83.89	74.30	NA	NA	NA		
	6/3/2014	10.99	ND	83.89	72.90	NA	NA	NA		

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	7/3/2014	10.80	ND	83.89	73.09	NA	NA	NA		
	7/17/2014	10.60	ND	83.89	73.29	NA	NA	NA		
	8/25/2014	12.15	ND	83.89	71.74	NA	NA	NA		
	9/9/2014	9.97	ND	83.89	73.92	NA	NA	NA		
	10/7/2014	12.38	ND	83.89	71.51	NA	NA	NA		
	10/8/2014*	12.37	ND	83.89	71.52	NA	NA	NA		
	11/4/2014	11.65	ND	83.89	72.24	NA	NA	NA		
	12/1/2014	10.40	ND	83.89	73.49	NA	NA	NA		
	1/7/2015	9.84	ND	83.89	74.05	NA	NA	NA		
	1/9/2015*	9.82	ND	83.89	74.07	NA	NA	NA		
	2/3/2015	10.06	ND	83.89	73.83	NA	NA	NA		
	3/17/2015	8.69	ND	83.89	75.20	NA	NA	NA		
	4/14/2015	10.05	ND	83.89	73.84	NA	NA	NA		
	4/15/2015*	10.13	ND	83.89	73.76	NA	NA	NA		
	5/12/2015	11.30	ND	83.89	72.59	NA	NA	NA		
	6/9/2015	10.14	ND	83.89	73.75	NA	NA	NA		
MW-27	10/16/2013	8.23	ND	81.98	73.75	NA	NA	NA		
	10/22/2013*	8.17	ND	81.98	73.81	NA	NA	NA		
	11/6/2013	8.42	ND	81.98	73.56	NA	NA	NA		
	12/4/2013	8.14	ND	81.98	73.84	NA	NA	NA		
	1/6/2014*	6.92	ND	81.98	75.06	NA	NA	NA		
	2/24/2014	6.19	ND	81.98	75.79	NA	NA	NA		
	3/10/2014	6.75	ND	81.98	75.23	NA	NA	NA		
	4/22/2014	6.66	ND	81.98	75.32	NA	NA	NA		
	4/23/2014*	6.82	ND	81.98	75.16	NA	NA	NA		
	5/7/2014	6.37	ND	81.98	75.61	NA	NA	NA		
	6/3/2014	7.75	ND	81.98	74.23	NA	NA	NA		
	7/3/2014	7.55	ND	81.98	74.43	NA	NA	NA		
	7/17/2014	7.57	ND	81.98	74.41	NA	NA	NA		
	8/25/2014	8.50	ND	81.98	73.48	NA	NA	NA		
	9/9/2014	8.30	ND	81.98	73.68	NA	NA	NA		
	10/7/2014	8.71	ND	81.98	73.27	NA	NA	NA		
	10/8/2014*	8.70	ND	81.98	73.28	NA	NA	NA		
	11/4/2014	8.11	ND	81.98	73.87	NA	NA	NA		
	12/1/2014	7.30	ND	81.98	74.68	NA	NA	NA		
	1/8/2015*	6.80	ND	81.98	75.18	NA	NA	NA		
	2/3/2015	6.90	ND	81.98	75.08	NA	NA	NA		
	3/17/2015	5.70	ND	81.98	76.28	NA	NA	NA		
	4/14/2015	6.92	ND	81.98	75.06	NA	NA	NA		
	4/15/2015*	6.65	ND	81.98	75.33	NA	NA	NA		
	5/12/2015	7.81	ND	81.98	74.17	NA	NA	NA		
	6/9/2015	5.73	ND	81.98	76.25	NA	NA	NA		
MW-28	10/16/2013	6.29	ND	87.04	80.75	NA	NA	NA		
	10/22/2013*	7.00	ND	87.04	80.04	NA	NA	NA		
	11/6/2013	7.15	ND	87.04	79.89	NA	NA	NA		
	12/4/2013	6.98	ND	87.04	80.06	NA	NA	NA		
	1/6/2014*	6.03	ND	87.04	81.01	NA	NA	NA		
	2/24/2014	5.35	ND	87.04	81.69	NA	NA	NA		
	3/10/2014	6.07	ND	87.04	80.97	NA	NA	NA		
	4/22/2014	5.87	ND	87.04	81.17	NA	NA	NA		
	4/23/2014*	6.31	ND	87.04	80.73	NA	NA	NA		

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	5/7/2014	5.29	ND	87.04	81.75	NA	NA	NA		
	6/3/2014	7.13	ND	87.04	79.91	NA	NA	NA		
	7/3/2014	6.12	ND	87.04	80.92	NA	NA	NA		
	7/17/2014	5.94	ND	87.04	81.10	NA	NA	NA		
	8/25/2014	7.40	ND	87.04	79.64	NA	NA	NA		
	9/9/2014	7.90	ND	87.04	79.14	NA	NA	NA		
	10/8/2014	7.31	ND	87.04	79.73	NA	NA	NA		
	11/4/2014	7.15	ND	87.04	79.89	NA	NA	NA		
	12/1/2014	6.35	ND	87.04	80.69	NA	NA	NA		
	1/8/2015*	5.75	ND	87.04	81.29	NA	NA	NA		
	2/3/2015	6.02	ND	87.04	81.02	NA	NA	NA		
	3/17/2015	5.03	ND	87.04	82.01	NA	NA	NA		
	4/14/2015	5.95	ND	87.04	81.09	NA	NA	NA		
	4/15/2015*	5.68	ND	87.04	81.36	NA	NA	NA		
	5/12/2015	6.31	ND	87.04	80.73	NA	NA	NA		
	6/9/2015	5.73	ND	87.04	81.31	NA	NA	NA		
MW-29	10/16/2013	9.22	ND	82.23	73.01	NA	NA	NA		
	10/22/2013*	9.06	ND	82.23	73.17	NA	NA	NA		
	11/6/2013	9.49	ND	82.23	72.74	NA	NA	NA		
	12/4/2013	8.40	ND	82.23	73.83	NA	NA	NA		
	1/6/2014*	7.15	ND	82.23	75.08	NA	NA	NA		
	2/24/2014	5.67	ND	82.23	76.56	NA	NA	NA		
	3/10/2014	6.26	ND	82.23	75.97	NA	NA	NA		
	4/22/2014	6.67	ND	82.23	75.56	NA	NA	NA		
	4/23/2014*	6.32	ND	82.23	75.91	NA	NA	NA		
	5/7/2014	6.36	ND	82.23	75.87	NA	NA	NA		
	6/3/2014	7.65	ND	82.23	74.58	NA	NA	NA		
	7/3/2014	7.30	ND	82.23	74.93	NA	NA	NA		
	7/17/2014	6.75	ND	82.23	75.48	NA	NA	NA		
	8/25/2014	5.70	ND	82.23	76.53	NA	NA	NA		
	9/9/2014	7.49	ND	82.23	74.74	NA	NA	NA		
	10/8/2014	9.96	ND	82.23	72.27	NA	NA	NA		
	11/4/2014	9.43	ND	82.23	72.80	NA	NA	NA		
	12/1/2014	7.88	ND	82.23	74.35	NA	NA	NA		
	1/8/2015*	6.95	ND	82.23	75.28	NA	NA	NA		
	2/3/2015	7.10	ND	82.23	75.13	NA	NA	NA		
	3/17/2015	5.33	ND	82.23	76.90	NA	NA	NA		
	4/14/2015	6.88	ND	82.23	75.35	NA	NA	NA		
	4/15/2015*	6.82	ND	82.23	75.41	NA	NA	NA		
	5/12/2015	8.46	ND	82.23	73.77	NA	NA	NA		
	6/9/2015	6.60	ND	82.23	75.63	NA	NA	NA		
MW-30	10/16/2013	7.19	ND	92.01	84.82	NA	NA	NA		
	10/22/2013*	7.08	ND	92.01	84.93	NA	NA	NA		
	11/6/2013	7.96	ND	92.01	84.05	NA	NA	NA		
	12/4/2013	8.24	ND	92.01	83.77	NA	NA	NA		
	1/6/2014*	7.91	ND	92.01	84.10	NA	NA	NA		
	2/24/2014	6.56	ND	92.01	85.45	NA	NA	NA		
	3/10/2014	6.23	ND	92.01	85.78	NA	NA	NA		
	4/22/2014	7.61	ND	92.01	84.40	NA	NA	NA		
	4/23/2014*	6.52	ND	92.01	85.49	NA	NA	NA		
	5/7/2014	4.62	ND	92.01	87.39	NA	NA	NA		

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Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	6/3/2014	7.95	ND	92.01	84.06	NA	NA	NA		
	7/3/2014	5.88	ND	92.01	86.13	NA	NA	NA		
	7/17/2014	5.59	ND	92.01	86.42	NA	NA	NA		
	8/25/2014	7.81	ND	92.01	84.20	NA	NA	NA		
	9/9/2014	7.56	ND	92.01	84.45	NA	NA	NA		
	10/7/2014	8.01	ND	92.01	84.00	NA	NA	NA		
	10/8/2014*	7.50	ND	92.01	84.51	NA	NA	NA		
	11/4/2014	7.55	ND	92.01	84.46	NA	NA	NA		
	12/1/2014	6.96	ND	92.01	85.05	NA	NA	NA		
	1/7/2015	5.62	ND	92.01	86.39	NA	NA	NA		
	1/9/2015*	5.04	ND	92.01	86.97	NA	NA	NA		
	2/3/2015	6.21	ND	92.01	85.80	NA	NA	NA		
	3/17/2015	5.40	ND	92.01	86.61	NA	NA	NA		
	4/14/2015	5.87	ND	92.01	86.14	NA	NA	NA		
	4/15/2015*	5.11	ND	92.01	86.90	NA	NA	NA		
	5/12/2015	5.97	ND	92.01	86.04	NA	NA	NA		
	6/9/2015	5.59	ND	92.01	86.42	NA	NA	NA		
CMW-1	10/16/2013	8.71	ND	82.56	73.85	NA	NA	NA		
	10/28/2013*	8.66	ND	82.56	73.90	NA	NA	NA		
	11/6/2013	9.14	ND	82.56	73.42	NA	NA	NA		
	12/4/2013	9.19	ND	82.56	73.37	NA	NA	NA		
	1/6/2014*	8.32	ND	82.56	74.24	NA	NA	NA		
	2/24/2014	8.60	ND	82.56	73.96	NA	NA	NA		
	3/10/2014	8.39	ND	82.56	74.17	NA	NA	NA		
	4/22/2014	8.46	ND	82.56	74.10	NA	NA	NA		
	4/23/2014*	8.31	ND	82.56	74.25	NA	NA	NA		
	5/7/2014	7.16	ND	82.56	75.40	NA	NA	NA		
	6/3/2014	8.34	ND	82.56	74.22	NA	NA	NA		
	7/3/2014	7.46	ND	82.56	75.10	NA	NA	NA		Positive Pressu
	7/17/2014	7.59	ND	82.56	74.97	NA	NA	NA		
	8/25/2014	8.60	ND	82.56	73.96	NA	NA	NA		
	9/9/2014	8.71	ND	82.56	73.85	NA	NA	NA		
	10/8/2014	8.79	ND	82.56	73.77	NA	NA	NA		
	11/4/2014	8.58	ND	82.56	73.98	NA	NA	NA		
	12/1/2014	8.50	ND	82.56	74.06	NA	NA	NA		
	1/8/2015*	7.26	ND	82.56	75.30	NA	NA	NA		
	2/3/2015	7.61	ND	82.56	74.95	NA	NA	NA		
	3/17/2015	7.05	ND	82.56	75.51	NA	NA	NA		
	4/14/2015	7.51	ND	82.56	75.05	NA	NA	NA		
	4/15/2015*	7.55	ND	82.56	75.01	NA	NA	NA		
	5/12/2015	8.35	ND	82.56	74.21	NA	NA	NA		
	6/9/2015	8.42	ND	82.56	74.14	NA	NA	NA		
CMW-2	10/16/2013	8.08	ND	81.02	72.94	NA	NA	NA		
	10/28/2013*	8.44	ND	81.02	72.58	NA	NA	NA		
	11/6/2013	8.56	ND	81.02	72.46	NA	NA	NA		
	12/4/2013	8.26	ND	81.02	72.76	NA	NA	NA		
	1/6/2014*	7.01	ND	81.02	74.01	NA	NA	NA		
	2/24/2014	6.30	ND	81.02	74.72	NA	NA	NA		
	3/10/2014	6.96	ND	81.02	74.06	NA	NA	NA		
	4/22/2014	6.69	ND	81.02	74.33	NA	NA	NA		
	4/23/2014*	6.71	ND	81.02	74.31	NA	NA	NA		

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	5/7/2014	6.40	ND	81.02	74.62	NA	NA	NA		
	6/3/2014	NG	NG	81.02	NG	NA	NA	NA	inaccessable	
	7/3/2014	7.53	ND	81.02	73.49	NA	NA	NA		
	7/17/2014	7.55	ND	81.02	73.47	NA	NA	NA		
	8/25/2014	8.25	ND	81.02	72.77	NA	NA	NA		
	9/9/2014	8.23	ND	81.02	72.79	NA	NA	NA		
	10/7/2014	8.61	ND	81.02	72.41	NA	NA	NA		
	10/8/2014*	8.60	ND	81.02	72.42	NA	NA	NA		
	11/4/2014	NG	NG	81.02	NG	NA	NA	NA	inaccessable	
	12/1/2014	7.55	ND	81.02	73.47	NA	NA	NA		
	1/8/2015*	6.95	ND	81.02	74.07	NA	NA	NA		
	2/3/2015	7.05	ND	81.02	73.97	NA	NA	NA		
	3/17/2015	5.59	ND	81.02	75.43	NA	NA	NA		
	4/14/2015	7.10	ND	81.02	73.92	NA	NA	NA		
	4/15/2015*	7.15	ND	81.02	73.87	NA	NA	NA		
	5/12/2015	7.74	ND	81.02	73.28	NA	NA	NA		
	6/9/2015	7.46	ND	81.02	73.56	NA	NA	NA		
TP-1	12/14/2011	8.89	ND	NM	NM	NM	NM	NA		
	12/15/2011	9.02	ND	NM	NM	NM	NM	NA		
	12/16/2011	9.13	ND	NM	NM	NM	NM	NA		
	12/19/2011	9.34	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/20/2011	9.36	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/21/2011	9.43	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/22/2011	9.47	ND	NM	NM	NM	NM	NA	Stagnant odor	
	12/23/2011	9.20	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/27/2011	9.42	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/28/2011	9.22	ND	NM	NM	NM	NM	NA		
	12/29/2011	9.26	ND	NM	NM	NM	NM	NA		
	12/30/2011	9.31	ND	NM	NM	NM	NM	NA	stagnant odor	
	1/3/2012	9.47	ND	NM	NM	NM	NM	NA	stagnant odor	
	1/5/2012	9.53	ND	NM	NM	NM	NM	NA	stagnant odor	
	1/9/2012	9.65	ND	NM	NM	NM	NM	NA	stagnant odor	
	1/10/2012	NG	ND	NM	NM	NM	NM	NA		
	1/18/2012	9.58	ND	NM	NM	NM	NM	NA	stagnant odor	
	1/25/2012	9.57	ND	NM	NM	NM	NM	NA		
	1/30/2012	9.51	ND	NM	NM	NM	NM	NA		
	2/6/2012	9.57	ND	NM	NM	NM	NM	NA	Slight Odor	
	2/13/2012	9.58	ND	NM	NM	NM	NM	NA	Moderate odor	
	2/20/2012	9.64	ND	NM	NM	NM	NM	NA	Slight Odor	
	2/28/2012	9.69	ND	NM	NM	NM	NM	NA		0.05
	3/5/2012	9.23	ND	NM	NM	NM	NM	NA		
	3/12/2012	9.34	ND	NM	NM	NM	NM	NA	Slight Odor	
	3/19/2012	9.43	ND	NM	NM	NM	NM	NA	Slight Odor	
	3/29/2012	9.38	ND	NM	NM	NM	NM	NA		
	4/2/2012	9.40	ND	NM	NM	NM	NM	NA		
	4/10/2012	9.52	ND	NM	NM	NM	NM	NA	Slight Odor	
	4/16/2012	9.59	ND	NM	NM	NM	NM	NA	Slight Odor	0.02
	4/23/2012	9.05	ND	NM	NM	NM	NM	NA	Slight Odor	
	4/30/2012	9.09	ND	NM	NM	NM	NM	NA	Moderate odor	
	5/8/2012*	9.04	ND	NM	NM	NA	NA	NA		
	5/15/2012	8.75	ND	NM	NM	NA	NA	NA	Slight	

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	5/21/2012	8.64	ND	NM	NM	NA	NA	NA		0.06
	5/31/2012	8.81	ND	NM	NM	NA	NA	NA		
	6/7/2012*	8.70	ND	NM	NM	NA	NA	NA		
	6/11/2012	8.78	ND	NM	NM	NA	NA	NA		
	6/18/2012	8.56	ND	NM	NM	NA	NA	NA		
	6/25/2012	8.71	ND	NM	NM	NA	NA	NA		
	7/10/2012	8.55	ND	NM	NM	NA	NA	NA		
	7/17/2012	8.60	ND	NM	NM	NA	NA	NA		0.03
	7/24/2012	7.88	ND	NM	NM	NA	NA	NA		
	7/31/2012	8.05	ND	NM	NM	NA	NA	NA		
	8/7/2012	8.14	ND	NM	NM	NA	NA	NA		0.05
	8/14/2012	7.86	ND	NM	NM	NA	NA	NA		
	8/21/2012	7.64	ND	NM	NM	NA	NA	NA		
	8/28/2012	7.02	ND	NM	NM	NA	NA	NA		
	9/5/2012	7.13	ND	NM	NM	NA	NA	NA		0.08
	9/13/2012	7.87	ND	NM	NM	NA	NA	NA		
	9/18/2012	8.04	ND	NM	NM	NA	NA	NA		
	9/26/2012	8.18	ND	NM	NM	NA	NA	NA		
	10/11/2012	8.35	ND	NM	NM	NA	NA	NA		0.03
	10/16/2012	8.30	ND	NM	NM	NA	NA	NA		
	10/22/2012	8.47	ND	NM	NM	NA	NA	NA		
	10/31/2012	6.16	ND	NM	NM	NA	NA	NA		
	11/7/2012	6.85	ND	NM	NM	NA	NA	NA		
	11/13/2012	7.23	ND	NM	NM	NA	NA	NA		0.02
	11/21/2012	7.86	ND	NM	NM	NA	NA	NA		
	11/27/2012	8.10	ND	NM	NM	NA	NA	NA		
	12/4/2012	8.42	ND	NM	NM	NA	NA	NA		0.04
	12/13/2012	8.60	ND	NM	NM	NA	NA	NA		
	12/21/2012	8.00	ND	NM	NM	NA	NA	NA		
	12/28/2012	7.32	ND	NM	NM	NA	NA	NA		
	1/4/2013	7.61	ND	NM	NM	NA	NA	NA		0.02
	1/9/2013	7.89	ND	NM	NM	NA	NA	NA		
	1/16/2013	7.34	ND	NM	NM	NA	NA	NA		
	1/21/2013*	7.59	ND	NM	NM	NA	NA	NA		
	2/8/2013	7.52	ND	NM	NM	NA	NA	NA		0.03
	3/8/2013	7.49	ND	NM	NM	NA	NA	NA		0.02
	4/16/2013	Dry	ND	NM	NM	NA	NA	NA		
	4/17/2013*	Dry	ND	NM	NM	NA	NA	NA		
	5/3/2013	7.90	ND	NM	NM	NA	NA	NA		0.00
	6/13/2013	6.70	ND	NM	NM	NA	NA	NA		
	7/11/2013	8.26	ND	NM	NM	NA	NA	NA		0.00
	8/1/2013	8.15	ND	NM	NM	NA	NA	NA		
	9/5/2013	8.91	ND	NM	NM	NA	NA	NA		
	10/7/2013	8.47	ND	NM	NM	NA	NA	NA		
	10/8/2013*	9.79	ND	NM	NM	NA	NA	NA		
	10/22/2013*	7.69	ND	NM	NM	NA	NA	NA	Moderate odor	
	11/6/2013	8.43	ND	NM	NM	NA	NA	NA		0.00
	12/4/2013	8.04	ND	NM	NM	NA	NA	NA	Moderate odor	0.04
	1/6/2014*	7.28	ND	NM	NM	NA	NA	NA	Slight odor	
	2/24/2014	7.23	ND	NM	NM	NA	NA	NA		
	3/10/2014	7.81	ND	NM	NM	NA	NA	NA		0.00

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	4/22/2014	7.44	ND	NM	NM	NA	NA	NA		0.00
	5/7/2014	6.09	ND	NM	NM	NA	NA	NA	Slight odor	
	6/3/2014	8.07	ND	NM	NM	NA	NA	NA		
	7/3/2014	8.50	ND	NM	NM	NA	NA	NA		0.06
	7/17/2014	8.39	ND	NM	NM	NA	NA	NA		
	8/25/2014	9.20	ND	NM	NM	NA	NA	NA		0.02
	9/9/2014	8.41	ND	NM	NM	NA	NA	NA		0.02
	10/8/2014	8.30	ND	NM	NM	NA	NA	NA		
	11/4/2014	7.95	ND	NM	NM	NA	NA	NA		
	12/1/2014	7.40	ND	NM	NM	NA	NA	NA		
	1/7/2015	7.78	ND	NM	NM	NA	NA	NA		
	2/3/2015	7.43	ND	NM	NM	NA	NA	NA		0.00
	3/17/2015	7.12	ND	NM	NM	NA	NA	NA		0.00
	4/14/2015	7.60	ND	NM	NM	NA	NA	NA		
	4/15/2015*	7.63	ND	NM	NM	NA	NA	NA		
	5/12/2015	8.07	ND	NM	NM	NA	NA	NA		0.00
	6/9/2015	8.03	ND	NM	NM	NA	NA	NA		0.00
TP-2	12/14/2011	9.62	ND	NM	NM	NM	NM	NA		
	12/15/2011	9.75	ND	NM	NM	NM	NM	NA		
	12/16/2011	9.86	ND	NM	NM	NM	NM	NA		
	12/19/2011	10.06	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/20/2011	10.12	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/21/2011	10.16	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/22/2011	10.19	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/23/2011	9.93	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/23/2011	9.20	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/27/2011	10.14	ND	NM	NM	NM	NM	NA	stagnant odor	
	12/28/2011	9.95	ND	NM	NM	NM	NM	NA		
	12/29/2011	9.99	ND	NM	NM	NM	NM	NA	Stagnant odor	
	12/30/2011	10.03	ND	NM	NM	NM	NM	NA		
	1/3/2012	10.21	ND	NM	NM	NM	NM	NA		
	1/5/2012	10.26	ND	NM	NM	NM	NM	NA	Stagnant odor	
	1/9/2012	10.38	ND	NM	NM	NM	NM	NA	Stagnant odor	
	1/10/2012	NG	ND	NM	NM	NM	NM	NA		
	1/18/2012	10.30	ND	NM	NM	NM	NM	NA	stagnant odor	
	1/25/2012	10.30	ND	NM	NM	NM	NM	NA	stagnant odor	
	1/30/2012	10.25	ND	NM	NM	NM	NM	NA		
	2/6/2012	10.29	ND	NM	NM	NM	NM	NA		
	2/13/2012	10.31	ND	NM	NM	NM	NM	NA	Moderate odor	
	2/20/2012	10.37	ND	NM	NM	NM	NM	NA	Slight Odor	
	2/28/2012	10.43	ND	NM	NM	NM	NM	NA		0.04
	3/5/2012	9.97	ND	NM	NM	NM	NM	NA		
	3/12/2012	10.08	ND	NM	NM	NM	NM	NA		
	3/19/2012	10.18	ND	NM	NM	NM	NM	NA		
	3/29/2012	10.13	ND	NM	NM	NM	NM	NA	Slight Odor	
	4/2/2012	10.12	ND	NM	NM	NM	NM	NA	Slight Odor	
	4/10/2012	10.25	ND	NM	NM	NM	NM	NA		
	4/16/2012	10.32	ND	NM	NM	NM	NM	NA	Slight Odor	0.03
	4/23/2012	9.77	ND	NM	NM	NM	NM	NA		
	4/30/2012	9.81	ND	NM	NM	NM	NM	NA	Slight Odor	
	5/8/2012*	9.77	ND	NM	NM	NM	NM	NA		

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	5/15/2012	9.49	ND	NM	NM	NM	NM	NA	Slight Odor	
	5/21/2012	9.37	ND	NM	NM	NM	NM	NA		0.05
	5/31/2012	9.54	ND	NM	NM	NM	NM	NA		
	6/7/2012*	9.42	ND	NM	NM	NM	NM	NA		
	6/11/2012	9.51	ND	NM	NM	NM	NM	NA		
	6/18/2012	9.29	ND	NM	NM	NM	NM	NA		
	6/25/2012	9.43	ND	NM	NM	NM	NM	NA		
	7/10/2012	9.27	ND	NM	NM	NM	NM	NA		
	7/17/2012	6.34	ND	NM	NM	NM	NM	NA		0.03
	7/24/2012	8.61	ND	NM	NM	NM	NM	NA		
	7/31/2012	8.79	ND	NM	NM	NM	NM	NA		
	8/7/2012	8.86	ND	NM	NM	NM	NM	NA		0.04
	8/14/2012	8.59	ND	NM	NM	NM	NM	NA		
	8/21/2012	8.36	ND	NM	NM	NM	NM	NA		
	8/28/2012	7.73	ND	NM	NM	NM	NM	NA		
	9/5/2012	8.16	ND	NM	NM	NM	NM	NA		0.06
	9/13/2012	8.60	ND	NM	NM	NM	NM	NA		
	9/18/2012	8.76	ND	NM	NM	NM	NM	NA		
	9/26/2012	8.84	ND	NM	NM	NM	NM	NA		
	10/11/2012	9.07	ND	NM	NM	NA	NA	NA		
	10/16/2012	9.02	ND	NM	NM	NA	NA	NA		
	10/22/2012	9.18	ND	NM	NM	NA	NA	NA		
	10/31/2012	6.86	ND	NM	NM	NA	NA	NA		
	11/7/2012	7.58	ND	NM	NM	NA	NA	NA		
	11/13/2012	7.97	ND	NM	NM	NA	NA	NA		0.04
	11/21/2012	8.60	ND	NM	NM	NA	NA	NA		
	11/27/2012	8.85	ND	NM	NM	NA	NA	NA		
	12/4/2012	9.54	ND	NM	NM	NA	NA	NA		0.03
	12/13/2012	9.33	ND	NM	NM	NA	NA	NA		
	12/21/2012	8.72	ND	NM	NM	NA	NA	NA		
	12/28/2012	8.04	ND	NM	NM	NA	NA	NA		
	1/4/2013	8.33	ND	NM	NM	NA	NA	NA		0.03
	1/9/2013	8.62	ND	NM	NM	NA	NA	NA		
	1/16/2013	8.08	ND	NM	NM	NA	NA	NA		
	1/21/2013*	8.32	ND	NM	NM	NA	NA	NA		
	2/8/2013	8.24	ND	NM	NM	NA	NA	NA		0.05
	3/8/2013	8.27	ND	NM	NM	NA	NA	NA		0.02
	4/16/2013	Dry	ND	NM	NM	NA	NA	NA		
	4/17/2013*	Dry	ND	NM	NM	NA	NA	NA		
	5/3/2013	8.63	ND	NM	NM	NA	NA	NA		
	6/13/2013	7.42	ND	NM	NM	NA	NA	NA		0.03
	7/11/2013	8.95	ND	NM	NM	NA	NA	NA		0.02
	8/1/2013	8.89	ND	NM	NM	NA	NA	NA		
	9/5/2013	9.69	ND	NM	NM	NA	NA	NA		
	10/7/2013	9.55	ND	NM	NM	NA	NA	NA		
	10/8/2013*	9.51	ND	NM	NM	NA	NA	NA		
	10/22/2013*	8.41	ND	NM	NM	NA	NA	NA	Slight odor	
	11/6/2013	9.11	ND	NM	NM	NA	NA	NA		0.00
	12/4/2013	8.77	ND	NM	NM	NA	NA	NA	Moderate odor	0.03
	1/6/2014*	7.98	ND	NM	NM	NA	NA	NA	Slight odor	
	2/24/2014	7.97	ND	NM	NM	NA	NA	NA		

Table 1 - Well Gauging Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Baltimore, MD 21237

Well ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments	Vacuum Pressure
	3/10/2014	8.39	ND	NM	NM	NA	NA	NA		0.00
	4/22/2014	8.17	ND	NM	NM	NA	NA	NA		0.00
	4/23/2014*	8.01	ND	NM	NM	NA	NA	NA		
	5/7/2014	6.75	ND	NM	NM	NA	NA	NA		
	6/3/2014	8.82	ND	NM	NM	NA	NA	NA		
	7/3/2014	9.03	ND	NM	NM	NA	NA	NA		0.06
	7/17/2014	9.01	ND	NM	NM	NA	NA	NA		
	8/25/2014	9.90	ND	NM	NM	NA	NA	NA		0.0
	9/9/2014	9.14	ND	NM	NM	NA	NA	NA		0.0
	10/8/2014	9.11	ND	NM	NM	NA	NA	NA		
	11/4/2014	8.69	ND	NM	NM	NA	NA	NA		
	12/1/2014	8.15	ND	NM	NM	NA	NA	NA		
	1/7/2015	7.99	ND	NM	NM	NA	NA	NA		
	2/3/2015	8.19	ND	NM	NM	NA	NA	NA		0.0
	3/17/2015	7.84	ND	NM	NM	NA	NA	NA		0.0
	4/14/2015	8.40	ND	NM	NM	NA	NA	NA		
	4/15/2015*	8.35	ND	NM	NM	NA	NA	NA		
	5/12/2015	8.81	ND	NM	NM	NA	NA	NA		0.00
	6/9/2015	8.72	ND	NM	NM	NA	NA	NA		0.00

LPH = Liquid Phase Hydrocarbon
TOC = Top of Casing Elevation
ND = None Detected
NA = Not Applicable
NG = Not Gauged
NM = Not Measured
Vacuum pressure readings measured in inches of water
Corrected water elevation based on LPH density of 0.7 grams per milliliter
* - Levels taken on these days were taken after a period of system shutdown in order to observe static water levels
** - Stinger tube was connected to the system @ MW-4R and run into MW-6 for recovery while AEC was on-site

Table 2 - Monitoring Well Groundwater Analytical Results
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD 21237

Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO
MW-1	7/22/2010	7,600	23,000	2,800	15,600	49,000	5.0	3,900	0.001	0.001	0.001	160	86.0	9.2
	10/28/2010	6,500	17,200	700	7,000	31,400	0.001	850	0.001	0.001	0.001	130	37.0	19.0
	1/10/2011	440	1,000	260	1,610	3,310	0.001	200	0.001	0.001	0.001	27	2.8	2.2
	4/27/2011	960	4,200	500	7,600	13,260	0.001	570	0.001	0.001	0.001	56	16.0	6.3
	7/21/2011	1,000	5,600	880	4,720	12,200	0.001	2,200	0.001	0.001	0.001	66	4.0	5.9
	10/28/2011	1,800	11,000	1,300	14,500	28,600	0.001	2,800	0.001	0.001	0.001	130	24.0	8.4
	1/10/2012	1,000	3,700	24	2,010	6,734	0.001	1,200	0.001	0.001	0.001	7	11.0	5.9
	4/11/2012	1,700	7,500	990	14,600	24,790	0.001	750	0.001	0.001	0.001	67	19.0	9.5
	7/6/2012	646	2,180	201	5,670	8,697	0.001	247	0.001	0.001	0.001	0.001	11.6	6.02
	10/5/2012	520	3,420	361	8,700	13,001	0.001	337	0.001	0.001	0.001	0.001	17.9	4.88
	1/21/2013	590	2,110	431	9,410	12,541	0.001	301	0.001	0.001	0.001	0.001	16.5	5.66
	4/17/2013	385	1,450	317	6,000	8,152	0.001	189	0.001	0.001	0.001	0.001	12.7	3.96
	7/19/2013	311	962	330	6,000	7,603	0.001	236	0.001	0.001	0.001	0.001	11.6	5.28
	10/8/2013	135	172	145	4,300	4,752	0.001	197	0.001	0.001	0.001	0.001	8.05	4.9
	1/6/2014	261	776	295	6,420	7,752	0.001	356	0.001	0.001	0.001	0.001	10.7	5.28
	4/23/2014	193	1,170	636	6,740	8,739	0.001	305	0.001	0.001	0.001	0.001	13.8	7.57
	7/17/2014	79.2	544	479	3,980.0	5,082	0.001	241	0.001	0.001	0.001	0.001	13.80	4.34
	10/8/2014	42.6	245	168	3,110.0	3,566	0.001	121	0.001	0.001	0.001	0.001	6.06	3.74
	1/9/2015	91	498	663	5140	6392	0.001	277	0.001	0.001	0.001	0.001	10.6	4.12
	4/15/2015	48.6	238	571	5730	6587.6	0.001	283	0.001	0.001	0.001	0.001	11.3	4.34
MW-2	7/22/2010	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
	10/28/2010	3,900	7,900	370	1,720	13,890	0.0	270	0.001	0.001	0.001	60	24.0	9.3
	1/10/2011	3,000	9,600	1,400	6,300	20,300	0.0	470	0.001	0.001	0.001	85	14.0	4.4
	4/27/2011	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
MW-2R	8/9/2011	7,600	18,300	1,720	7,870	35,490	0.0	0.001	0.001	0.001	0.001	0.001	92.3	4.4
	10/28/2011	6,600	27,000	3,200	20,300	57,100	0.0	3,800	0.001	0.001	0.001	180	17.0	11.0
	1/10/2012	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
	4/11/2012	200	590	90	630	1,510	0.0	100	0.001	0.001	0.001	7.8	1.1	2.4
	7/6/2012	255	1,200	188	1,538	3,181	0.0	65	0.001	0.001	0.001	0.001	4.19	1.91
	10/5/2012	97.9	105	5.6	483	691.5	7.3	16.5	0.001	0.001	0.001	0.001	1.49	0.54
	1/21/2013	6.8	23.5	6.7	60.0	97.0	2.1	5.1	0.001	0.001	0.001	0.001	0.177	0.37
	4/17/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/19/2013	152	421	269	2,086	2,928	0.0	109	0.001	0.001	0.001	11.2	3.58	1.37
	10/8/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/6/2014	0.001	0.001	0.001	8.1	8.1	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.32
	4/23/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/17/2014	46.2	41.7	48.0	215.9	351.8	0.0	12.8	0.001	0.001	0.001	2.0	0.761	0.82
	10/8/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/9/2015	437	159	388	1262	2246	0.001	99.2	0.001	0.001	0.001	15.5	2.97	2.36
	4/15/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	7/22/2010	200	1,700	330	1,770	4,000	310.0	1,800	0.001	0.001	0.001	45	7.0	1.6
	10/28/2010	10	24	9.3	28	71.3	0.0	34	0.001	0.001	0.001	0.001	0.001	0.001
	1/10/2011	240	200	67	300	807	310.0	48	0.001	0.001	0.001	5.1	1.1	0.9
	4/27/2011	32	33	17	118	200	0.0	49	0.001	0.001	0.001	0.001	0.001	0.001
	7/21/2011	52	15	12	50	129	0.0	6.2	0.001	0.001	0.001	0.001	0.5	0.001
	10/28/2011	360	47	9.6	65	481.6	310.0	10.0	0.001	0.001	0.001	0.001	0.001	0.001

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Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO
	1/10/2012	230	75	88	89	482	0.0	30	0.001	0.001	0.001	8	0.8	0.001
	4/11/2012	30	16	6.2	40	92.2	35.0	6.7	0.001	0.001	0.001	0.001	0.001	0.001
	7/6/2012	639	917	143	713	2,412	21.7	0.001	0.001	0.001	12.7	0.001	2.83	1.57
	10/5/2012	40.4	2.3	7.1	9.2	59.0	0.0	0.001	0.001	0.001	0.001	0.001	0.122	0.001
	1/21/2013	73.4	13.4	10.7	14.0	111.5	5.7	3.1	0.001	0.001	0.001	0.001	0.216	0.62
	4/17/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.53
	7/19/2013	4.8	0.001	0.001	3.5	8.3	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.62
	10/8/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.48
	1/6/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.26
	4/23/2014	5.5	0.001	0.001	0.001	5.5	4.1	0.001	78.2	0.001	0.001	0.001	0.001	0.34
	7/17/2014	8.1	0.001	10.7	0.001	18.9	4.8	0.001	0.001	0.001	0.001	0.001	0.148	0.73
	10/8/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.59
	1/9/2015	3.8	0.001	2.4	0.001	6.2	8.8	0.001	0.001	0.001	0.001	0.001	0.001	0.34
	4/15/2015	0.001	0.001	0.001	0.001	0.001	6.1	0.001	0.001	0.001	0.001	0.001	0.001	0.29
MW-4	7/22/2010	5,200	22,000	2,900	17,000	47,100	0.0	8,600	0.001	0.001	0.001	150	30.0	8.0
	10/28/2010	560	3,000	310	2,780	6,650	0.0	560	0.001	0.001	0.001	74	8.6	4.3
	1/10/2011	1,500	4,700	580	2,800	9,580	0.0	1,900	0.001	0.001	0.001	63	19.0	4.5
	4/27/2011	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
MW-4R	8/9/2011	7,710	33,500	2,800	18,800	62,810	0.0	0.001	0.001	0.001	0.001	0.001	54.0	5.2
	10/28/2011	7,700	13,000	2,600	14,200	37,500	0.0	800	0.001	0.001	0.001	160	29.0	3.9
	1/10/2012	4,700	9,200	1,800	8,100	23,800	0.0	1,700	0.001	0.001	0.001	120	24.0	13.0
	4/11/2012	360	1,000	280	2,500	4,140	0.0	290	0.001	0.001	0.001	53	9.6	5.5
	7/6/2012	6.4	14.8	51.4	310.3	382.9	0.0	16.1	0.001	0.001	0.001	0.001	1.08	2.13
	10/5/2012	718	613	268	500.1	2,099	13.9	69	0.001	0.001	0.001	10.8	2.95	0.81
	1/21/2013	218	85.5	79.6	108.9	492.0	7.9	34.8	0.001	0.001	0.001	5.9	1.290	0.92
	4/17/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/19/2013	8.1	2.6	9.5	8.7	28.9	0.0	0.001	0.001	0.001	0.001	0.001	0.153	0.77
	10/8/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/6/2014	4.9	2.4	10.2	13.9	25.8	0.0	2.9	0.001	0.001	0.001	0.001	0.131	0.42
	4/23/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/17/2014	19.9	2.7	11.5	17.6	51.7	3.4	3.3	0.001	0.001	0.001	0.001	0.321	0.96
	10/8/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/9/2015	5.5	0.001	6.8	0.001	12.3	6.4	0.001	0.001	0.001	0.001	0.001	0.001	0.36
	4/15/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-5	7/22/2010	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
	10/28/2010	190	250	170	480	1,090	0.0	110	0.001	0.001	0.001	10	1.2	0.5
	1/10/2011	210	190	94	570	1,064	0.0	190	0.001	0.001	0.001	17	3.7	1.4
	4/27/2011	63	1,100	250	1,220	2,633	0.0	220	0.001	0.001	0.001	43	3.9	2.1
MW-5R	8/9/2011	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
	10/28/2011	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
	1/10/2012	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
	4/11/2012	220	200	74	1,700	2,194	0.0	100	0.001	0.001	0.001	12	3.0	0.9
	7/6/2012	26.2	6.0	0.001	9.4	41.6	6.6	0.001	0.001	0.001	0.001	0.001	0.001	0.73
	10/5/2012	359	35	108	401	902.5	25.7	89	0.001	0.001	0.001	12.2	2.15	1.45
	1/21/2013	248	6.5	35.4	10.3	300.2	18.1	8.5	0.001	0.001	0.001	0.001	0.665	0.86
	4/17/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO
	7/19/2013	47.2	6.3	23.9	36.9	114.3	10.2	11.2	0.001	0.001	0.001	0.001	0.404	1.00
	10/8/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/6/2014	4.2	0.001	0.001	0.001	4.2	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.31
	4/23/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/17/2014	52.4	12.1	81.6	146.3	292.4	4.0	16.2	0.001	0.001	0.001	5.2	0.676	2.09
	10/8/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/9/2015	33.6	2.3	101	210.8	347.7	2.1	24.6	0.001	0.001	0.001	10.8	1.02	0.84
	4/15/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	7/22/2010	3,300	9,200	1,500	8,100	22,100	0.0	2,900	0.001	0.001	0.001	71	18.0	9.5
	10/28/2010	1,900	4,300	350	2,900	9,450	0.0	350	0.001	0.001	0.001	66	3.7	2.3
	1/10/2011	2,600	5,300	1,400	5,100	14,400	0.0	550	0.001	0.001	0.001	990	10.0	5.3
	4/27/2011	1,800	9,000	1,700	12,200	24,700	0.0	3,300	0.001	0.001	0.001	71	27.0	7.6
	7/21/2011	550	1,600	350	1,930	4,430	0.0	250	0.001	0.001	0.001	42	3.9	1.6
	10/28/2011	1,700	5,500	1,200	6,900	15,300	0.0	650	0.001	0.001	0.001	120	12.0	8.6
	1/10/2012	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
	4/11/2012	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
	7/6/2012	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
	10/5/2012	2,940	2,030	1,410	5,260	11,640	0.0	318	0.001	0.001	0.001	0.001	18.9	3.24
	1/21/2013	652	1,430	799	5,290	8,171	0.0	343	0.001	0.001	0.001	0.001	15.6	5.66
	4/17/2013	1,070	1,200	1,660	6,820	10,750	0.0	436	0.001	0.001	0.001	106	20.8	8.22
	7/19/2013	820	1,750	1,340	5,840	9,750	0.0	358	0.001	0.001	0.001	102	18.6	6.60
	10/8/2013	1,160	453	883	1,357	3,853	0.0	272	0.001	0.001	0.001	72.4	13.4	3.85
	1/6/2014	175	776	632	6,030	7,613	0.0	442	0.001	0.001	0.001	102	12.8	6.93
	4/23/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/17/2014	615	457	532	1,758	3,362	0.0	153	0.001	0.001	0.001	32.5	7.030	2.45
	10/8/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/9/2015	84	0.001	110	358	552	5.3	53.5	23	0.001	0.001	11.2	2.11	1.86
	4/15/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-7	7/22/2010	7,100	19,300	2,200	14,100	42,700	0.0	3,700	0.001	0.001	0.001	130	16.0	12.00
	10/28/2010	4,000	9,700	3,000	9,500	26,200	0.0	330	0.001	0.001	0.001	110	2.7	7.8
	1/10/2011	3,700	7,400	510	5,500	17,110	0.0	340	0.001	0.001	0.001	50	19.0	7.6
	4/27/2011	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
MW-7R	8/9/2011	9,500	24,800	2,040	10,730	47,070	0.0	0.001	0.001	0.001	0.001	0.001	50.7	3.2
	10/28/2011	100,000	100,000	100,000	100,000	100,000	100000.0	100,000	100,000	100,000	100,000	100,000	100,000	100,000
	1/10/2012	7,000	5,000	2,200	6,600	20,800	0.0	1,900	0.001	0.001	0.001	130	14.0	10.0
	4/11/2012	4,500	1,600	950	830	7,880	0.0	1,900	0.001	0.001	0.001	87	3.2	4.2
	7/6/2012	978	146	145	155.3	1,424	21.7	77	0.001	0.001	0.001	0.001	2.47	3.24
	10/5/2012	113	19.8	25.5	22.5	181	2.2	10.6	0.001	0.001	0.001	0.001	1.30	0.87
	1/21/2013	50.8	3.6	29.1	7.7	91.2	2.1	8.2	0.001	0.001	0.001	0.001	0.282	0.94
	4/17/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/19/2013	13.7	3.8	6	6.5	30	4.8	0.001	0.001	0.001	0.001	0.001	0.001	0.60
	10/8/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/6/2014	53.9	2.2	9.9	2.0	68	0.0	0.001	0.001	0.001	0.001	0.001	0.108	0.36
	4/23/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/17/2014	13.1	0.001	0.001	0.001	13.1	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.00
	10/8/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO
	1/9/2015	**10.1**	27.9	10.6	40.8	89.4	0.001	3.1	0.001	0.001	0.001	0.001	**0.203**	**1.86**
	4/15/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-8	7/22/2010	**870**	**1,400**	200	740	3,210	**240.0**	**100**	0.001	0.001	0.001	14	**3.0**	**2.0**
	10/28/2010	**600**	800	190	650	2,240	**150.0**	**52**	0.001	0.001	0.001	16	**1.7**	**0.9**
	1/10/2011	**1,200**	**2,200**	**750**	1,410	5,560	0.0	**320**	0.001	0.001	0.001	46	**6.3**	**3.2**
	4/27/2011	**4,700**	**9,800**	**1,600**	9,300	25,400	2.5	**1,800**	0.001	0.001	0.001	61	**10.0**	**6.1**
MW-8R	8/9/2011	**870**	**1,250**	406	1,440	3,966	**34.8**	**65**	0.001	0.001	0.001	0.001	**7.0**	**1.2**
	10/28/2011	**2,400**	**2,800**	**1,000**	3,400	9,600	0.0	**410**	0.001	0.001	0.001	55	**3.8**	**4.0**
	1/10/2012	**11**	0.001	6.3	0.001	17.3	0.0	**7.8**	0.001	0.001	0.001	0.001	0.001	0.001
	4/11/2012	**45**	18.0	29	23.0	115.0	0.0	**9.2**	0.001	0.001	0.001	0.001	0.001	0.001
	7/6/2012	2.3	0.001	2.3	0.001	4.6	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/5/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/21/2013	0.001	0.001	0.001	0.001	0.001	2.1	0.001	0.001	0.001	0.001	0.001	0.001	**0.49**
	4/17/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/19/2013	**12**	0.001	2.8	0.001	14.8	0.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.31**
	10/8/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/6/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.31**
	4/23/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/17/2014	17.6	13.9	12.6	0.001	44.1	3.4	0.001	0.001	0.001	0.001	0.001	**0.151**	**0.41**
	10/8/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/9/2015	**19.4**	2.8	41	57.4	120.6	3.2	15	0.001	0.001	0.001	5.4	**0.306**	**0.51**
	4/15/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	7/22/2010	**200**	150	35	470	855	**110.0**	**50**	0.001	0.001	0.001	5.5	0.001	0.001
	10/28/2010	**200**	115	110	400	825	0.0	**37**	0.001	0.001	0.001	11	**1.0**	**1.4**
	1/10/2011	**580**	480	85	1,050	2,195	0.0	**62**	0.001	0.001	0.001	9.3	**1.9**	**1.1**
	4/27/2011	**1,300**	**3,300**	600	3,000	8,200	0.0	**250**	0.001	0.001	0.001	46	**4.2**	**5.9**
	7/21/2011	**1,700**	**1,700**	**1,400**	4,100	8,900	0.0	**1,600**	0.001	0.001	0.001	**110**	**7.4**	**1.7**
	10/28/2011	**2,800**	**7,200**	**1,500**	4,400	15,900	0.0	**640**	0.001	0.001	0.001	**130**	**4.9**	**6.0**
	1/10/2012	**640**	0.001	30	0.001	670	**81.0**	0.001	0.001	0.001	0.001	7.1	**0.7**	0.001
	4/11/2012	**340**	210	130	226	906	0.0	**33**	0.001	0.001	0.001	10	0.001	0.001
	7/6/2012	0.001	0.001	0.001	0.001	0.001	6.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.28**
	10/5/2012	**7.3**	0.001	0.001	0.001	7.3	4.3	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/21/2013	0.001	0.001	0.001	0.001	0.001	3.3	0.001	0.001	0.001	0.001	0.001	0.001	**0.31**
	4/17/2013	0.001	0.001	0.001	0.001	0.001	3.7	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/19/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.22**
	10/8/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.25**
	1/6/2014	**2.4**	0.001	0.001	0.001	**2.4**	2.7	0.001	0.001	0.001	0.001	0.001	0.001	**0.27**
	4/23/2014	0.001	0.001	0.001	0.001	0.001	2.8	0.001	0.001	0.001	0.001	0.001	0.001	**0.22**
	7/17/2014	**79.2**	**13.9**	**96.6**	**121.9**	311.6	7.5	**74.7**	0.001	0.001	0.001	**7.2**	**0.897**	**1.24**
	10/8/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/9/2015	**118**	258	267	500	1143	9.4	**85.6**	0.001	0.001	0.001	19	**1.75**	**1.74**
	4/15/2015	**153**	181	248	611	1193	6.1	**99.1**	0.001	0.001	0.001	18.6	**1.76**	**1.28**
MW-10	7/22/2010	0.001	5.6	0.001	0.001	5.6	**120.0**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/28/2010	**6.2**	6.2	0.001	0.001	12.4	**120.0**	**6.6**	0.001	0.001	0.001	0.001	0.001	0.001
	1/10/2011	**110**	80	24	110	324	0.0	**16.0**	0.001	0.001	0.001	0.001	0.001	0.001
	4/27/2011	**630**	820	98	550	2,098	0.0	**390**	0.001	0.001	0.001	6.4	**0.9**	**1.3**

Table 2 - Monitoring Well Groundwater Analytical Results
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD 21237

Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO
	7/21/2011	**900**	900	130	670	2,600	0.0	**40**	0.001	0.001	0.001	9.9	**1.1**	0.001
	10/28/2011	**5,600**	**7,900**	**900**	4,400	18,800	0.0	**330**	0.001	0.001	0.001	52	**6.4**	**4.0**
	1/10/2012	**2,900**	420	120	320	3,760	0.0	**60**	0.001	0.001	0.001	20	**1.6**	0.001
	4/11/2012	**730**	53	7.6	113	903.6	0.0	**17.0**	0.001	0.001	0.001	7.6	0.001	0.001
	7/6/2012	**260**	10.2	0.001	24.4	294.6	**88.1**	0.001	0.001	0.001	**6.2**	0.001	**0.63**	**0.40**
	10/5/2012	**134**	0.001	0.001	0.001	134.0	**111.0**	0.001	0.001	0.001	0.001	0.001	**0.334**	**0.26**
	1/21/2013	**73.3**	0.001	0.001	5.6	78.9	**95.5**	0.001	0.001	0.001	0.001	0.001	**0.286**	**0.50**
	4/17/2013	**58.8**	0.001	0.001	7.4	66.2	**128.0**	0.001	0.001	0.001	0.001	0.001	**0.234**	**0.37**
	7/19/2013	**31.1**	0.001	0.001	2.3	33.4	**141.0**	0.001	0.001	0.001	0.001	0.001	**0.179**	**0.46**
	10/8/2013	**21.9**	0.001	0.001	0.001	21.9	**146.0**	0.001	0.001	0.001	0.001	0.001	**0.208**	**0.47**
	1/6/2014	**33.6**	0.001	0.001	0.001	33.6	**88.8**	0.001	0.001	0.001	0.001	0.001	**0.177**	**0.41**
	4/23/2014	**18.3**	0.001	0.001	0.001	18.3	**128.0**	0.001	0.001	0.001	0.001	0.001	**0.181**	**0.39**
	7/17/2014	**8.7**	0.001	0.001	0.001	8.7	**133.0**	0.001	0.001	0.001	0.001	0.001	**0.167**	**0.31**
	10/8/2014	**9.3**	0.001	0.001	0.001	9.3	**127.0**	0.001	0.001	0.001	0.001	0.001	**0.121**	**0.34**
	1/9/2015	**5**	0.001	0.001	0.001	5	**97.7**	0.001	0.001	0.001	0.001	0.001	**0.122**	**0.34**
	4/15/2015	3.9	0.001	0.001	0.001	3.9	**65.4**	0.001	0.001	0.001	0.001	0.001	0.001	**0.31**
MW-11	7/22/2010	**140**	280	31	206	657	**310.0**	**12.0**	0.001	0.001	0.001	0.001	0.001	0.001
	10/28/2010	**31**	6.2	0.001	13	50.2	**30.0**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/10/2011	**45**	0.001	0.001	12	57	**92.0**	**10.0**	0.001	0.001	0.001	0.001	0.001	0.001
	4/27/2011	**12**	0.001	0.001	0.001	12	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/21/2011	0.001	0.001	0.001	0.001	0.001	**81.0**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/28/2011	**26**	14	0.001	8.5	48.5	**21.0**	**19.0**	0.001	0.001	0.001	0.001	0.001	0.001
	1/10/2012	0.001	0.001	0.001	0.001	0.001	0.0	**5.3**	0.001	0.001	0.001	0.001	0.001	0.001
	4/11/2012	0.001	0.001	0.001	0.001	0.001	**34.0**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/6/2012	2.6	0.001	0.001	0.001	2.6	**24.0**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/5/2012	**40**	0.001	0.001	0.001	40.4	**54.0**	0.001	0.001	0.001	0.001	0.001	**0.117**	0.001
	1/21/2013	**16.5**	0.001	0.001	0.001	16.5	**22.3**	0.001	15.2	26.9	0.001	0.001	0.001	0.001
	4/17/2013	0.001	0.001	0.001	0.001	0.001	8.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/19/2013	0.001	0.001	0.001	0.001	0.001	6.6	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/8/2013	0.001	0.001	0.001	0.001	0.001	**31.0**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/6/2014	0.001	0.001	0.001	0.001	0.001	9.8	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/23/2014	0.001	0.001	0.001	0.001	0.001	2.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/17/2014	0.001	0.001	0.001	0.001	0.001	3.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/8/2014	0.001	0.001	0.001	0.001	0.001	4.1	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/9/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/15/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
MW-12	7/22/2010	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/28/2010	0.001	0.001	0.001	0.001	0.001	**30.0**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/10/2011	0.001	0.001	0.001	0.001	0.001	0.0	**9.0**	0.001	0.001	0.001	0.001	0.001	0.001
	4/27/2011	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/21/2011	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/28/2011	0.001	0.001	0.001	8.1	8.1	0.0	**9.6**	0.001	0.001	0.001	0.001	0.001	0.001
	1/10/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/11/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/6/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/5/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001

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Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO
	1/21/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	11	20.4	0.001	0.001	0.001	0.001
	4/17/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/19/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/8/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/6/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/23/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/17/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/8/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/9/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/15/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
MW-13	7/22/2010	0.001	15	0.001	0.001	15	0.0	**23**	0.001	0.001	0.001	0.001	0.001	0.001
	10/28/2010	0.001	10	0.001	14	24.3	**30.0**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/10/2011	0.001	15	0.001	0.001	15	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/27/2011	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/21/2011	0.001	5.1	5	16.6	26.7	0.0	**11.0**	0.001	0.001	0.001	0.001	0.001	0.001
	10/28/2011	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/10/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/11/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/6/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.22**
	10/5/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/21/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.34**
	4/17/2013	0.001	0.001	0.001	0.001	0.001	2.1	0.001	0.001	0.001	0.001	0.001	0.001	**0.24**
	7/19/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.33**
	10/8/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.30**
	1/6/2014	0.001	0.001	0.001	0.001	0.001	2.4	0.001	0.001	0.001	0.001	0.001	0.001	**0.28**
	4/23/2014	0.001	0.001	0.001	0.001	0.001	2.3	0.001	0.001	0.001	0.001	0.001	0.001	**0.26**
	7/17/2014	0.001	0.001	0.001	0.001	0.001	2.1	0.001	17.5	0.001	0.001	0.001	0.001	**0.21**
	10/8/2014	0.001	0.001	0.001	0.001	0.001	2.1	0.001	14.5	0.001	0.001	0.001	0.001	**0.20**
	1/9/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	**0.26**
	4/15/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	**0.24**
MW-14	7/22/2010	**100,000**	**100,000**	**100,000**	**100,000**	100,000	**100000.0**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
	10/28/2010	**100,000**	**100,000**	**100,000**	**100,000**	100,000	**100000.0**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
	1/10/2011	**100,000**	**100,000**	**100,000**	**100,000**	100,000	**100000.0**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
	4/27/2011	**100,000**	**100,000**	**100,000**	**100,000**	100,000	**100000.0**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
	7/21/2011	**100,000**	**100,000**	**100,000**	**100,000**	100,000	**100000.0**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
	10/28/2011	**100,000**	**100,000**	**100,000**	**100,000**	100,000	**100000.0**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
	1/10/2012	**100,000**	**100,000**	**100,000**	**100,000**	100,000	**100000.0**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
	4/11/2012	**100,000**	**100,000**	**100,000**	**100,000**	100,000	**100000.0**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
	7/6/2012	**287**	592	126	941	1,946	12.6	**43**	0.001	0.001	0.001	0.001	**2.98**	**1.24**
	10/5/2012	**144**	202	16.3	442	804.3	0.0	**26**	0.001	0.001	0.001	0.001	**1.3**	**0.70**
	1/21/2013	**25.5**	5.5	2.7	49.1	82.8	5.7	**6.7**	0.001	0.001	0.001	0.001	**0.332**	**0.59**
	4/17/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/19/2013	**50.3**	57.6	84.2	557	749.1	6.4	**37.3**	0.001	0.001	0.001	6.7	**1.29**	**1.34**
	10/8/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/6/2014	**19.0**	**2.9**	13	92	127	4.5	**11.7**	0.001	0.001	0.001	0.001	**0.411**	**0.79**
	4/23/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO
	7/17/2014	**18.9**	2.3	11.1	122	154.7	8.7	19.9	38.1	0.001	0.001	0.001	**2.660**	**2.74**
	10/8/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/9/2015	**36.9**	4	32.8	128.5	202.2	8.8	**14.2**	0.001	0.001	0.001	3	**0.46**	**1.08**
	4/15/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-15	8/9/2011	**75.5**	77.1	6.6	253	412.2	**29.3**	**4.1**	0.001	0.001	0.001	0.001	**0.8**	**0.8**
	10/28/2011	**320**	130	120	670	1,240	**37.0**	**110**	0.001	0.001	0.001	17	**0.9**	**2.0**
	1/10/2012	**26**	**3,700**	7	11	3,744	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/11/2012	**540**	21	75	9.1	645.1	0.0	**26**	0.001	0.001	0.001	14	0.001	0.001
	7/6/2012	**73.1**	0.001	0.001	3.3	76.4	6.4	0.001	0.001	0.001	**22.6**	0.001	0.001	**0.39**
	10/5/2012	**637**	0.001	0.001	0.001	637	**25.6**	0.001	0.001	0.001	0.001	0.001	**0.694**	**0.23**
	1/21/2013	**70.9**	0.001	0.001	0.001	70.9	19.4	0.001	0.001	0.001	0.001	0.001	**0.154**	**0.32**
	4/17/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/19/2013	4.9	0.001	0.001	0.001	4.9	11.7	0.001	0.001	0.001	0.001	0.001	0.001	**0.27**
	10/8/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/6/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/23/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/17/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.23
	10/8/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/9/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/15/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-16	8/9/2011	0.001	0.001	0.001	0.001	0.001	**32.5**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/28/2011	**150**	410	40	220	820	**22.0**	**41**	0.001	0.001	0.001	0.001	0.001	0.001
	1/10/2012	**2,300**	**1,500**	440	1,060	5,300	0.0	**100**	0.001	0.001	0.001	31	**4.1**	**3.7**
	4/11/2012	**2,800**	**1,500**	550	1,060	5,910	0.0	**110**	0.001	0.001	0.001	48	**2.5**	**2.9**
	7/6/2012	**1,550**	951	409	761	3,671	**58.5**	**87**	0.001	0.001	0.001	0.001	**6.12**	**1.60**
	10/5/2012	**736**	361	140	333.2	1,570.2	**31.8**	**18.7**	0.001	0.001	0.001	0.001	**2.14**	**0.70**
	1/21/2013	**432**	65.9	48.6	66.0	612.5	**21.8**	**20.2**	0.001	0.001	0.001	0.001	**1.120**	**0.82**
	4/17/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/19/2013	**335**	45.5	64.6	32.6	477.7	**25.7**	**12.3**	0.001	0.001	0.001	4.1	**0.968**	**0.8**
	10/8/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/6/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/23/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/17/2014	0.001	0.001	0.001	0.001	0.001	2.1	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/8/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/9/2015	**121**	3	10.1	0.001	134.1	37.4	3.6	0.001	0.001	0.001	0.001	**0.41**	**0.29**
	4/15/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-17	8/9/2011	**728**	**1,660**	318	2,279	4,985	0.0	**59.9**	0.001	0.001	0.001	38.0	**8.2**	**1.9**
	10/28/2011	**840**	390	260	550	2,040	0.0	**150**	0.001	0.001	0.001	0.001	**2.9**	**1.1**
	1/10/2012	**1,100**	280	140	260	1,780	0.0	**50**	0.001	0.001	0.001	14	**1.6**	0.001
	4/11/2012	**1,900**	260	290	215	2,665	0.0	**160**	0.001	0.001	0.001	32	**0.8**	**1.1**
	7/6/2012	**438**	35.7	30.1	38.1	541.9	**23.9**	0.001	0.001	0.001	0.001	0.001	**1.08**	**0.55**
	10/5/2012	**39.3**	0.001	0.001	4.2	43.5	7.3	0.001	0.001	0.001	0.001	3.0	**0.121**	0.001
	1/21/2013	**5.8**	0.001	3.6	42	51.2	0.0	**2.3**	0.001	0.001	0.001	0.001	**0.131**	**0.66**
	4/17/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/19/2013	**13.3**	0.001	0.001	0.001	13.3	9.1	0.001	0.001	0.001	0.001	0.001	0.001	**0.29**
	10/8/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2 - Monitoring Well Groundwater Analytical Results
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD 21237

Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO
	1/6/2014	**11.6**	0.001	0.001	0.001	11.6	5.6	0.001	0.001	0.001	0.001	0.001	0.001	**0.29**
	4/23/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/17/2014	**19.2**	0.001	0.001	0.001	19.2	14.1	0.001	0.001	0.001	0.001	0.001	0.119	0.001
	10/8/2014	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/9/2015	4.8	0.001	0.001	0.001	4.8	11.1	0.001	0.001	0.001	0.001	0.001	0.001	**0.2**
	4/15/2015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-18	8/9/2011	**8,050**	**38,600**	**3,830**	**21,420**	71,900	0.0	**511**	0.001	0.001	0.001	0.001	**148.0**	**4.6**
	10/28/2011	**100,000**	**100,000**	**100,000**	**100,000**	100,000	**100000.0**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
	1/10/2012	**100,000**	**100,000**	**100,000**	**100,000**	100,000	**100000.0**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
	4/11/2012	**1,300**	410	440	440	2,590	0.0	**120**	0.001	0.001	0.001	51	**1.3**	**1.7**
	7/6/2012	**1,020**	77.6	293	74.1	1,464.7	12.3	**82**	0.001	0.001	0.001	0.001	**3.37**	**0.80**
	10/5/2012	**1,700**	52.7	191	0.001	1,943.7	**41.3**	**22.3**	0.001	0.001	0.001	0.001	**2.93**	**0.48**
	1/21/2013	**413**	0.001	34.9	0.001	447.9	**24.1**	0.001	0.001	0.001	0.001	0.001	**0.950**	**0.60**
	4/17/2013	**332**	0.001	0.001	6.2	338.2	11.3	0.001	0.001	0.001	0.001	6.8	**0.766**	0.001
	7/19/2013	**43.2**	0.001	0.001	0.001	43.2	5.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.36**
	10/8/2013	**27.1**	0.001	0.001	0.001	27.1	8.9	0.001	0.001	0.001	0.001	3.4	**0.208**	**0.35**
	1/6/2014	**76.4**	0.001	0.001	5.1	81.5	**28.3**	0.001	0.001	0.001	0.001	0.001	**0.138**	**0.42**
	4/23/2014	**10.8**	0.001	4.1	13.8	28.7	**42.0**	0.001	0.001	0.001	0.001	0.001	**0.111**	**0.52**
	7/17/2014	0.001	0.001	0.001	0.001	0.001	19.7	0.001	0.001	0.001	0.001	0.001	0.001	**0.40**
	10/8/2014	2.7	0.001	0.001	0.001	2.7	**21.0**	0.001	0.001	0.001	0.001	0.001	0.001	**0.47**
	1/9/2015	0.001	0.001	0.001	0.001	0.001	6.9	0.001	0.001	0.001	0.001	0.001	0.001	**0.34**
	4/15/2015	0.001	0.001	0.001	0.001	0.001	4.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.27**
MW-19	8/9/2011	**6,180**	**29,200**	**2,540**	**16,730**	54,650	0.0	**405**	0.001	0.001	0.001	0.001	**65.9**	**5.6**
	10/28/2011	**100,000**	**100,000**	**100,000**	**100,000**	100,000	**100000.0**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
	1/10/2012	**8,000**	**18,000**	**3,300**	**14,900**	44,200	0.0	**2,200**	0.001	0.001	0.001	**180**	**47.0**	**14.0**
	4/11/2012	**2,800**	**8,600**	**2,300**	9,900	23,600	0.0	**990**	0.001	0.001	0.001	**220**	**37.0**	**12.0**
	7/6/2012	**749**	**3,620**	**1,610**	7,580	13,559	0.0	**356**	0.001	0.001	0.001	0.001	**20.0**	**5.58**
	10/5/2012	**388**	**1,430**	**1,330**	5,820	8,968	0.0	**345**	0.001	0.001	0.001	**68.4**	**16.4**	**3.41**
	1/21/2013	**57.4**	191	451	2,614	3,313.4	0.0	**215**	0.001	0.001	0.001	38.5	**10.7**	**4.94**
	4/17/2013	**30.5**	82.5	396	1216	1,725	0.0	**152**	0.001	0.001	0.001	42	0.001	**0.53**
	7/19/2013	0.001	35.3	243	1080	1,358	0.0	**106**	70.4	0.001	0.001	36.6	**5.52**	**3.13**
	10/8/2013	0.001	16.4	267	683	966	0.0	**125**	70.4	0.001	0.001	36.6	**5.59**	**3.10**
	1/6/2014	0.001	0.001	159	629	788	0.0	**92.1**	0.001	0.001	0.001	36.6	**4.86**	**3.29**
	4/23/2014	0.001	0.001	30.4	118.7	149.1	0.0	**27.0**	24.5	0.001	0.001	9.1	**2.07**	**2.38**
	7/17/2014	0.001	2.9	82.1	174.2	259.2	0.0	**39.8**	24.0	0.001	0.001	15.8	**0.162**	**1.89**
	10/8/2014	0.001	0.001	63.7	186.6	250.3	0.0	**43.8**	36.6	0.001	0.001	16.2	**2.220**	**2.43**
	1/9/2015	0.001	2.2	37.7	62.1	102.0	0.001	**20**	0.001	0.001	0.001	9.2	**2.690**	**1.51**
	4/15/2015	0.001	0.001	25	32	57.0	0.001	**12.2**	0.001	0.001	0.001	6.9	**1.520**	**1.34**
MW-20	8/9/2011	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/28/2011	0.001	16	6.4	37	59.4	0.0	**18.0**	0.001	0.001	0.001	0.001	0.001	0.001
	1/10/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/11/2012	**8.8**	19	70	26	123.8	0.0	**20**	0.001	0.001	0.001	0.001	0.001	0.001
	7/6/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/5/2012	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/21/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	10.1	13.8	0.001	0.001	0.001	0.001
	4/17/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001

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Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO
	7/19/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.220**
	10/8/2013	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/6/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/23/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/17/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/8/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/9/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/15/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
MW-21	8/9/2011	**5,770**	**19,600**	**1,810**	**10,990**	38,170	**278.0**	0.001	0.001	0.001	0.001	0.001	**56.0**	**2.7**
	10/28/2011	**7,700**	**25,000**	**3,400**	**20,300**	56,400	0.0	**770**	0.001	0.001	0.001	**140**	**13.0**	**7.2**
	1/10/2012	**5,200**	**16,000**	**2,200**	**14,800**	38,200	0.0	**2,300**	0.001	0.001	0.001	**170**	**34.0**	**18.0**
	4/11/2012	**2,900**	**10,000**	**2,000**	**11,900**	26,800	0.0	**770**	0.001	0.001	0.001	**170**	**16.0**	**13.0**
	7/6/2012	**702**	**2,820**	**1,050**	5,560	10,132	0.0	**237**	0.001	0.001	0.001	0.001	**13.5**	**5.82**
	10/5/2012	**232**	706	**801**	3,630	5,369	0.0	**191**	0.001	0.001	0.001	40.1	**9.63**	**4.38**
	1/21/2013	**93**	164	542	2,763	3,562	0.0	**267**	0.001	0.001	0.001	52.7	**8.040**	**6.16**
	4/17/2013	**158**	127	331	2,133	2,749	**22.8**	**163**	0.001	0.001	0.001	30	**6.050**	**4.06**
	7/19/2013	**427**	64.9	443	1,393	2,328	**54.9**	**163**	0.001	0.001	0.001	0.001	**5.390**	**3.05**
	10/8/2013	**79.6**	5.9	65.2	139.8	291	**22.8**	**56**	0.001	0.001	0.001	7.0	**2.430**	**4.21**
	1/6/2014	**11.7**	0.001	155	454	621	**13.5**	**86.9**	0.001	0.001	0.001	23.1	**0.997**	**2.07**
	4/23/2014	**147**	15.1	93	352.5	607.7	**28.8**	**86.0**	0.001	0.001	0.001	38.0	**2.430**	**4.33**
	7/17/2014	**399**	0.001	56.0	99.1	554.1	**69.9**	**88.0**	**59.6**	0.001	0.001	0.001	**0.799**	**3.26**
	10/8/2014	**305**	12.3	166	384.0	867	**63.3**	**79.8**	0.001	0.001	0.001	0.001	**2.92**	**2.83**
	1/9/2015	**728**	**33.8**	308	**773.9**	1843.7	**64.3**	**124**	0.001	0.001	0.001	37	**5.34**	**2.8**
	4/15/2015	**945**	41	270	368.5	1624.5	**98.3**	**78.4**	0.001	0.001	0.001	30.3	**2.32**	**3.3**
MW-22	8/9/2011	**46.1**	85.6	4.3	170.8	306.8	6.1	**2.6**	0.001	0.001	0.001	0.001	**0.5**	**0.3**
	10/28/2011	**3,400**	**3,300**	330	1,200	8,230	0.0	**240**	0.001	0.001	0.001	47	**11.0**	**3.4**
	1/10/2012	**1,000**	200	43	198	1,441	0.0	**37**	0.001	0.001	0.001	10	**0.9**	0.001
	4/11/2012	**2,800**	**1,600**	**2,600**	9,600	16,600	0.0	**77**	0.001	0.001	0.001	36	**1.3**	**0.8**
	7/6/2012	**1,040**	128	54.4	150.3	1,372.7	**32.5**	**39.5**	0.001	0.001	0.001	0.001	**2.57**	**0.64**
	10/5/2012	**751**	51.7	17.1	53	872.8	**23.2**	0.001	0.001	0.001	0.001	0.001	**1.36**	**0.32**
	1/21/2013	**864**	39.0	0.001	23.0	926	**25.8**	0.001	0.001	0.001	0.001	0.001	**1.600**	**0.45**
	4/17/2013	**642**	18.2	0.001	0.001	660.2	**27.5**	**13.9**	0.001	0.001	0.001	0.001	**0.986**	**0.33**
	7/19/2013	**136**	0.001	0.001	0.001	136	12.4	0.001	0.001	0.001	0.001	0.001	**0.194**	**0.35**
	10/8/2013	**308**	15.3	5.4	0.001	329	12.4	**4.5**	0.001	0.001	0.001	4.1	**0.592**	**0.37**
	1/6/2014	**52.9**	0.001	0.001	0.001	52.9	14.5	0.001	0.001	0.001	0.001	0.001	0.001	**0.36**
	4/23/2014	**24.8**	0.001	0.001	0.001	24.8	13.4	0.001	0.001	0.001	0.001	0.001	0.001	**0.25**
	7/17/2014	**47.6**	0.001	0.001	0.001	47.6	19.4	0.001	0.001	0.001	0.001	0.001	0.001	**0.25**
	10/8/2014	**27.8**	0.001	0.001	0.001	27.8	11.3	0.001	0.001	0.001	0.001	0.001	0.001	**0.20**
	1/9/2015	4.9	0.001	0.001	0.001	4.9	9.4	0.001	0.001	0.001	0.001	0.001	0.001	**0.25**
	4/15/2015	4.0	0.001	0.001	0.001	4.0	8.1	0.001	0.001	0.001	0.001	0.001	0.001	**0.23**
MW-23	11/29/2012	0.001	0.001	0.001	0.001	0.001	10.5	0.001	0.001	0.001	0.001	0.001	0.001	**0.28**
	1/21/2013	**66.3**	0.001	0.001	15.3	81.6	8.8	0.001	0.001	0.001	0.001	0.001	**0.125**	**0.45**
	4/17/2013	**290**	5.7	0.001	54.5	350.2	11.8	0.001	0.001	0.001	0.001	0.001	**0.484**	**0.30**
	4/30/2013*	**110**	3.6	0.001	41.8	155.4	12.6	0.001	0.001	0.001	4.2	2.2	**0.235**	**0.34**
	7/19/2013	**566**	17.7	0.001	104	687.7	**26.6**	0.001	0.001	0.001	0.001	0.001	**0.708**	**0.66**
	10/8/2013	**352**	9.1	0.001	59	420.1	**30.0**	0.001	0.001	0.001	0.001	0.001	**0.501**	**0.45**

Table 2 - Monitoring Well Groundwater Analytical Results
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD 21237

Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO
	1/6/2014	**334**	5.7	0.001	39.5	379.2	**21.4**	0.001	0.001	0.001	0.001	0.001	**0.401**	**0.42**
	4/23/2014	**269**	0.001	0.001	16.2	285.2	**28.6**	0.001	0.001	0.001	0.001	0.001	**0.461**	**0.37**
	7/17/2014	**287**	0.001	0.001	17.4	304.4	**30.1**	0.001	0.001	0.001	0.001	0.001	**0.434**	**0.40**
	10/8/2014	**219**	0.001	0.001	9.3	228.3	**47.5**	0.001	0.001	0.001	0.001	0.001	**0.279**	**0.36**
	1/9/2015	**178**	0.001	0.001	4.3	182.3	**45.2**	0.001	0.001	0.001	0.001	0.001	**0.368**	**0.41**
	4/15/2015	**207**	0.001	0.001	2.3	209.3	**41.3**	0.001	0.001	0.001	0.001	0.001	**0.232**	**0.36**
MW-24	11/29/2012	**333**	15.9	20	31.2	400.5	**122.0**	0.001	0.001	0.001	0.001	0.001	**0.831**	**0.31**
	1/21/2013	**316.0**	0.001	0.001	4.6	320.6	**122.0**	0.001	0.001	0.001	0.001	0.001	**0.755**	**0.39**
	4/17/2013	**79.1**	0.001	0.001	0.001	79.1	**72.8**	0.001	0.001	0.001	0.001	0.001	**0.174**	0.001
	4/30/2013*	**25.0**	0.001	0.001	0.001	25.0	**63.1**	0.001	0.001	0.001	0.001	0.001	**0.107**	0.001
	7/19/2013	**12.6**	0.001	0.001	0.001	12.6	**64.6**	0.001	0.001	0.001	0.001	0.001	**0.129**	**0.23**
	10/8/2013	**43.1**	0.001	0.001	0.001	43.1	**109.0**	0.001	0.001	0.001	0.001	0.001	**0.129**	**0.23**
	1/6/2014	**24.9**	0.001	0.001	0.001	24.9	**29.8**	0.001	0.001	0.001	0.001	0.001	0.001	**0.20**
	4/23/2014	**10.5**	0.001	0.001	0.001	10.5	**48.3**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/17/2014	2.4	0.001	0.001	0.001	2.4	**47.5**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/8/2014	2.8	0.001	0.001	0.001	2.8	**64.8**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/9/2015	2.1	0.001	0.001	0.001	2.1	16.6	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/15/2015	2.3	0.001	0.001	0.001	2.3	13.7	0.001	0.001	0.001	0.001	0.001	0.001	0.001
MW-25	10/20/2013	0.001	0.001	0.001	0.001	0.001	10.9	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/6/2014	0.001	0.001	0.001	0.001	0.001	6.0	0.001	0.001	0.001	0.001	0.001	0.001	**0.22**
	4/23/2014	0.001	0.001	0.001	0.001	0.001	7.6	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/17/2014	0.001	0.001	0.001	0.001	0.001	9.8	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/8/2014	0.001	0.001	0.001	0.001	0.001	9.5	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/9/2015	0.001	0.001	0.001	0.001	0.001	7.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/15/2015	0.001	0.001	0.001	0.001	0.001	10.2	0.001	0.001	0.001	0.001	0.001	0.001	0.001
MW-26	10/20/2013	**2.7**	0.001	0.001	0.001	2.70	**27.6**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/6/2014	**36.7**	0.001	0.001	0.001	36.7	**32.8**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/23/2014	**26.9**	0.001	0.001	0.001	26.9	**27.7**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/17/2014	**6.9**	0.001	0.001	0.001	6.9	15.9	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/8/2014	0.001	0.001	0.001	0.001	0.001	**33.8**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/9/2015	4.1	0.001	0.001	0.001	4.1	**21.1**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/15/2015	0.001	0.001	0.001	0.001	0.001	13.5	0.001	0.001	0.001	0.001	0.001	0.001	0.001
MW-27	10/20/2013	0.001	0.001	0.001	0.001	0.001	**769.0**	0.001	0.001	0.001	0.001	0.001	**0.732**	**0.23**
	1/6/2014	**11.3**	0.001	0.001	0.001	11.3	**425.0**	0.001	0.001	0.001	0.001	0.001	**0.395**	**0.33**
	4/23/2014	**34.0**	0.001	0.001	0.001	34.0	**497.0**	0.001	0.001	0.001	0.001	0.001	**0.474**	0.001
	7/17/2014	**41.6**	0.001	0.001	0.001	41.6	**355.0**	0.001	0.001	0.001	0.001	0.001	**0.440**	0.001
	10/9/2014	**138**	0.001	0.001	0.001	138.0	**512.0**	0.001	0.001	0.001	0.001	0.001	**0.511**	**0.30**
	1/8/2015	**107**	0.001	0.001	0.001	107	**277**	0.001	0.001	0.001	0.001	0.001	**0.319**	0.001
	4/15/2015	**162**	0.001	0.001	0.001	162	**343**	0.001	0.001	0.001	0.001	0.001	**0.449**	**0.220**
MW-28	10/20/2013	0.001	0.001	0.001	0.001	0.001	**150.0**	0.001	0.001	0.001	0.001	0.001	**0.153**	**0.26**
	1/6/2014	**10.2**	0.001	0.001	0.001	10.2	**23.1**	0.001	0.001	29.4	0.001	0.001	0.001	**0.33**
	4/23/2014	**52.7**	0.001	0.001	4.3	57.0	**83.4**	0.001	0.001	0.0	0.001	0.001	**0.141**	**0.20**
	7/17/2014	**182.0**	0.001	0.001	0.0010	182.0	**97.0**	**3.9**	0.001	0.0	0.001	0.001	**0.283**	**0.23**
	10/9/2014	**279.0**	0.001	0.001	24.9	303.9	**159.0**	**8.7**	0.001	0.0	0.001	0.001	**0.283**	**0.23**
	1/8/2015	**244**	0.001	0.001	12.9	256.9	**111**	**5.5**	0.001	0.001	0.001	0.001	**0.338**	**0.3**
	4/15/2015	**86.8**	0.001	0.001	7.2	95.0	**65.6**	**2.4**	0.001	0.001	0.001	0.001	**0.283**	**0.26**

Table 2 - Monitoring Well Groundwater Analytical Results
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD 21237

Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO
MW-29	10/20/2013	**2.5**	0.001	0.001	0.001	2.50	**200.0**	0.001	0.001	0.001	0.001	0.001	**0.194**	0.001
	1/6/2014	**76.5**	0.001	0.001	0.001	76.5	**185.0**	0.001	0.001	0.001	0.001	0.001	**0.240**	**0.21**
	4/23/2014	**39.8**	0.001	0.001	0.001	39.8	**43.4**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/17/2014	**6.8**	0.001	0.001	0.001	6.8	**45.3**	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/9/2014	**8.4**	0.001	0.001	0.001	8.4	**485.0**	0.001	0.001	0.001	0.001	0.001	**0.390**	0.001
	1/8/2015	**7.7**	0.001	0.001	0.001	7.7	**323**	0.001	0.001	0.001	0.001	0.001	**0.221**	0.001
	4/15/2015	**5.6**	0.001	0.001	0.001	5.6	**216**	0.001	0.001	0.001	0.001	0.001	**0.165**	0.001
MW-30	10/20/2013	**11.6**	0.001	0.001	0.001	11.6	**64.0**	**44.5**	0.001	0.001	0.001	0.001	**1.80**	**0.63**
	1/6/2014	**150**	2.5	0.001	8.2	160.5	**38.2**	**5.1**	0.001	0.001	0.001	0.001	**0.202**	**0.03**
	4/23/2014	**24.3**	0.001	0.001	0.001	24.3	12.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/17/2014	0.001	0.001	0.001	0.001	0.001	2.9	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/8/2014	**118**	0.001	0.001	6.3	124.3	12.6	**2.8**	0.001	0.001	0.001	0.001	**0.128**	0.001
	1/9/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/15/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
CMW-1	10/28/2013	**13.8**	0.001	0.001	0.001	13.80	**338.0**	0.001	0.001	0.001	0.001	0.001	**0.310**	**0.26**
	1/6/2014	**4.3**	0.001	0.001	0.001	4.3	**367.0**	0.001	0.001	0.001	0.001	0.001	**0.294**	**0.22**
	4/23/2014	**10.9**	0.001	0.001	0.001	10.9	**403.0**	0.001	0.001	0.001	0.001	0.001	**0.324**	**0.21**
	7/17/2014	**8.3**	0.001	0.001	0.001	8.3	**366.0**	0.001	0.001	0.001	0.001	0.001	**0.332**	0.001
	10/9/2014	**38.0**	0.001	0.001	0.001	38.0	**312.0**	0.001	0.001	0.001	0.001	0.001	**0.252**	0.001
	1/8/2015	**9.3**	0.001	0.001	0.001	9.3	**287**	0.001	0.001	0.001	0.001	0.001	**0.204**	0.001
	4/15/2015	**20.2**	0.001	0.001	0.001	20.2	**306**	0.001	0.001	0.001	0.001	0.001	**0.263**	0.001
CMW-2	10/28/2013	0.001	0.001	0.001	0.001	0.001	6.5	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/6/2014	0.001	0.001	0.001	0.001	0.001	3.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/23/2014	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	7/17/2014	0.001	0.001	0.001	0.001	0.001	4.1	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	10/9/2014	0.001	0.001	0.001	0.001	0.001	6.4	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	1/8/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	4/15/2015	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Type I and II Aquifers		**5**	**1000**	**700**	**10000**	**NRS**	**20.0**	**0.65**	**550**	**700**	**5**	**66**	**0.047**	**0.047**

Table 2 - Monitoring Well Groundwater Analytical Results
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD 21237

Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	Acetone	MEK	1,2-Dichloroethane	Isopropylbenzene	TPH GRO	TPH DRO

Quality Control Samples														
QC Type	Sample ID	Date	B	T	E	X	MTBE	Naphth	Acetone	MEK	1,2-Dich	Isopropylbenzene	TPH GRO	TPH DRO
Duplicate of MW-11	MW-11	1/6/2014	0.001	0.001	0.001	0.001	9.8	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	FD-1		0.001	0.001	0.001	0.001	9.1	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Duplicate of MW-10	MW-10	1/6/2014	**33.6**	0.001	0.001	0.001	**88.8**	0.001	0.001	0.001	0.001	0.001	**0.177**	**0.41**
	FD-2		**34.7**	0.001	0.001	0.001	**151.0**	0.001	0.001	0.001	0.001	0.001	**0.184**	**0.48**
Duplicate of MW-18	MW-18	1/6/2014	**76.4**	0.001	0.001	5.1	**28.3**	0.001	0.001	0.001	0.001	0.001	**0.138**	**0.42**
	FD-3		**79.5**	0.001	0.001	4.2	**45.6**	0.001	0.001	0.001	0.001	0.001	**0.145**	**0.40**
Duplicate of MW-23	MW-23	4/23/2014	**269**	0.001	0.001	16.2	**28.6**	0.001	0.001	0.001	0.001	0.001	**0.461**	**0.37**
	FD-1		**334.0**	15.1	0.001	24.2	**29.8**	0.001	0.001	0.001	0.001	0.001	**0.438**	**0.39**
Duplicate of MW-21	MW-21	7/17/2014	**399**	0.001	56.0	99.1	**69.9**	**88.0**	**56.0**	0.001	0.001	0.001	**0.799**	**3.26**
	FD-1		**640**	**28.3**	**294**	877	**61.5**	**115**	0.001	0.001	0.001	**30.0**	**3.690**	**2.84**
Duplicate of MW-1	MW-1	1/9/2015	**91**	498	663	5140	0.001	**277**	0.001	0.001	0.001	0.001	**10.6**	**4.12**
	FD-1		0.001	463	650	5220	0.001	**271**	0.001	0.001	0.001	0.001	**10.1**	**3.56**
Duplicate of MW-26	MW-26	4/15/2015	0.001	498	663	5140	13.5	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	DUPE		0.001	463	650	5220	13.7	0.001	0.001	0.001	0.001	0.001	0.001	0.001

TPH GRO and DRO results in parts per million or mg/l
BTEX, MTBE, and Naphthalene, Acetone, MEK, 1,2-Dichloroethane, and Isopropylbenzene results in parts per billion or ug/l
0.001 = Below Detection Limits (Value Assigned For Graphing Purposes)
100,000 = Not sampled due to presence of liquid phase hydrocarbon (Value Assigned for Graphing Purposes)
As per the MDE Directive Letter, dated May 29, 2013 groundwater quality graphs were constructed using a log scale that was consistent for all wells.
As such, the aforementione values assigned for graphing purposes were used
B = Benzene; T = Toluene; E = Ethylbenzene; X = Xylene
MTBE = Methyl-tert-butyl-ether
TPH GRO = Total Petroleum Hydrocarbons Gasoline Range Organics
TPH DRO = Total Petroleum Hydrocarbons Diesel Range Organics
NS = Not Sampled
This table presents all applicable dissolved phase constituents included in the quantifiable clean-up standards established by the Maryland Department of the Environment (MDE)
Some compounds may have been detected but are not tabulated on this spreadsheet as they do not have a quantifiable cleanup standard established by the MDE
See laboratory analytical results reports for full results.
MDE Standards (Generic Numeric Cleanup Standards for Groundwater and Soil - Interim Final Guidance Update No. 2.1 - June 2008)
Bold Denotes Regulatory Exceedance
Denotes Estimated Value
NRS = No Regulatory Standard
* Sample collected to confirm prior analytical results

Table 3 - 1207 Chesaco Avenue Indoor Air Quality Analytical Results
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD 21237

Location	Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
2nd Floor	IAQ-03	8/20/2010	2.72	9.96	0.87 U	2.60	0.72 U	1.1 U
	IAQ-03	4/26/2011	1.03	7.78	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-03	7/20/2011	3.45	10.70	1.11	4.52	0.72 U	2.60
	IAQ-03	10/6/2011	14.00	41.90	3.49	10.10	0.72 U	6.36
	IAQ-03	3/23/2012	4.86	17.80	1.56	5.82	0.72 U	1.1 U
	IAQ -03A	3/23/2012	4.19	15.30	1.39	5.08	0.72 U	1.1 U
	IAQ -03	6/14/2012	4.31	10.20	0.87 U	2.30	0.72 U	1.1 U
	IAQ -03	9/27/2012	5.24	12.90	1.39	5.30	0.72 U	1.83
	IAQ -03	12/21/2012	4.31	8.74	1.09	3.39	0.72 U	1.42
	IAQ -03	3/15/2013	2.04	3.84	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ -03	7/12/2013	5.18	9.99	1.22	2.74	0.72 U	1.1 U
	IAQ-03	9/12/2013	7.25	15.70	1.78	6.21	0.72 U	2.78
	IAQ-3	12/6/2013	10.00	34.30	2.39	8.60	0.72 U	1.63
1st Floor	IAQ-02	8/20/2010	2.00	4.88	0.87 U	1.7 U	0.72 U	1.2
	IAQ-02	4/26/2011	1.08	2.03	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-02	7/20/2011	2.23	4.31	0.90	3.97	0.72 U	1.32
	IAQ-02	10/6/2011	1.39	2.68	0.87 U	1.7 U	0.72 U	1.75
	IAQ-02	3/23/2012	2.24	6.75	0.91	2.82	0.72 U	1.1 U
	IAQ-02	6/14/2012	0.64 U	0.75 U	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-02	9/27/2012	0.93	1.58	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-02	12/21/2012	0.70	1.73	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-02	3/15/2013	0.64 U	0.75 U	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-02	7/12/2013	0.96	1.17	0.87 U	2.57 U	0.72 U	1.73
	IAQ-02	9/12/2013	1.05	2.00	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-02	12/6/2013	1.34	2.15	0.87 U	2.57 U	0.72 U	1.1 U
Basement	IAQ-01	8/20/2010	2.71	4.56	0.87 U	1.7 U	0.72 U	1.4
	IAQ-01	4/26/2011	1.05	3.08	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-01	7/20/2011	5.02	5.80	0.97	3.65	0.72 U	2.98
	IAQ-01	10/6/2011	1.74	4.09	0.87 U	1.7 U	0.72 U	3.04
	IAQ-01	3/23/2012	2.40	6.82	0.87 U	2.43	0.72 U	1.1 U
	IAQ -01A	3/23/2012	2.36	6.44	0.87 U	2.39	0.72 U	1.1 U
	SV-01	3/23/2012	10.20	9.69	1.00	4.69	0.72 U	1.1 U
	SV-02	3/23/2012	1.47	2.26	1.74 U	3.4 U	1.44 U	2.2 U
	IAQ-01	6/14/2012	0.64 U	0.79	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-01	9/27/2012	1.12	2.22	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-01	12/21/2012	0.73	1.58	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-01	3/15/2013	0.64 U	0.75 U	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-01	7/12/2013	1.95	3.69	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-01	9/12/2013	2.46	4.82	0.87 U	1.74	0.72 U	2.41
	IAQ-01	12/6/2013	1.28	2.30	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-1	3/6/2014	0.89	0.75 U	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-01	6/4/2014	1.53	5.80	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-01	9/11/2014	0.96	2.00	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-01	12/4/2014	0.80	0.75 U	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-01	3/26/2015	0.80	1.09	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-01	6/25/2015	0.64 U	1.51	0.87 U	2.57 U	0.72 U	1.42
Outside	AA-01	8/20/2010	1.16	3.32	0.87 U	1.7 U	0.72 U	1.1 U
	AA-01	4/26/2011	0.64 U	1.07	0.87 U	1.7 U	0.72 U	1.1 U
	AA-01	7/20/2011	0.81	2.85	0.87 U	1.7 U	0.72 U	1.1 U
	AA-01	10/6/2011	0.64 U	2.73	0.87 U	1.7 U	0.72 U	1.38
	AA-01	3/23/2012	1.82	5.80	0.87 U	2.04	0.72 U	1.1 U
	AA-01	6/14/2012	0.64 U	0.75 U	0.87 U	1.7 U	0.72 U	1.1 U
	AA-01	9/27/2012	0.64 U	1.58	0.87 U	1.7 U	0.72 U	1.1 U
	AA-01	12/21/2012	0.64 U	1.21	0.87 U	1.7 U	0.72 U	1.1 U
	AA-01	3/15/2013	0.64 U	0.75 U	0.87 U	2.57 U	0.72 U	1.1 U
	AA-01	7/12/2013	0.64 U	0.98	0.87 U	2.57 U	0.72 U	1.1 U
	AA-01	9/12/2013	0.64 U	1.58	0.87 U	2.57 U	0.72 U	1.1 U
	AA-01	12/6/2013	0.73	1.36	0.87 U	2.57 U	0.72 U	1.1 U
	AA-01	3/6/2014	0.67	0.75 U	0.87 U	2.57 U	0.72 U	1.1 U
	AA-01	6/4/2014	0.64 U	0.87	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-AA	9/11/2014	0.64 U	0.75 U	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-AA	12/4/2014	0.64 U	0.75 U	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-AA	3/26/2015	0.99	0.94	0.87 U	2.57 U	0.72 U	1.1 U
	IAQ-AA	6/25/2015	0.64 U	1.32	0.87 U	2.57 U	0.72 U	1.1 U
MDE Standards:			3.2	5300	10.0	110.0	94.0	0.72

MDE Standards - Maryland Dept. of the Environment Facts About: Vapor Intrusion - June 2012 (Residential)
All results reported in micrograms per cubic meter ($\mu g/m^3$)
L = suspect artifact
U = less than reported quantitation limit
B = detected in laboratory blank
J = estimated concentration
AA-01 located in up wind direction
SV-01 located in basement near sump
SV-02 located in basement near bathroom

Table 4 - 1205 Chesaco Avenue Indoor Air Quality Analytical Results
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD 21237

Location	Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
2nd Floor	1	3/10/2011	1.04	4.09	0.87 U	1.7 U	0.72 U	1.1 U
	2	3/10/2011	1.10	5.97	0.87 U	1.90	0.72 U	1.1 U
	3	3/10/2011	1.00	6.78	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-03	7/20/2011	1.91	14.30	2.56	13.00	0.72 U	3.20
	IAQ-03	10/6/2011	0.64U	3.17	0.87U	1.7U	0.72 U	1.54
	IAQ-03	3/24/2012	1.34	7.27	0.91	4.43	0.72 U	1.1 U
	IAQ-03	6/14/2012	0.64U	1.92	0.87U	1.7 U	0.72 U	1.1 U
	IAQ-03	9/27/2012	0.77	2.34	0.87U	1.7 U	0.72 U	1.1 U
1st Floor	4	3/10/2011	0.99	2.13	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-02	7/20/2011	1.66	10.10	2.62	14.16	0.72 U	3.21
	IAQ-02	10/6/2011	0.64U	3.89	0.87U	1.7U	0.72 U	1.70
	IAQ-02	3/24/2012	1.34	6.90	0.87 U	4.21	0.72 U	1.1 U
	IAQ-02	6/14/2012	0.64U	1.39	0.87 U	1.7U	0.72 U	1.1 U
	IAQ-02	9/27/2012	0.64U	2.00	0.87 U	1.7U	0.72 U	1.1 U
Basement	5	3/10/2011	0.94	1.82	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-01	7/20/2011	1.59	13.10	1.77	16.62	0.72 U	6.31
	IAQ-01	10/6/2011	0.64U	4.33	0.87U	3.03	0.72 U	1.65
	IAQ-01	3/24/2012	1.25	15.50	1.35	6.08	0.72 U	1.1 U
	IAQ-01	6/14/2012	0.64U	4.07	0.87U	0.87U	0.72 U	1.1 U
	IAQ-01	9/27/2012	0.64U	3.62	0.87U	1.82	0.72 U	1.1 U
Background	Background-1	3/10/2011	0.80	1.06	0.87 U	1.7 U	0.72 U	1.1 U
MDE Standards:			3.2	5300	10.0	110.0	94.0	0.72

MDE Standards - Maryland Dept. of the Environment Facts About: Vapor Intrusion - June 2012 (Residential)
All results reported in micrograms per cubic meter ($\mu g/m^3$)
All detected analytes are represented above
L = suspect artifact
U = less than reported quantitation limit
B = detected in laboratory blank
IAQ-01 is located in basement
IAQ-02 is located in kitchen
IAQ-03 is located in 2nd floor hallway

Table 5 - 7950 Pulaski Highway Indoor Air Quality Analytical Results
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD 21237

Location	Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
Behind food-ordering kiosk	IAQ-01	4/26/2011	0.64	5.33	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-01	7/20/2011	1.59	22.70	1.06	3.97	0.72 U	1.79
	IAQ-01	10/5/2011	1.11	53.7	0.87 U	1.74	0.72 U	2.72
	IAQ-01	3/23/2012	1.37	8.14	0.87 U	1.78	0.72 U	1.1 U
	IAQ-01	6/14/2012	0.73	3.99	0.87 U	1.7 U	0.72 U	1.1 U
	IAQ-01	9/27/2012	0.93	4.15	0.87 U	1.7 U	0.72 U	1.1 U
MDE Standards:			3.2	5300	10.0	110.0	94.0	0.72

MDE Standards - Maryland Dept. of the Environment Facts About: Vapor Intrusion - June 2012 (Residential)
All results r All results reported in micrograms per cubic meter (µg/m^3)
All detected All detected analytes are represented above
L = suspect L = suspect artifact
U = less tha U = less than reported quantitation limit
B = detecte B = detected in laboratory blank

Table 6 - 1205;1207;1209;1209.5 Sump Sampling History
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD 21237

Sump ID	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	MTBE	Naphthalene	TPH-GRO	TPH-DRO
1205	1/28/2011	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	2/28/2011	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	3/28/2011	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	4/27/2011	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	5/25/2011	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	6/29/2011	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	7/26/2011	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	8/31/2011	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	10/28/2011	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	11/30/2011	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	12/29/2011	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	1/26/2012	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	4/23/2012	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	5/15/2012	BDL	BDL	BDL	BDL	BDL	BDL	NA	BDL	BDL
	2/12/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/17/2013	BDL	BDL	BDL	BDL	BDL	BDL	7.8	BDL	0.29
	9/12/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/4/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.57
	3/6/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.31
1205-Effluent	7/24/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	9/12/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/4/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS
1207	12/23/2009	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	6/30/2010	BDL	BDL	BDL	BDL	BDL	BDL	13	BDL	BDL
	2/12/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	7/12/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.23
	9/12/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	12/4/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.23
	3/6/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	6/4/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	9/11/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	12/4/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	3/26/2015	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	6/25/2015	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1209	12/23/2009	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	6/30/2010	BDL	BDL	BDL	BDL	BDL	32	BDL	BDL	BDL
	2/12/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	7/12/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	9/12/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	12/4/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	3/6/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	6/4/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	9/11/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	12/4/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	3/26/2015	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	6/25/2015	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1209.5	12/23/2009	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	6/30/2010	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	2/12/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.57
	7/12/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.77
	9/12/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1970
	10/1/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	8.47
	12/4/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	16.40
	3/6/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.37
	6/4/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.51
	9/11/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.49
	12/4/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	3/26/2015	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	6/25/2015	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.31

NS - Not sampled (sump was dry)
TPH-GRO and TPH-DRO in mg/L
All other constituents in ug/L
BDL= Below Detection Limit
NA=Not analyzed by laboratory

Table 7 - Groundwater Extraction Estimates
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD
Period: April 1, 2015 - June 30, 2015

TASK	RESULT
Groundwater Extracted for the Period	140,866 gallons
System Average Extraction Rate	1.12 gallons per minute
Wells Utilized	MW-2R,MW-4R, MW-5R, MW-6, MW-8R, MW-14, MW-15, MW-16, MW-17
Average Extraction Rate Per Well	0.14 gallons per minute
Average Influent BTEX Concentration	2.9 parts per billion
Average Effluent BTEX Concentration	0 parts per billion
Average Treatment Efficiency	100%
Total Dissolved Phase Hydrocabons Recovered for the Period	0.00 gallons
Total Liquid Phase Hydrocabons Recovered for the Period	0.00 gallons
Total Liquid and Dissolved Phase Hydrocarbons Recovered Since Dual Phase System Start-up	0.55 gallons

Table 8 - Vapor Extraction Estimates
Period: April 1, 2015 - June 30, 2015

TASK	RESULT
Vapor Extracted for the Period	4,746,859 cubic feet
System Average Extraction Rate	37.9 cubic feet per minute
Wells Utilized	MW-2R,MW-4R, MW-5R, MW-6, MW-8R, MW-14, MW-15, MW-16, MW-17
Average Extraction Rate Per Well	3.51 cubic feet per minute
Average Volatile Organic Compound Concentration	1.1 parts per million
Average Treatment Efficiency	Not applicable
Average Manifold Vacuum Pressure	20.1 inches of mercury
Average Vapor Phase Hydrocarbons Recovered for the Period	0.06 pounds per day
Total Vapor Phase Hydrocarbons Recovered for the Period	1.5 pounds / 0.24 gallons
Total Vapor Phase Hydrocarbons Recovered Since Dual Phase System Start-up	1,424.5 pounds / 227.4 gallons

Table 9 - Cumulative Hydrocarbon Recovery Estimates
Period: April 1, 2015 - June 30, 2015

TASK	RESULT
Total Hydrocarbons Recovered Per Period	0.24 gallons
Cumulative Total Hydrocarbons Recovered Since Dual Phase System Start-up	227.9 gallons
Cumulative Hydrocarbons Recovered Prior to Dual Phase System Start-up	4,393 gallons
Total Cumulative Hydrocarbons Recovered	4,620.9 gallons

Table 10 - Dual Phase System Hydrocarbon Recovery Estimate Worksheet 1
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Monitoring Period	Operating Days	Dissolved Phase				Groundwater Extraction and Discharge Rates				Vapor Phase	
		System Influent Dissolved Benzene Concentration (ug/L)	System Influent Dissolved BTEX Concentration (ug/L)	System Influent Dissolved MTBE Concentration (ug/L)	System Influent Dissolved TPH-GRO Concentration (ug/L)	Period GW Discharge (gallons)	Cumulative GW Discharge (gallons)	Average Extraction Rate per Well (gpm)	Average Extraction Rate for System (gpm)	VOCs (ppm)	Airflow (cfm)
12/14/11 - 12/29/11	16	137	1408	12.30	3960	67203	67203	0.33	3.01	22	233
12/30/11 - 1/9/12	11	77	750	8.60	4320	25477	92680	0.18	1.61	22	233
1/10/12 - 3/31/12	75	53	593	3.80	1092	207685	300364	0.21	1.93	205	99
4/1/12 - 6/30/12	85	19	279	1.60	355	197936	498300	0.18	1.62	134	59
7/1/12 - 9/30/12	90	16	243	1.90	361	200000	698300	0.26	1.54	68	57
10/1/12-12/31/12	90	8.7	177	1.20	194	224259	922559	0.35	1.73	53	49
1/1/13-3/31/13	89	2.9	108	0.8	178	178010	1100569	0.28	1.39	27	40
4/1/13 - 6/30/13	82	2.0	28	0.0	0.0	150103	1250672	0.25	1.27	18	37
7/1/13 - 9/30/13	88	0.0	5.4	0.0	0.0	199540	1300109	0.31	1.57	29	39
10/1/13-12/31/13	89	0.0	10.7	0.0	0.0	199065	1626905	0.26	1.55	21	46
1/1/14-3/31/14	89	0.7	33.3	0.0	44.3	213576	1840481	0.28	1.67	10	34
4/1/14-6/30/14	90	0.9	12.3	0.0	149.0	171856	2012337	0.17	1.33	13	30
7/1/14-9/30/14	91	0.0	0.0	0.0	0.0	194803	2207140	0.19	1.49	15	32
10/1/14-12/31/14	89	0.0	0.0	0.0	0.0	159980	2367120	0.16	1.25	2.4	34
1/1/15-3/31/15	86	0.0	0.0	0.0	0.0	186602	2553722	0.19	1.51	0.8	34
4/1/15-6/30/15	87	0.0	0.97	0.0	0.0	140866	2694588	0.14	1.12	1.1	38

BTEX = Benzene, toulene, ethylbenzene and xylenes

VOCs - Volatile organic compounds measured with a photoionization detector (PID)

Table 11 - Dual Phase System Hydrocarbon Recovery Estimate Worksheet 2

Monitoring Period	Gallons of Hydrocarbons (BTEX) Recovered During Period			Period Total Gallons	Cumulative Gallons to Date	Pounds of Hydrocarbons (BTEX) Recovered During Period					Period Total Pounds	Cumulative Pounds to Date
	Liquid (gallons)	Dissolved (gallons)	Vapor (gallons)			Liquid (lbs)	Dissolved (lbs)	Dissolved (lbs/day)	Vapor (lbs)	Vapor (lbs/day)		
12/14/11 - 12/29/11	0.00	0.13	5.44	5.57	5.57	0.00	0.79	0.05	34.0	2.19	34.8	34.8
12/30/11 - 1/9/12	0.00	0.03	3.86	3.89	9.45	0.00	0.16	0.01	24.1	2.19	24.3	59.1
1/10/12 - 3/31/12	0.00	0.16	103	103	112.5	0.00	1.03	0.01	643.0	8.60	644.0	703.1
4/1/12 - 6/30/12	0.00	0.07	46	46	158.1	0.00	0.46	0.01	284.4	3.35	284.8	987.9
7/1/12 - 9/30/12	0.00	0.06	23	23	181.6	0.00	0.41	0.00	146.5	1.63	146.9	1134.8
10/1/12-12/31/12	0.00	0.05	16	16	197.5	0.00	0.33	0.00	99.4	1.10	99.7	1234.5
1/1/13-3/31/13	0.00	0.03	6.39	6.41	203.9	0.00	0.16	0.00	39.9	0.45	40.1	1274.6
4/1/13 - 6/30/13	0.00	0.01	3.60	3.61	207.5	0.00	0.03	0.00	22.5	0.27	22.5	1297.2
7/1/13 - 9/30/13	0.00	0.00	6.61	6.61	210.5	0.00	0.01	0.00	41.3	0.47	41.3	1338.4
10/1/13-12/31/13	0.00	0.00	5.60	5.61	216.2	0.00	0.02	0.00	35.0	0.39	35.0	1373.5
1/1/14-3/31/14	0.00	0.01	2.00	2.01	218.2	0.00	0.06	0.00	12.5	0.14	12.6	1386.0
4/1/14-6/30/14	0.00	0.00	2.35	2.36	220.5	0.00	0.02	0.00	14.7	0.16	14.7	1400.8
7/1/14-9/30/14	0.00	0.00	2.90	2.90	223.4	0.00	0.00	0.00	18.1	0.20	18.1	1418.9
10/1/14-12/31/14	0.00	0.00	0.49	0.49	223.9	0.00	0.00	0.00	3.1	0.03	3.09	1422.0
1/1/15-3/31/15	0.00	0.00	0.16	0.16	224.1	0.00	0.00	0.00	1.0	0.01	1.02	1423.0
4/1/15-6/30/15	0.00	0.00	0.24	0.24	224.3	0.00	0.00	0.00	1.5	0.02	1.53	1424.5

Calculation used for dissolved phase recovery in pounds per day: Flow rate gpm * Total BTEX concentration ug/L * 3.785 L/gal * 1440 min/day *(2.205 lbs/10^9 ug)

Calculation used for vapor phase recovery in pounds per day: Airflow ft^3/min * 0.0283 m^3/ft^3 * VOCs ppm * 105 g/mole BTEX * .00268 gas constant * 0.001 kg/g * 52.91 lbs per day / kg per hr

1 gallon = 6.25 pounds

Table 12 - Dual Phase System Hydrocarbon Recovery Estimate Worksheet 3

Monitoring Period	Cumulative Gallons of Hydrocarbons (BTEX) Recovered by Period			Cumulative Total Gallons	Cumulative Pounds of Hydrocarbons (BTEX) Recovered by Period			
	Liquid (gallons)	Cumulative Dissolved (gallons)	Cumulative Vapor (gallons)		Cumulative Liquid (lbs)	Cumulative Dissolved (lbs)	Cumulative Vapor (lbs)	Cumulative Total Pounds
12/14/11 - 12/29/11	0.0	0.13	5.4	5.6	0.0	0.79	34.0	34.8
12/30/11 - 1/9/12	0.0	0.16	9.3	9.5	0.0	0.95	58.1	59.1
1/10/12 - 3/31/12	0.0	0.32	112.2	112.5	0.0	1.98	701.1	703.1
4/1/12 - 6/30/12	0.0	0.39	157.7	158.1	0.0	2.44	985.5	987.9
7/1/12 - 9/30/12	0.0	0.45	181.1	181.6	0.0	2.84	1132.0	1134.8
10/1/12-12/31/12	0.0	0.50	197.0	197.5	0.0	3.18	1231.4	1234.5
1/1/13-3/31/13	0.0	0.53	203.4	203.9	0.0	3.34	1271.3	1274.6
4/1/13 - 6/30/13	0.0	0.53	207.0	207.5	0.0	3.37	1293.8	1297.2
7/1/13 - 9/30/13	0.0	0.54	213.6	214.1	0.0	3.38	1335.1	1338.4
10/1/13 -12/31/13	0.0	0.54	219.2	219.8	0.0	3.40	1370.1	1373.5
1/1/14-3/31/14	0.0	0.55	221.2	221.8	0.0	3.46	1382.6	1386.0
4/1/14-6/30/14	0.0	0.55	223.6	224.1	0.0	3.47	1397.3	1400.8
7/1/14-9/30/14	0.0	0.55	226.5	227.0	0.0	3.47	1415.4	1418.9
10/1/14-12/31/14	0.0	0.55	227.0	227.5	0.0	3.47	1418.5	1422.0
1/1/15-3/31/15	0.0	0.55	227.1	227.7	0.0	3.47	1419.5	1423.0
4/1/15-6/30/15	0.0	0.55	227.4	227.9	0.0	3.47	1421.1	1424.5

Table 13 - Groundwater Influent Concentration Worksheet
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Date	B	T	E	X	Total BTEX	MTBE	TPH GRO
1/25/2012	45.0	214.0	24.3	193.6	476.9	6.5	848.0
2/6/2012	71.3	350.0	56.0	391.0	868.3	8.9	1300.0
2/22/2012	62.5	287.0	43.0	317.0	709.5	0.0	1310.0
3/9/2012	49.1	226.0	26.5	206.1	507.7	0.0	727.0
3/22/2012	36.0	170.0	22.8	175.9	404.7	3.6	1270.0
1st Qtr mean:	**52.8**	**249.4**	**34.5**	**256.7**	**593.4**	**3.8**	**1091.0**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
4/16/2012	22.8	124.0	15.4	127.4	289.6	3.7	596.0
4/30/2012	26.7	158.0	20.6	181.8	387.1	BDL	352.0
5/31/2012	14.7	91.3	11.0	123.0	240.0	2.7	254.0
6/11/2012	13.4	63.5	10.1	112.8	199.8	BDL	216.0
2nd Qtr mean:	**19.4**	**109.2**	**14.3**	**136.3**	**279.1**	**1.6**	**354.5**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
7/24/2012	11.7	53.0	4.9	106.8	176.4	BDL	195.0
8/21/2012	20.3	101.0	15.1	178.9	315.3	2.9J	592.0
9/18/2012	16.8	86.1	7.7	127.0	237.6	2.9J	297.0
3rd Qtr mean:	**16.3**	**80.0**	**9.2**	**137.6**	**243.1**	**1.9**	**361.3**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
10/19/2012	8.9	57.6	5.5	98.7	170.7	BDL	170.0
11/14/2012	6.7	26.1	3.0J	51.5	87.3	BDL	125.0
12/28/2012	10.5	56.5	7.0	199.0	273.0	3.5J	286.0
4th Qtr mean:	**8.7**	**46.7**	**6.3**	**116.4**	**177.0**	**1.2**	**193.7**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
1/25/2013	5.7	30.3	4J	112.3	152.3	2.3J	223.0
2/21/2013	BDL	13.0	3.5J	73.2	89.7	BDL	183.0
3/8/2013	3.1J	6.9	BDL	70.4	80.4	BDL	128.0
1st Qtr mean:	**2.9**	**16.7**	**4.5**	**85.3**	**107.5**	**0.8**	**178.0**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
4/3/2013	3.1J	8.4	2.3J	46.8	60.6J	BDL	BDL
4/18/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5/31/2013	BDL	6.6	BDL	25.9	32.5	BDL	BDL
6/27/2013	4.8J	BDL	BDL	12.6	17.4J	BDL	BDL
2nd Qtr mean:	**2J**	**3.8**	**0.6J**	**21.3**	**27.6J**	**BDL**	**BDL**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
7/11/2013	BDL	4.6J	BDL	11.5J	16.1J	BDL	BDL
8/1/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL
9/5/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL
3rd Qtr mean:	**BDL**	**1.5**	**BDL**	**3.8**	**5.4**	**BDL**	**BDL**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
10/7/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL
10/24/2013	BDL	2.2J	BDL	8.5J	10.7J	BDL	BDL
11/6/2013	BDL	4.3J	BDL	17.2	21.5J	BDL	BDL
4th Qtr mean:	**BDL**	**2.2**	**BDL**	**8.6**	**10.7**	**BDL**	**BDL**

Date	B	T	E	X	Total BTEX	MTBE	TPH GRO
1/3/2014	2.1J	8.5	3.3J	78.1	92.0	BDL	133.0
2/24/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL
3/14/2014	BDL	BDL	BDL	8.0J	8.0	BDL	BDL
1st Qtr mean:	**0.7**	**2.8**	**1.1**	**28.7**	**33.3**	**BDL**	**44.3**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
4/22/2014	2.7J	3.6J	2.7J	11.9	20.9J	BDL	346.0
5/7/2014	BDL	3.9J	3.1 J	9.1	16.1J	BDL	101.0
6/3/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL
2nd Qtr mean:	**0.9**	**2.5**	**1.9**	**7.0**	**12.3**	**BDL**	**149.0**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
7/3/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL
8/12/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL
9/9/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL
3rd Qtr mean:	**BDL**	**BDL**	**BDL**	**BDL**	**BDL**	**BDL**	**BDL**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
10/7/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL
11/4/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL
12/1/2014	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4th Qtr mean:	**BDL**	**BDL**	**BDL**	**BDL**	**BDL**	**BDL**	**BDL**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
1/7/2015	BDL	BDL	BDL	BDL	BDL	BDL	BDL
2/3/2015	BDL	BDL	BDL	BDL	BDL	BDL	BDL
3/17/2015	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1st Qtr mean:	**BDL**	**BDL**	**BDL**	**BDL**	**BDL**	**BDL**	**BDL**
Date	**B**	**T**	**E**	**X**	**Total BTEX**	**MTBE**	**TPH GRO**
4/14/2015	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5/12/2015	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6/9/2015	BDL	BDL	BDL	2.9	BDL	BDL	BDL
1st Qtr mean:	**BDL**	**BDL**	**BDL**	**0.97**	**BDL**	**BDL**	**BDL**

Results from laboratory analysis by Maryland Spectral Services, Inc.
All values in micrograms per Liter (ug/L)
J - denotes estimated value

Table 14a - Airflow and Vapor Concentration Worksheet
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD

Date	Airflow (CFM)	PID (ppm)
2/13/12	191.41	207
2/22/12	78.48	233
2/28/12	77.42	264
3/5/12	75.1	227
3/12/12	74.4	136
3/29/12	NG	165
1st Qtr mean:	**99.36**	**205.33**
4/2/12	50.46	130
4/10/12	80.96	233
4/16/12	71.75	169
4/23/12	50.02	161
4/30/12	55.35	65
5/8/12	88.46	110
5/21/12	37.81	112
5/29/12	61	95
6/7/12	59.81	185
6/11/12	68.91	106
6/25/12	29.05	103
2nd Qtr mean:	**59.42**	**133.55**
7/6/12	35	52
7/10/12	62.31	NG
7/17/12	47.48	145
7/24/12	68.13	NG
8/7/12	30.11	44.3
8/14/12	72.28	81.3
8/28/12	89.64	49.5
9/5/12	65.65	61
9/13/12	51.21	60
9/18/12	65.18	48
3rd Qtr mean:	**58.70**	**67.64**
Date	**Airflow (CFM)**	**PID (ppm)**
10/9/12	70.15	36.9
10/16/12	62.1	93
10/22/12	75	85.9
10/31/12	55.45	0
11/13/12	46.34	54.1
12/4/12	30.47	56.2
12/13/12	33.78	47
12/21/12	38.27	40
12/28/12	30.4	14.5
4th Qtr mean:	**49.11**	**47.51**
1/4/13	32	NG
1/9/13	NG	43.8
1/25/13	29	24.9
2/8/13	43	21
3/8/13	53	15
3/29/12	42	29
1st Qtr mean:	**39.80**	**26.74**

Date	Airflow (CFM)	PID (ppm)
4/16/13	42	4.5
5/31/13	30	23.7
6/13/13	38.3	25.1
2nd Qtr mean:	**36.77**	**17.77**
7/11/13	36.8	8.3
7/17/13	41	24.4
8/1/13	56.6	25
9/5/13	20.1	36.2
3rd Qtr mean:	**39.23**	**28.53**
10/8/13	27.81	128
11/6/13	48	7.5
11/18/13	55.05	21.4
12/4/13	33.5	19.6
4th Qtr mean:	**45.52**	**44.13**
1/3/14	33.42	19.4
2/24/14	33.42	5.8
3/10/14	35.49	4.1
1st Qtr mean:	**34.11**	**9.77**
4/22/14	30.14	12.3
5/7/14	30.5	11
6/18/14	28.1	16
2nd Qtr mean:	**29.58**	**13.10**
7/3/14	26.1	30.1
8/26/14	34.6	10.1
9/9/14	34.3	12.2
9/24/14	31.42	7.4
3rd Qtr mean:	**31.61**	**14.95**
10/22/14	33.1	1.2
11/4/14	28.7	0.7
12/1/14	39.8	5.4
4th Qtr mean:	**33.87**	**2.43**
1/7/15	33.1	0
2/3/15	39.2	2.6
3/6/15	32.6	0
3/31/15	31.2	0.7
1st Qtr mean:	**34.03**	**0.83**
4/14/15	39.38	0
4/28/15	39.87	0
6/9/15	34.9	2.2
6/23/15	37.4	2.2
2nd Qtr mean:	**37.89**	**1.10**

CFM - cubic feet per minute
Airflow readings obtained using a Hot Wire Anemometer
PID - Photoionization Detector reading
ppm - parts per million

Table 14b - Airflow and Vapor Concentration Worksheet cont.
Gasoline Fueling Station – Royal Farms #64

Total Airflow Calculations

Date	# of Days	CFM	Total Airflow
12/14 - 1/9	27	233	8949787
1/10- 3/31	75	99.3	10838793.6
4/1 - 6/30	85	59.42	7786396.8
7/1 - 9/30	90	58.699	7607390.4
10/1 - 12/31	90	49.11	6364656
1/1 - 3/31	89	39.8	5100768.0
4/1 - 6/30	82	36.77	4341801.6
7/10 - 9/30	88	39.23	4971225.6
10/1-12/31	89	45.52	5833843.2
1/1-3/31	89	34.11	4371537.6
4/1/14-6/30/14	90	28.1	3641760.0
7/1/14-9/30/14	91	31.6	4141519.2
10/1/14-12/31/14	89	33.9	4344624.0
1/1/15-3/31/15	86	34.0	4210560.0
4/1/15-6/9/15	87	37.9	4746859.2
Total:			**87251522.2**

Results from Tedlar bag sample taken from vapor effluent stack

Date	B	T	E	X	Naphthalene	MTBE
*6/28/2013	1.62	5.44	2.10	12.33	BDL	BDL
7/11/2013	0.209	0.801	0.242	1.449	BDL	BDL
8/1/2013	0.283	0.902	0.264	3.830	BDL	BDL
9/5/2013	0.325	0.981	0.376	5.720	BDL	BDL
10/7/2013	0.604	1.530	0.553	8.510	BDL	BDL
10/24/2013	0.0767J	0.228	0.0725J	0.655	BDL	BDL
11/6/2013	0.106J	0.382	0.0866J	1.042	BDL	BDL
12/4/2013	0.151J	0.402	0.0953J	2.129	BDL	BDL
1/3/2014	0.365	1.180	0.487	10.00J	BDL	BDL
2/24/2014	0.174	0.097J	0.117	0.578	BDL	BDL
3/14/2014	0.187	0.072J	0.136	0.646	BDL	BDL
4/22/2014	0.434	0.548	0.524	3.050	BDL	BDL
5/7/2014	0.0942J	0.167	0.114J	0.395	BDL	BDL
6/3/2014	0.103J	0.102J	0.0776J	0.398	BDL	BDL
7/3/2014	0.270	0.206	0.304	1.039	BDL	BDL
8/12/2014	0.112J	0.079J	0.125	0.526	BDL	BDL
9/9/2014	0.104J	0.058J	0.112J	0.358	BDL	BDL
10/16/2014	BDL	BDL	0.117	0.306	BDL	BDL
11/4/2014	BDL	BDL	0.068	0.251J	BDL	BDL
12/1/2014	0.144J	0.129J	0.0695J	0.302J	BDL	BDL
1/7/2015	BDL	BDL	BDL	0.0704J	BDL	BDL
2/3/2015	BDL	0.0565J	0.0714J	0.400J	BDL	BDL
3/17/2015	BDL	0.0531J	0.0684J	.3087J	BDL	BDL
4/14/2015	BDL	0.0860J	0.0788J	0.412	BDL	BDL
5/12/2015	0.237	0.928	0.139	0.801	BDL	BDL
3/17/2015	BDL	.0621J	0.1250	0.660	BDL	BDL

Results in parts per million by volume (ppmv)

BDL- Below Detetion Limits

*Results in micrograms per liter(µg/L)

Table 15 - System Emissions Compliance Table
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Total Volatile Organic Compounds (VOCs)

Date	Airflow (CFM)	VOCs (ppm)	Vapor lbs/day	Permit Limit	Emissions compliance?
2/13/12	191.4	207.0	16.70	20 lbs/day	Yes
2/22/12	78.5	233.0	7.71	20 lbs/day	Yes
2/28/12	77.4	264.0	8.62	20 lbs/day	Yes
3/5/12	75.1	227.0	7.19	20 lbs/day	Yes
3/12/12	74.4	136.0	4.27	20 lbs/day	Yes
4/2/12	50.5	130.0	2.77	20 lbs/day	Yes
4/10/12	81.0	233.0	7.95	20 lbs/day	Yes
4/16/12	71.8	169.0	5.11	20 lbs/day	Yes
4/23/12	50.0	161.0	3.40	20 lbs/day	Yes
4/30/12	55.4	65.0	1.52	20 lbs/day	Yes
5/8/12	88.5	110.0	4.10	20 lbs/day	Yes
5/21/12	37.8	112.0	1.79	20 lbs/day	Yes
5/29/12	61.0	95.0	2.44	20 lbs/day	Yes
6/7/12	59.8	185.0	4.67	20 lbs/day	Yes
6/11/12	68.9	106.0	3.08	20 lbs/day	Yes
6/25/12	29.1	103.0	1.26	20 lbs/day	Yes
7/6/12	35.0	52.0	0.77	20 lbs/day	Yes
7/17/12	47.5	145.0	2.90	20 lbs/day	Yes
8/7/12	30.1	44.3	0.56	20 lbs/day	Yes
8/14/12	72.3	81.3	2.48	20 lbs/day	Yes
8/28/12	89.6	49.5	1.87	20 lbs/day	Yes
9/5/12	65.7	61.0	1.69	20 lbs/day	Yes
9/13/12	51.2	60.0	1.30	20 lbs/day	Yes
9/18/12	65.2	48.0	1.32	20 lbs/day	Yes
10/9/12	70.2	36.9	1.09	20 lbs/day	Yes
10/16/12	62.1	93.0	2.43	20 lbs/day	Yes
10/22/12	75.0	85.9	2.72	20 lbs/day	Yes
10/31/12	55.5	52.4	1.23	20 lbs/day	Yes
11/13/12	46.3	54.1	1.06	20 lbs/day	Yes
12/4/12	30.5	56.2	0.72	20 lbs/day	Yes
12/13/12	33.8	47.0	0.67	20 lbs/day	Yes
12/21/12	38.3	40.0	0.65	20 lbs/day	Yes
12/28/12	30.4	14.5	0.19	20 lbs/day	Yes
1/25/13	29.0	24.9	0.30	20 lbs/day	Yes
2/8/13	43.0	21.0	0.38	20 lbs/day	Yes
3/8/13	53.0	15.0	0.34	20 lbs/day	Yes
3/29/13	42.0	29.0	0.51	20 lbs/day	Yes
4/16/13	42.0	4.5	0.08	20 lbs/day	Yes
5/31/13	30.0	23.7	0.30	20 lbs/day	Yes
6/27/13	32.0	27.7	0.37	20 lbs/day	Yes
7/17/14	41.0	24.4	0.42	20 lbs/day	Yes
8/1/14	56.6	25.0	0.60	20 lbs/day	Yes
9/5/14	20.1	36.2	0.31	20 lbs/day	Yes
11/6/14	27.8	128.0	1.50	20 lbs/day	Yes
11/18/14	55.1	21.4	0.50	20 lbs/day	Yes
12/4/14	33.5	19.6	0.28	20 lbs/day	Yes
1/3/14	33.4	19.4	0.27	20 lbs/day	Yes
2/24/14	33.4	5.8	0.08	20 lbs/day	Yes
3/14/14	35.5	4.1	0.06	20 lbs/day	Yes
4/22/14	30.1	12.3	0.16	20 lbs/day	Yes
5/7/14	30.5	11.0	0.14	20 lbs/day	Yes
6/16/14	28.1	16.0	0.19	20 lbs/day	Yes
7/3/14	30.1	26.1	0.33	20 lbs/day	Yes
7/30/14	33.9	13.3	0.19	20 lbs/day	Yes
8/26/14	34.6	10.1	0.15	20 lbs/day	Yes
9/9/14	34.3	12.2	0.18	20 lbs/day	Yes
9/24/14	31.4	7.4	0.10	20 lbs/day	Yes
10/22/14	33.1	1.2	0.02	20 lbs/day	Yes
2/3/15	39.2	2.6	0.04	20 lbs/day	Yes
3/31/15	31.2	0.7	0.01	20 lbs/day	Yes
4/14/15	39.5	0.6	0.01	20 lbs/day	Yes
5/12/15	37.5	2.1	0.03	20 lbs/day	Yes
6/9/15	36.2	0.8	0.01	20 lbs/day	Yes

A catalytic oxidizer and granular activated carbon (GAC) drums were removed from the system in February 2012, this table includes emissions data beginning after the permitted removal of these devices.

Calculation used for vapor phase recovery in pounds per day: Airflow ft^3/min * 0.0283 m^3/ft^3 * VOCs ppm * 105 g/mole BTEX * .00268 gas constant * 0.001 kg/g * 52.91 lbs per day / kg per hr

Airflow measurements taken using an Extech brand hot-wire anemometer

VOC measurements taken using a calibrated MiniRAE 2000 portable photo-ionization detector

Table 16 - Groundwater Treatment Efficiency Worksheet
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

	INFLUENT			EFFLUENT			
Date	**Total BTEX**	**MTBE**	**TPH GRO**	**Total BTEX**	**MTBE**	**TPH GRO**	**Treatment Efficiency (%)**
1/25/2012	476.9	6.5	848.0	0.0	0.0	0.0	100.0
2/6/2012	868.3	8.9	1300.0	0.0	0.0	0.0	100.0
2/22/2012	709.5	0.0	1310.0	0.0	0.0	0.0	100.0
3/9/2012	507.7	0.0	727.0	0.0	0.0	0.0	100.0
3/22/2012	404.7	3.6	1270.0	0.0	0.0	0.0	100.0
4/16/2012	289.6	3.7	596.0	0.0	0.0	0.0	100.0
4/30/2012	387.1	0.0	352.0	0.0	0.0	0.0	100.0
5/31/2012	240.0	2.7	254.0	0.0	0.0	0.0	100.0
6/11/2012	199.8	0.0	216.0	0.0	0.0	0.0	100.0
7/24/2012	176.4	0.0	195.0	0.0	0.0	0.0	100.0
8/21/2012	315.3	2.9 J	592.0	0.0	0.0	0.0	100.0
9/18/2012	237.6	2.9 J	297.0	0.0	0.0	0.0	100.0
10/19/2012	170.7	0.0	170.0	0.0	0.0	0.0	100.0
11/14/2012	87.3	0.0	125.0	0.0	0.0	0.0	100.0
12/28/2012	273.0	3.5 J	286.0	0.0	0.0	0.0	100.0
1/25/2013	152.3	2.3 J	223.0	0.0	0.0	0.0	100.0
2/21/2013	89.7	0.0	183.0	0.0	0.0	0.0	100.0
3/8/2013	80.4	0.0	128.0	0.0	0.0	0.0	100.0
4/3/2013	60.6 J	0.0	0.0	0.0	0.0	0.0	100.0
4/18/2013	0.0	0.0	0.0	0.0	0.0	0.0	100.0
5/31/2013	32.5	0.0	0.0	0.0	0.0	0.0	100.0
6/27/2013	17.4 J	0.0	128.0	0.0	0.0	0.0	100.0
7/11/2013	16.1 J	0.0	0.0	0.0	0.0	0.0	100.0
8/1/2013	0.0	0.0	0.0	0.0	0.0	0.0	100.0
9/5/2013	0.0	0.0	0.0	0.0	0.0	0.0	100.0
10/7/2013	0.0	0.0	0.0	0.0	0.0	0.0	100.0
10/24/2013	10.7J	0.0	0.0	0.0	0.0	0.0	100.0
11/6/2013	21.5J	0.0	0.0	0.0	0.0	0.0	100.0
1/3/2014	92.0	0.0	133.0	0.0	0.0	0.0	100.0
2/24/2014	0.0	0.0	0.0	0.0	0.0	0.0	100.0
3/14/2014	8.0	0.0	0.0	0.0	0.0	0.0	100.0
4/22/2014	20.9	0.0	346.0	0.0	0.0	0.0	100.0
5/7/2014	16.1	0.0	101.0	0.0	0.0	0.0	100.0
6/16/2014	0.0	0.0	0.0	0.0	0.0	0.0	100.0
7/3/2014	0.0	0.0	0.0	0.0	0.0	0.0	100.0
8/12/2014	0.0	0.0	0.0	0.0	0.0	0.0	100.0
9/9/2014	0.0	0.0	0.0	0.0	0.0	0.0	100.0
10/7/2014	0.0	0.0	0.0	0.0	0.0	0.0	100.0
11/4/2014	0.0	0.0	0.0	0.0	0.0	0.0	100.0
12/8/2014	0.0	0.0	0.0	0.0	0.0	0.0	100.0
1/7/2015	0.0	0.0	0.0	0.0	0.0	0.0	100.0
2/3/2015	0.0	0.0	0.0	0.0	0.0	0.0	100.0
3/17/2015	0.0	0.0	0.0	0.0	0.0	0.0	100.0
4/14/2015	0.0	0.0	0.0	0.0	0.0	0.0	100.0
5/12/2015	0.0	0.0	0.0	0.0	0.0	0.0	100.0
6/9/2015	2.9	0.0	0.0	0.0	0.0	0.0	100.0

Results from laboratory analysis by Maryland Spectral Services, Inc.
For computational purposes, the value 0.0 represents a result below detection limits
All values in micrograms per Liter (ug/L)
J - denotes estimated value

Table 17 - Groundwater and Vapor Phase Recovery Well Operation Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Monitoring Period	Recovery Wells	Depth of Stinger Tube (Feet Below TOC)	Days in Operation
12/14/11 - 12/29/11 (16 days)	MW-2R	17.00	15
	MW-4R	12.20	12
	MW-5R	11.25	15
	MW-7R	20.25	0
	MW-8R	18.75	1
	MW-14	17.75	15
	MW-15	12.75	0
	MW-16	11.50	1
	MW-17	15.10	15
12/30/11 - 1/9/12 (11 Days)	MW-2R	17.00	11
	MW-4R	12.20	5
	MW-5R	11.25	11
	MW-7R	20.25	0
	MW-8R	18.75	0
	MW-14	17.75	11
	MW-15	12.75	0
	MW-16	11.50	0
	MW-17	15.10	4
1/10/12 - 3/31/12 (75 days)	MW-2R	17.00	22
	MW-4R	12.20	34
	MW-5R	11.25	71
	MW-7R	20.25	54
	MW-8R	18.75	6
	MW-14	17.75	75
	MW-15	12.75	57
	MW-16	11.50	64
	MW-17	15.10	35
4/1/12 - 6/30/12 (85 days)	MW-2R	17.00	0
	MW-4R	12.20	0
	MW-5R	11.25	85
	MW-7R	20.25	85
	MW-8R	18.75	0
	MW-14	17.75	85
	MW-15	12.75	85
	MW-16	11.50	78
	MW-17	15.10	83
	MW-2R	17.00	0
	MW-4R	12.20	25
	MW-5R	11.25	90

Table 17 - Groundwater and Vapor Phase Recovery Well Operation Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Monitoring Period	Recovery Wells	Depth of Stinger Tube (Feet Below TOC)	Days in Operation
7/1/12 - 9/30/12 (90 days)	MW-7R	20.25	65
	MW-8R	18.75	0
	MW-14	19.25	90
	MW-15	11.75	90
	MW-16	12.25	90
	MW-17	15.10	65
	MW-6	16.00	4
10/1/12-12/31/12 (90 days)	MW-2R	17.00	0
	MW-4R	12.20	60
	MW-5R	11.25	90
	MW-7R	20.25	7
	MW-8R	18.75	0
	MW-14	19.25	90
	MW-15	11.75	90
	MW-16	12.25	90
	MW-17	15.10	0
	MW-6	16.00	2
1/1/13-3/31/13 (89 days)	MW-2R	17.00	0
	MW-4R	12.20	89
	MW-5R	11.25	89
	MW-7R	20.25	0
	MW-8R	18.75	0
	MW-14	20.25	89
	MW-15	12.50	89
	MW-16	13.00	89
	MW-17	15.10	0
	MW-6	16.00	2
4/1/13-6/30/13 (82 days)	MW-2R	17.00	0
	MW-4R	12.20	82
	MW-5R	11.25	82
	MW-7R	20.25	14
	MW-8R	18.75	0
	MW-14	20.25	82
	MW-15	12.50	82
	MW-16	14.00	82
	MW-17	15.10	0
	MW-6	16.00	1
	MW-2R	17.00	26
	MW-4R	12.20	88

Table 17 - Groundwater and Vapor Phase Recovery Well Operation Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Monitoring Period	Recovery Wells	Depth of Stinger Tube (Feet Below TOC)	Days in Operation
7/1/13-9/30/13 (88 days)	MW-5R	11.25	88
	MW-7R	20.25	11
	MW-8R	18.75	0
	MW-14	20.25	88
	MW-15	12.50	83
	MW-16	14.00	88
	MW-17	15.10	0
	MW-6	16.00	1
10/1/13-12/31/13 (92 days)	MW-2R	17.00	89
	MW-4R	12.20	89
	MW-5R	11.25	89
	MW-7R	20.25	0
	MW-8R	18.75	0
	MW-14	20.25	89
	MW-15	12.50	61
	MW-16	14.00	61
	MW-17	15.10	81
	MW-6	16.00	1
1/1/14-3/31/14 (90 days)	MW-2R	17.00	28
	MW-4R	12.20	89
	MW-5R	11.25	35
	MW-7R	20.25	0
	MW-8R	18.75	0
	MW-14	20.25	89
	MW-15	12.50	89
	MW-16	14.00	89
	MW-17	15.10	61
	MW-6	18.75	19
4/1/14-6/30/14 (91 days)	MW-2R	17.00	48
	MW-4R	12.20	90
	MW-5R	11.25	90
	MW-7R	20.25	0
	MW-8R	18.75	0
	MW-14	20.25	90
	MW-15	12.50	53
	MW-16	14.00	37
	MW-17	15.10	42
	MW-6	18.75	90
	MW-2R	17.00	91
	MW-4R	12.20	91

Table 17 - Groundwater and Vapor Phase Recovery Well Operation Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Monitoring Period	Recovery Wells	Depth of Stinger Tube (Feet Below TOC)	Days in Operation
7/1/14-9/30/14 (91 days)	MW-5R	11.25	91
	MW-7R	20.25	0
	MW-8R	18.75	0
	MW-14	15.00	91
	MW-15	12.50	91
	MW-16	14.00	88
	MW-17	15.10	55
	MW-6	18.75	91
10/1/14-12/31/14 (92 days)	MW-2R	17.00	91
	MW-4R	12.20	91
	MW-5R	11.25	91
	MW-7R	20.25	0
	MW-8R	18.75	0
	MW-14	20.00	91
	MW-15	12.50	91
	MW-16	14.00	91
	MW-17	15.10	91
	MW-6	18.75	91
1/1/15-3/31/15 (90 days)	MW-2R	17.00	86
	MW-4R	12.20	86
	MW-5R	11.25	86
	MW-7R	20.25	0
	MW-8R	18.75	0
	MW-14	20.00	86
	MW-15	12.50	86
	MW-16	14.00	86
	MW-17	15.10	86
	MW-6	18.75	86
4/1/14-6/30/14 (91 days)	MW-2R	17.00	21
	MW-4R	12.20	87
	MW-5R	11.25	87
	MW-7R	20.25	0
	MW-8R	18.75	14
	MW-14	20.25	87
	MW-15	12.50	35
	MW-16	14.00	87
	MW-17	15.10	87
	MW-6	18.75	87

Table 18 - Benzene and BTEX Concentration Trend Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway, Rosedale, MD 21237

	Well ID	Benzene Trend	BTEX Trend	Notes
On-site	MW-1	Decreasing	Decreasing	
	MW-2R	Decreasing	Decreasing	
	MW-6	Decreasing	Decreasing	
	MW-7R	Decreasing	Decreasing	
	MW-8R	Decreasing	Decreasing	
	MW-9	Decreasing	Decreasing	
	MW-10	Decreasing	Decreasing	
	MW-13	Stable	No Trend	Current benzene and BTEX concentrations are less than laboratory detection limits.
	MW-14	Decreasing	Decreasing	
	MW-21	Decreasing	Decreasing	
1205 Chesaco	MW-3	Decreasing	Decreasing	
	MW-4R	Decreasing	Decreasing	
	MW-5R	Decreasing	Decreasing	
	MW-15	No Trend	Decreasing	Most recent benzene concentration is less than laboratory detection limit.
	MW-16	Decreasing	Decreasing	
	MW-17	Probably Decreasing	Decreasing	Current benzene concentration is less than the regulatory standard.
	MW-18	Decreasing	Decreasing	
	MW-19	Decreasing	Decreasing	
	MW-20	No Trend	No Trend	Current benzene and BTEX concentrations are less than laboratory detection limits.
Off-Site	MW-11	Decreasing	Decreasing	
	MW-12	Stable	No Trend	Current benzene and BTEX concentrations are less than laboratory detection limits.
	MW-22	Decreasing	Decreasing	
	MW-23	Decreasing	Decreasing	
	MW-24	Decreasing	Decreasing	
	MW-25	Stable	Stable	Current benzene and BTEX concentrations are less than laboratory detection limits.
	MW-26	No Trend	No Trend	Current benzene and BTEX concentrations are less than laboratory detection limits.
	MW-27	Increasing	Increasing	
	MW-28	Increasing	Increasing	
	MW-29	No Trend	No Trend	Seven samples have been collected from this location. Current benzene and BTEX concentrations are less than historical highs.
	MW-30	Probably Decreasing	Probably Decreasing	Seven samples have been collected from this location. Current benzene and BTEX concentrations are less than laboratory detection limits.
	CMW-1	Probably Increasing	Probably Increasing	Seven samples have been collected from this location. Current benzene and BTEX concentrations are less than historical highs.
	CMW-2	Stable	Stable	Current benzene and BTEX concentrations are less than laboratory detection limits.

BTEX - Total benzene, toluene, ethylbenzene, and xylene

Attachment C

Maryland spectral Services

Analytical Chemistry Services

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

Project: RF-064

Project Number: 05-056 RF-64

Project Manager: Jeffery Stein

Report Issued: 04/24/15 14:13

Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
Jessup MD, 20794

CLIENT SAMPLE ID:		MW-26	MW-25	MW-30	MW-24	MW-23	MW-20
LAB SAMPLE ID:		5041520-01	5041520-02	5041520-03	5041520-04	5041520-05	5041520-06
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (Water)							
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
tert-Amyl alcohol (TAA)	ug/L	<20.0	<20.0	<20.0	<20.0	**58.5**	<20.0
tert-Amyl methyl ether (TAME)	ug/L	<2.0	<2.0	<2.0	<2.0	**4.7 [2]**	<2.0
Benzene	ug/L	<2.0	<2.0	<2.0	**2.3 [2]**	**207 [1]**	<2.0
Bromobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromochloromethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromoform	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromomethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
tert-Butanol (TBA)	ug/L	<15.0	<15.0	<15.0	<15.0	**163**	<15.0
2-Butanone (MEK)	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
n-Butylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
sec-Butylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
tert-Butylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon disulfide	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Chlorotoluene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4-Chlorotoluene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromochloromethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dibromo-3-chloropropane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dibromoethane (EDB)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromomethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dichlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
cis-1,2-Dichloroethene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,2-Dichloroethene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dichlorofluoromethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

1 = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
2 = Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).
3 = Surrogate recovery and/or internal standard area are outside control limits due to sample matrix effect.

As a NELAP accredited laboratory, MSS certifies that all applicable test results meet NELAC requirements.

Maryland spectral Services

Analytical Chemistry Services

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

Project: RF-064

Project Number: 05-056 RF-64

Project Manager: Jeffery Stein

Report Issued: 04/24/15 14:13

Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
Jessup MD, 20794

CLIENT SAMPLE ID:		MW-26	MW-25	MW-30	MW-24	MW-23	MW-20
LAB SAMPLE ID:		5041520-01	5041520-02	5041520-03	5041520-04	5041520-05	5041520-06
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)							
1,2-Dichloropropane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3-Dichloropropane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2,2-Dichloropropane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloropropene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
cis-1,3-Dichloropropene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,3-Dichloropropene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Diisopropyl ether (DIPE)	ug/L	<2.0	<2.0	<2.0	**6.3**	**11.4**	<2.0
Ethyl tert-butyl ether (ETBE)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Hexachlorobutadiene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Isopropylbenzene (Cumene)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4-Isopropyltoluene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methyl tert-butyl ether (MTBE)	ug/L	**13.5**	**10.2**	<2.0	**13.7**	**41.3**	<2.0
4-Methyl-2-pentanone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Methylene chloride	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Naphthalene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
n-Propylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Styrene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,1,2-Tetrachloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2,2-Tetrachloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Tetrachloroethene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trichlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,1-Trichloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichloroethene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichlorofluoromethane (Freon 11)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trimethylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	ug/L	<2.0	<2.0	<2.0	<2.0	**2.3 [2]**	<2.0
m- & p-Xylenes	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane-d4	[surr]	107%	108%	108%	106%	103%	108%

1 = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
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3 = Surrogate recovery and/or internal standard area are outside control limits due to sample matrix effect.

As a NELAP accredited laboratory, MSS certifies that all applicable test results meet NELAC requirements.

Analytical Results

1500 Caton Center Dr Suite G
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410-247-7600
www.mdspectral.com
VELAP ID 460040

Project: RF-064

Project Number: 05-056 RF-64
Project Manager: Jeffery Stein
Report Issued: 04/24/15 14:13

Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
Jessup MD, 20794

CLIENT SAMPLE ID:		MW-26	MW-25	MW-30	MW-24	MW-23	MW-20
LAB SAMPLE ID:		5041520-01	5041520-02	5041520-03	5041520-04	5041520-05	5041520-06
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)							
Toluene-d8	[surr]	96.2%	96.8%	96.2%	96.8%	96.5%	96.3%
4-Bromofluorobenzene	[surr]	92.0%	93.3%	92.5%	91.5%	95.6%	92.1%
GASOLINE RANGE ORGANICS BY EPA 8015B (Water)							
Gasoline-Range Organics	ug/L	<100	<100	<100	<100	**232**	<100
a,a,a-Trifluorotoluene	[surr]	100%	101%	100%	100%	99.7%	101%
DIESEL RANGE ORGANICS BY EPA 3510/8015B (Water)							
Diesel-Range Organics	mg/L	<0.19	<0.20	<0.20	<0.20	**0.36**	<0.19
o-Terphenyl	[surr]	93.1%	91.7%	99.7%	101%	96.5%	98.4%

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CLIENT SAMPLE ID:		MW-12	MW-11	MW-22	MW-10	MW-18	MW-3
LAB SAMPLE ID:		5041520-07	5041520-08	5041520-09	5041520-10	5041520-11	5041520-12
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (Water)							
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
tert-Amyl alcohol (TAA)	ug/L	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
tert-Amyl methyl ether (TAME)	ug/L	<2.0	<2.0	<2.0	**5.9**	<2.0	<2.0
Benzene	ug/L	<2.0	<2.0	**4.0 [2]**	**3.9 [2]**	<2.0	<2.0
Bromobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromochloromethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromoform	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromomethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
tert-Butanol (TBA)	ug/L	<15.0	<15.0	<15.0	**73.4**	**23.7**	<15.0
2-Butanone (MEK)	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
n-Butylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
sec-Butylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
tert-Butylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon disulfide	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon tetrachloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroform	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloromethane	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
2-Chlorotoluene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4-Chlorotoluene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromochloromethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dibromo-3-chloropropane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dibromoethane (EDB)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromomethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3-Dichlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dichlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
cis-1,2-Dichloroethene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,2-Dichloroethene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dichlorofluoromethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

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Analytical Results

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VELAP ID 460040

Project: RF-064

Project Number: 05-056 RF-64
Project Manager: Jeffery Stein
Report Issued: 04/24/15 14:13

Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
Jessup MD, 20794

CLIENT SAMPLE ID:		MW-12	MW-11	MW-22	MW-10	MW-18	MW-3
LAB SAMPLE ID:		5041520-07	5041520-08	5041520-09	5041520-10	5041520-11	5041520-12
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)							
1,2-Dichloropropane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3-Dichloropropane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2,2-Dichloropropane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloropropene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
cis-1,3-Dichloropropene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,3-Dichloropropene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Diisopropyl ether (DIPE)	ug/L	<2.0	<2.0	**10.2**	**2.6 [2]**	<2.0	**2.6 [2]**
Ethyl tert-butyl ether (ETBE)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Hexachlorobutadiene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Isopropylbenzene (Cumene)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4-Isopropyltoluene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methyl tert-butyl ether (MTBE)	ug/L	<2.0	<2.0	**18.1**	**65.4**	**4.0 [2]**	**6.1**
4-Methyl-2-pentanone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Methylene chloride	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Naphthalene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
n-Propylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Styrene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,1,2-Tetrachloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2,2-Tetrachloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Tetrachloroethene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trichlorobenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,1-Trichloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichloroethene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichlorofluoromethane (Freon 11)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trimethylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
m- & p-Xylenes	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane-d4	[surr]	108%	108%	107%	107%	107%	107%

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Maryland spectral Services
Analytical Chemistry Services

Analytical Results

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VELAP ID 460040

Project: RF-064

Project Number: 05-056 RF-64
Project Manager: Jeffery Stein
Report Issued: 04/24/15 14:13

Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
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CLIENT SAMPLE ID:		MW-12	MW-11	MW-22	MW-10	MW-18	MW-3
LAB SAMPLE ID:		5041520-07	5041520-08	5041520-09	5041520-10	5041520-11	5041520-12
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)							
Toluene-d8	[surr]	97.0%	95.9%	96.4%	96.9%	96.7%	96.6%
4-Bromofluorobenzene	[surr]	92.4%	93.9%	92.0%	93.6%	93.4%	93.5%
GASOLINE RANGE ORGANICS BY EPA 8015B (Water)							
Gasoline-Range Organics	ug/L	<100	<100	<100	<100	<100	<100
a,a,a-Trifluorotoluene	[surr]	100%	100%	101%	100%	100%	102%
DIESEL RANGE ORGANICS BY EPA 3510/8015B (Water)							
Diesel-Range Organics	mg/L	<0.19	<0.20	**0.23**	**0.31**	**0.27**	**0.29**
o-Terphenyl	[surr]	90.4%	103%	97.2%	93.2%	96.9%	101%

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Maryland spectral Services

Analytical Chemistry Services

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Project Number: 05-056 RF-64

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Advantage Environmental Consultants, LLC
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CLIENT SAMPLE ID:		MW-19	MW-13	MW-21	MW-9	MW-8R	MW-1
LAB SAMPLE ID:		5041520-13	5041520-14	5041520-15	5041520-16	5041520-17	5041520-18
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (Water)							
Acetone	ug/L	<10.0	**11.6**	<100	<10.0	<10.0	<200
tert-Amyl alcohol (TAA)	ug/L	<20.0	**60.1**	<200	**222**	**40.7**	<400
tert-Amyl methyl ether (TAME)	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Benzene	ug/L	<2.0	<2.0	**945**	**153**	**38.0**	**48.6 [2]**
Bromobenzene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Bromochloromethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Bromodichloromethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Bromoform	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Bromomethane	ug/L	<5.0	<5.0	<50.0	<5.0	<5.0	<100
tert-Butanol (TBA)	ug/L	<15.0	<15.0	**151**	**23.3**	**19.4**	<300
2-Butanone (MEK)	ug/L	<10.0	<10.0	<100	<10.0	<10.0	<200
n-Butylbenzene	ug/L	**10.0**	<2.0	<20.0	**3.4 [2]**	<2.0	<40.0
sec-Butylbenzene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
tert-Butylbenzene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Carbon disulfide	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Carbon tetrachloride	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Chlorobenzene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Chloroethane	ug/L	<5.0	<5.0	<50.0	<5.0	<5.0	<100
Chloroform	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Chloromethane	ug/L	<5.0	<5.0	<50.0	<5.0	<5.0	<100
2-Chlorotoluene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
4-Chlorotoluene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Dibromochloromethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,2-Dibromo-3-chloropropane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,2-Dibromoethane (EDB)	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Dibromomethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,2-Dichlorobenzene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,3-Dichlorobenzene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,4-Dichlorobenzene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Dichlorodifluoromethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,1-Dichloroethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,2-Dichloroethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,1-Dichloroethene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
cis-1,2-Dichloroethene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
trans-1,2-Dichloroethene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Dichlorofluoromethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0

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Maryland spectral Services

Analytical Chemistry Services

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

Project: RF-064

Project Number: 05-056 RF-64

Project Manager: Jeffery Stein

Report Issued: 04/24/15 14:13

Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
Jessup MD, 20794

CLIENT SAMPLE ID:		MW-19	MW-13	MW-21	MW-9	MW-8R	MW-1
LAB SAMPLE ID:		5041520-13	5041520-14	5041520-15	5041520-16	5041520-17	5041520-18
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)							
1,2-Dichloropropane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,3-Dichloropropane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
2,2-Dichloropropane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,1-Dichloropropene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
cis-1,3-Dichloropropene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
trans-1,3-Dichloropropene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Diisopropyl ether (DIPE)	ug/L	<2.0	<2.0	**101**	**21.4**	**7.0**	<40.0
Ethyl tert-butyl ether (ETBE)	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Ethylbenzene	ug/L	**25.0**	<2.0	**270**	**248 [1]**	**115**	**571**
Hexachlorobutadiene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
2-Hexanone	ug/L	<10.0	<10.0	<100	<10.0	<10.0	<200
Isopropylbenzene (Cumene)	ug/L	**6.9**	<2.0	**30.3 [2]**	**18.6**	**9.9**	<40.0
4-Isopropyltoluene	ug/L	**2.4 [2]**	<2.0	<20.0	<2.0	<2.0	<40.0
Methyl tert-butyl ether (MTBE)	ug/L	<2.0	<2.0	**98.3**	**6.1**	**4.3 [2]**	<40.0
4-Methyl-2-pentanone	ug/L	<10.0	<10.0	<100	<10.0	<10.0	<200
Methylene chloride	ug/L	<10.0	<10.0	<100	<10.0	<10.0	<200
Naphthalene	ug/L	**12.2**	<2.0	**78.4**	**99.1**	**29.8**	**283**
n-Propylbenzene	ug/L	**15.5**	<2.0	**64.2**	**24.7**	**15.1**	**60.4 [2]**
Styrene	ug/L	<2.0	<2.0	<20.0	**3.4 [2]**	<2.0	<40.0
1,1,1,2-Tetrachloroethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,1,2,2-Tetrachloroethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Tetrachloroethene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Toluene	ug/L	<2.0	<2.0	**41.0 [2]**	**181**	**16.9**	**238**
1,2,3-Trichlorobenzene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,2,4-Trichlorobenzene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,1,1-Trichloroethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,1,2-Trichloroethane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Trichloroethene	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
Trichlorofluoromethane (Freon 11)	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,2,3-Trichloropropane	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
1,2,4-Trimethylbenzene	ug/L	**152**	<2.0	**511**	**242 [1]**	**119**	**2070**
1,3,5-Trimethylbenzene	ug/L	**24.3**	<2.0	<20.0	**46.7**	**29.5**	**573**
Vinyl chloride	ug/L	<2.0	<2.0	<20.0	<2.0	<2.0	<40.0
o-Xylene	ug/L	**9.5**	<2.0	**45.5 [2]**	**223 [1]**	**7.5**	**1780**
m- & p-Xylenes	ug/L	**22.5**	<2.0	**323**	**388**	**125**	**3590**
1,2-Dichloroethane-d4	[surr]	105%	101%	101%	95.0%	97.1%	104%

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Analytical Results

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Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

Project: RF-064

Project Number: 05-056 RF-64
Project Manager: Jeffery Stein
Report Issued: 04/24/15 14:13

Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
Jessup MD, 20794

CLIENT SAMPLE ID:		MW-19	MW-13	MW-21	MW-9	MW-8R	MW-1
LAB SAMPLE ID:		5041520-13	5041520-14	5041520-15	5041520-16	5041520-17	5041520-18
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)							
Toluene-d8	[surr]	99.9%	96.9%	97.8%	98.4%	98.1%	96.9%
4-Bromofluorobenzene	[surr]	96.8%	95.2%	98.2%	101%	101%	102%
GASOLINE RANGE ORGANICS BY EPA 8015B (Water)							
Gasoline-Range Organics	ug/L	**1520**	< 100	**2320**	**1760**	**795**	**11300**
a,a,a-Trifluorotoluene	[surr]	126% [3]	100%	100%	101%	103%	102%
DIESEL RANGE ORGANICS BY EPA 3510/8015B (Water)							
Diesel-Range Organics	mg/L	**1.34**	**0.24**	**3.30**	**1.28**	**0.64**	**4.34**
o-Terphenyl	[surr]	103%	101%	101%	95.6%	92.0%	99.7%

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Advantage Environmental Consultants, LLC
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CLIENT SAMPLE ID:		DUPE	CMW-2	MW-27	MW-29	CMW-1	MW-28
LAB SAMPLE ID:		5041520-19	5041520-20	5041520-21	5041520-22	5041520-23	5041520-24
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (Water)							
Acetone	ug/L	<10.0	<10.0	<20.0	<20.0	<20.0	<10.0
tert-Amyl alcohol (TAA)	ug/L	<20.0	<20.0	**42.9**	<40.0	**43.3**	**25.3**
tert-Amyl methyl ether (TAME)	ug/L	<2.0	<2.0	**18.2**	**12.2**	**17.7**	**3.4 [2]**
Benzene	ug/L	<2.0	<2.0	**162**	**5.6 [2]**	**20.2**	**86.8**
Bromobenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Bromochloromethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Bromodichloromethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Bromoform	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Bromomethane	ug/L	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
tert-Butanol (TBA)	ug/L	<15.0	<15.0	**481**	**137**	**523**	**149**
2-Butanone (MEK)	ug/L	<10.0	<10.0	<20.0	<20.0	<20.0	<10.0
n-Butylbenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
sec-Butylbenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
tert-Butylbenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Carbon disulfide	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Carbon tetrachloride	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Chlorobenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Chloroethane	ug/L	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
Chloroform	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Chloromethane	ug/L	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
2-Chlorotoluene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
4-Chlorotoluene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Dibromochloromethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,2-Dibromo-3-chloropropane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,2-Dibromoethane (EDB)	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Dibromomethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,2-Dichlorobenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,3-Dichlorobenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,4-Dichlorobenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Dichlorodifluoromethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,1-Dichloroethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,2-Dichloroethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,1-Dichloroethene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
cis-1,2-Dichloroethene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
trans-1,2-Dichloroethene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Dichlorofluoromethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0

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Project: RF-064

Project Number: 05-056 RF-64
Project Manager: Jeffery Stein
Report Issued: 04/24/15 14:13

Advantage Environmental Consultants, LLC
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CLIENT SAMPLE ID:		DUPE	CMW-2	MW-27	MW-29	CMW-1	MW-28
LAB SAMPLE ID:		5041520-19	5041520-20	5041520-21	5041520-22	5041520-23	5041520-24
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)							
1,2-Dichloropropane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,3-Dichloropropane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
2,2-Dichloropropane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,1-Dichloropropene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
cis-1,3-Dichloropropene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
trans-1,3-Dichloropropene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Diisopropyl ether (DIPE)	ug/L	<2.0	<2.0	**12.8**	**5.1 [2]**	**6.0 [2]**	**7.9**
Ethyl tert-butyl ether (ETBE)	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Ethylbenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Hexachlorobutadiene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
2-Hexanone	ug/L	<10.0	<10.0	<20.0	<20.0	<20.0	<10.0
Isopropylbenzene (Cumene)	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
4-Isopropyltoluene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Methyl tert-butyl ether (MTBE)	ug/L	**13.0**	<2.0	**343**	**216**	**306**	**65.6**
4-Methyl-2-pentanone	ug/L	<10.0	<10.0	<20.0	<20.0	<20.0	<10.0
Methylene chloride	ug/L	<10.0	<10.0	<20.0	<20.0	<20.0	<10.0
Naphthalene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	**2.4 [2]**
n-Propylbenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Styrene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,1,1,2-Tetrachloroethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,1,2,2-Tetrachloroethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Tetrachloroethene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Toluene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,2,3-Trichlorobenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,2,4-Trichlorobenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,1,1-Trichloroethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,1,2-Trichloroethane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Trichloroethene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Trichlorofluoromethane (Freon 11)	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,2,3-Trichloropropane	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,2,4-Trimethylbenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,3,5-Trimethylbenzene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
Vinyl chloride	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
o-Xylene	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	**7.2**
m- & p-Xylenes	ug/L	<2.0	<2.0	<4.0	<4.0	<4.0	<2.0
1,2-Dichloroethane-d4	[surr]	102%	103%	101%	104%	103%	103%

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Maryland spectral Services
Analytical Chemistry Services

Analytical Results

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VELAP ID 460040

Project: RF-064

Project Number: 05-056 RF-64
Project Manager: Jeffery Stein
Report Issued: 04/24/15 14:13

Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
Jessup MD, 20794

CLIENT SAMPLE ID:		DUPE	CMW-2	MW-27	MW-29	CMW-1	MW-28
LAB SAMPLE ID:		5041520-19	5041520-20	5041520-21	5041520-22	5041520-23	5041520-24
SAMPLE DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
RECEIVED DATE:		04/15/15	04/15/15	04/15/15	04/15/15	04/15/15	04/15/15
MATRIX	Units	Water	Water	Water	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)							
Toluene-d8	[surr]	98.2%	96.9%	97.9%	98.0%	97.3%	97.9%
4-Bromofluorobenzene	[surr]	94.1%	92.4%	94.6%	93.9%	93.1%	96.5%
GASOLINE RANGE ORGANICS BY EPA 8015B (Water)							
Gasoline-Range Organics	ug/L	<100	<100	**449**	**165**	**263**	**283**
a,a,a-Trifluorotoluene	[surr]	100%	101%	99.9%	94.9%	94.3%	94.1%
DIESEL RANGE ORGANICS BY EPA 3510/8015B (Water)							
Diesel-Range Organics	mg/L	<0.18	<0.19	**0.22**	<0.19	<0.18	**0.26**
o-Terphenyl	[surr]	88.3%	63.7%	101%	98.5%	96.4%	104%

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Company Name: AEC
Project Manager: J. Stein
Project Name: RF 64
Project ID: 05-056-64
Sampler(s): M. levine, R. Swaninger, K. Pellegrini
P.O. Number:

CHAIN-OF-CUSTODY RECORD

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410–247–7600 • Fax 410–247–7602
labman@mdspectral.com

Matrix Codes: NW (nonpotable water)
PW (potable water)

Analysis Requested: TPH DRO 8015; TPH GRO 8015; VOCs + OXY 8260

Field Sample ID	Date	Time	Water	Soil	Other	No. of Containers	TPH DRO 8015	TPH GRO 8015	VOCs + OXY 8260	Preservative: 1+1 HCL, H_2SO_4, Methanol, $Na_2S_2O_3$, $NaHCO_3$	Field pH, Residual Chlorine, QC Request, Trip Blank, Field Blank	MSS Lab ID
MW-26	4/15/15	12:30	X			3	X	X	X	1+1 HCL		5041520-01
MW-25		12:23										-02
MW-30		12:53										-03
MW-24		12:10										-04
MW-23		12:09										-05
MW-20		13:10										-06
MW-12		12:44										-07
MW-11		12:45										-08
MW-22		12:52										-09
MW-10		13:09										-10

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed) Kevin Pellegrini	4-15-15 17:32	(Printed) William Brewington	(Printed)		(Printed)

Relinquished by: (Signature)	Date/Time	Received by Lab: (Signature)
(Printed)		(Printed)

Turn Around Time:
- X Normal (7 day)
- ☐ 5 day
- ☐ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: ____
- ☐ Specific Due Date: ____

Lab Use:
Temp: 5.2 °C
- ✓ Received on Ice
- ✓ Received same day
- ✓ Preservation Appropriate

Delivery Method:
- ☐ Courier
- X Client
- ☐ UPS
- ☐ FedEx
- ☐ USPS
- ☐ Other: ____

Special Instructions/QC Requirements & Comments:
Results to: Jstein Mlevine Jwolf rswaninger Kpellegrini

Sample Disposal:
- ☐ Return to Client
- X Disposal by lab
- ☐ Archive for ____ days

1

MSS-F001-03/13

Company Name: AEC
Project Manager: J. Stein
Project Name: RF 64
Project ID: 05-056-64
Sampler(s): M. levine, r. swaninger, K. pellegrini
P.O. Number: 05-056-64

CHAIN-OF-CUSTODY RECORD

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410–247–7600 • Fax 410–247–7602
labman@mdspectral.com

Matrix Codes: NW (nonpotable water)
PW (potable water)

Analysis Requested: TPH DRO 8015; TPH GRO 8015; VOCs + OXY 8260

Field Sample ID	Date	Time	Water	Soil	Other	No. of Containers	TPH DRO 8015	TPH GRO 8015	VOCs + OXY 8260	Preservative: 1+1 HCL, H_2SO_4, Methanol, $Na_2S_2O_3$, $NaHCO_3$	Field pH, Residual Chlorine, QC Request, Trip Blank, Field Blank	MSS Lab ID
MW-18	4/15/15	13:19	X			3	X	X	X	1+1 HCL		5041520-11
MW-3		13:25										-12
MW-19		13:31										-13
~~MW-15~~												
~~MW-16~~												
~~MW-5R~~												
~~MW-4R~~												
~~MW-17~~												
MW-13		13:40										-14
MW-21		13:41										-15

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
(Printed) Kevin Pellegrini	4-15-15 17:32	(Printed) William Brewington	(Printed)		(Printed)

Relinquished by: (Signature)	Date/Time	Received by Lab: (Signature)
(Printed)		(Printed)

Turn Around Time:
- X Normal (7 day)
- ☐ 5 day
- ☐ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: ____
- ☐ Specific Due Date: ____

Lab Use:
Temp: 5.2 °C
- ✓ Received on Ice
- ✓ Received same day
- ☐ Preservation Appropriate

Delivery Method:
- ☐ Courier
- X Client
- ☐ UPS
- ☐ FedEx
- ☐ USPS
- ☐ Other: ____

Special Instructions/QC Requirements & Comments:
Same as Sheet #1

Sample Disposal:
- ☐ Return to Client
- X Disposal by lab
- ☐ Archive for ____ days

2

MSS-F001-03/13

| Company Name: AEC | Project Manager: J. Stein | | | | | | Analysis Requested | | | | | |

Maryland spectral Services

Analytical Chemistry Services

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

Project: RF-064

Project Number: 05-056 RF-64

Project Manager: James Wolf

Report Issued: 07/13/15 15:43

Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
Jessup MD, 20794

CLIENT SAMPLE ID:		1207 SUMP	1209.5 SUMP	1209 SUMP
LAB SAMPLE ID:		5062503-01	5062503-02	5062503-03
SAMPLE DATE:		06/25/15	06/25/15	06/25/15
RECEIVED DATE:		06/25/15	06/25/15	06/25/15
MATRIX	Units	Water	Water	Water

VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (Water)

Acetone	ug/L	<10.0	**11.4**	<10.0
tert-Amyl alcohol (TAA)	ug/L	<20.0	<20.0	<20.0
tert-Amyl methyl ether (TAME)	ug/L	<2.0	<2.0	<2.0
Benzene	ug/L	<2.0	<2.0	<2.0
Bromobenzene	ug/L	<2.0	<2.0	<2.0
Bromochloromethane	ug/L	<2.0	<2.0	<2.0
Bromodichloromethane	ug/L	<2.0	<2.0	<2.0
Bromoform	ug/L	<2.0	<2.0	<2.0
Bromomethane	ug/L	<5.0	<5.0	<5.0
tert-Butanol (TBA)	ug/L	<15.0	<15.0	<15.0
2-Butanone (MEK)	ug/L	<10.0	<10.0	<10.0
n-Butylbenzene	ug/L	<2.0	<2.0	<2.0
sec-Butylbenzene	ug/L	<2.0	<2.0	<2.0
tert-Butylbenzene	ug/L	<2.0	<2.0	<2.0
Carbon disulfide	ug/L	<2.0	<2.0	<2.0
Carbon tetrachloride	ug/L	<2.0	<2.0	<2.0
Chlorobenzene	ug/L	<2.0	<2.0	<2.0
Chloroethane	ug/L	<5.0	<5.0	<5.0
Chloroform	ug/L	<2.0	<2.0	**2.9 [1]**
Chloromethane	ug/L	<5.0	<5.0	<5.0
2-Chlorotoluene	ug/L	<2.0	<2.0	<2.0
4-Chlorotoluene	ug/L	<2.0	<2.0	<2.0
Dibromochloromethane	ug/L	<2.0	<2.0	<2.0
1,2-Dibromo-3-chloropropane	ug/L	<2.0	<2.0	<2.0
1,2-Dibromoethane (EDB)	ug/L	<2.0	<2.0	<2.0
Dibromomethane	ug/L	<2.0	<2.0	<2.0
1,2-Dichlorobenzene	ug/L	<2.0	<2.0	<2.0
1,3-Dichlorobenzene	ug/L	<2.0	<2.0	<2.0
1,4-Dichlorobenzene	ug/L	<2.0	<2.0	<2.0
Dichlorodifluoromethane	ug/L	<2.0	<2.0	<2.0
1,1-Dichloroethane	ug/L	<2.0	<2.0	<2.0
1,2-Dichloroethane	ug/L	<2.0	<2.0	<2.0
1,1-Dichloroethene	ug/L	<2.0	<2.0	<2.0
cis-1,2-Dichloroethene	ug/L	<2.0	<2.0	<2.0
trans-1,2-Dichloroethene	ug/L	<2.0	<2.0	<2.0
Dichlorofluoromethane	ug/L	<2.0	<2.0	<2.0

1 = Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).

Maryland spectral Services

Analytical Chemistry Services

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

Project: RF-064

Project Number: 05-056 RF-64

Project Manager: James Wolf

Report Issued: 07/13/15 15:43

Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
Jessup MD, 20794

CLIENT SAMPLE ID:		1207 SUMP	1209.5 SUMP	1209 SUMP
LAB SAMPLE ID:		5062503-01	5062503-02	5062503-03
SAMPLE DATE:		06/25/15	06/25/15	06/25/15
RECEIVED DATE:		06/25/15	06/25/15	06/25/15
MATRIX	Units	Water	Water	Water

VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)

1,2-Dichloropropane	ug/L	<2.0	<2.0	<2.0
1,3-Dichloropropane	ug/L	<2.0	<2.0	<2.0
2,2-Dichloropropane	ug/L	<2.0	<2.0	<2.0
1,1-Dichloropropene	ug/L	<2.0	<2.0	<2.0
cis-1,3-Dichloropropene	ug/L	<2.0	<2.0	<2.0
trans-1,3-Dichloropropene	ug/L	<2.0	<2.0	<2.0
Diisopropyl ether (DIPE)	ug/L	<2.0	<2.0	<2.0
Ethyl tert-butyl ether (ETBE)	ug/L	<2.0	<2.0	<2.0
Ethylbenzene	ug/L	<2.0	<2.0	<2.0
Hexachlorobutadiene	ug/L	<2.0	<2.0	<2.0
2-Hexanone	ug/L	<10.0	<10.0	<10.0
Isopropylbenzene (Cumene)	ug/L	<2.0	<2.0	<2.0
4-Isopropyltoluene	ug/L	<2.0	<2.0	<2.0
Methyl tert-butyl ether (MTBE)	ug/L	<2.0	<2.0	<2.0
4-Methyl-2-pentanone	ug/L	<10.0	<10.0	<10.0
Methylene chloride	ug/L	<10.0	<10.0	<10.0
Naphthalene	ug/L	<2.0	<2.0	<2.0
n-Propylbenzene	ug/L	<2.0	<2.0	<2.0
Styrene	ug/L	<2.0	<2.0	<2.0
1,1,1,2-Tetrachloroethane	ug/L	<2.0	<2.0	<2.0
1,1,2,2-Tetrachloroethane	ug/L	<2.0	<2.0	<2.0
Tetrachloroethene	ug/L	<2.0	<2.0	<2.0
Toluene	ug/L	<2.0	<2.0	<2.0
1,2,3-Trichlorobenzene	ug/L	<2.0	<2.0	<2.0
1,2,4-Trichlorobenzene	ug/L	<2.0	<2.0	<2.0
1,1,1-Trichloroethane	ug/L	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	ug/L	<2.0	<2.0	<2.0
Trichloroethene	ug/L	<2.0	<2.0	<2.0
Trichlorofluoromethane (Freon 11)	ug/L	<2.0	<2.0	<2.0
1,2,3-Trichloropropane	ug/L	<2.0	<2.0	<2.0
1,2,4-Trimethylbenzene	ug/L	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	ug/L	<2.0	<2.0	<2.0
Vinyl chloride	ug/L	<2.0	<2.0	<2.0
o-Xylene	ug/L	<2.0	<2.0	<2.0
m- & p-Xylenes	ug/L	<2.0	<2.0	<2.0
1,2-Dichloroethane-d4	[surr]	92.8%	93.8%	92.6%

1 = Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).

Maryland spectral Services

Analytical Chemistry Services

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

Project: RF-064

Project Number: 05-056 RF-64

Project Manager: James Wolf

Report Issued: 07/13/15 15:43

Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
Jessup MD, 20794

CLIENT SAMPLE ID:		1207 SUMP	1209.5 SUMP	1209 SUMP
LAB SAMPLE ID:		5062503-01	5062503-02	5062503-03
SAMPLE DATE:		06/25/15	06/25/15	06/25/15
RECEIVED DATE:		06/25/15	06/25/15	06/25/15
MATRIX	Units	Water	Water	Water
VOLATILE ORGANICS BY EPA METHOD 8260B (GC/MS) (continued)				
Toluene-d8	[surr]	98.9%	98.3%	99.4%
4-Bromofluorobenzene	[surr]	95.1%	95.7%	96.3%
GASOLINE RANGE ORGANICS BY EPA 8015B (Water)				
Gasoline-Range Organics	ug/L	<100	<100	<100
a,a,a-Trifluorotoluene	[surr]	100%	100%	100%
DIESEL RANGE ORGANICS BY EPA 3510/8015B (Water)				
Diesel-Range Organics	mg/L	<0.21	**0.31**	<0.21
o-Terphenyl	[surr]	93.7%	76.5%	83.0%

1 = Detected but below the reporting limit; therefore, result is an estimated concentration (CLP J-Flag).

CHAIN-OF-CUSTODY RECORD

Maryland Spectral Services, Inc.
1500 Caton Center Drive, Suite G
Baltimore, MD 21227
410-247-7600 • Fax 410-247-7802
labman@mdspectral.com

Matrix Codes: NW (non-potable water) PW (potable water)

Company Name: AEL
Project Name: 05-056 RF64
Sampler(s): R. Sunny
Project Manager: J. Wolf
Project ID: 05-056 RF64
P.O. Number:

Field Sample ID	Date	Time	Water	Soil	Other	No. of Containers	VOCs for 8260	TPH DRO/GRO 8015	Preservative: 1+1 HCl, H_2SO_4, Methanol, $Na_2S_2O_3$, $NaHCO_3$	Field pH, Residual Chlorine, QC Request, Trip Blank, Field Blank	MSS Lab ID
1207 Sump	6/25/15	10:34	X			3	X	X	1:1 HCL		5062503-01
1209.5 Sump	6/25/15	10:40	X			3	X	X			-02
1209 Sump	6/25/15	10:50	X			3	X	X			-03

Analysis Requested

Relinquished by: (Signature) — Date/Time: 13:11 — (Printed): Robert Sunny
Received by: (Signature) — (Printed): Andrew Baltzhee
Relinquished by: (Signature) — Date/Time: 6/25/15 — (Printed): Robert Sunny
Received by Lab: (Signature) — (Printed): Andrew Boecker
Relinquished by: (Signature) — Date/Time: — (Printed):
Received by: (Signature) — Date/Time: — (Printed):

Delivery Method: ☐ Courier ☐ Client ☐ UPS ☐ Fedex ☐ USPS ☐ Other:

Special Instructions/QC Requirements & Comments: Send J Wolf R Sunny

Turn Around Time: ☐ Normal (7 day) ☐ 5 day ☐ 4 day ☐ 3 day ☐ Rush (2 day) ☐ Next Day ☐ Other:___ ☐ Specific Due Date:___

Lab Use: Temp: 10.8 °C ☒ Received on Ice ☒ Received same day ☐ Preservation Appropriate

Sample Disposal: ☐ Return to Client ☒ Disposal by lab ☐ Archive for ____ days

M55-F001-002

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

08 July 2015

James Wolf
Advantage Environmental Consultants, LLC
8610 Baltimore Washington Blvd, Suite 217
Jessup, MD 20794
RE: RF-064

Enclosed are the results of analyses for samples received by the laboratory on 06/25/15 13:09.

A more detailed report format is available upon request, which lists the accreditation status for all analytical methods performed.

Please visit our website at www.mdspectral.com for a complete listing of our accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
Staff Chemist

Maryland spectral Services

Analytical Chemistry Services

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: RF-064
Project Number: 05-056 RF-64
Project Manager: James Wolf

Reported:
07/08/15 13:24

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
IAQ-AA		5062505-01	Vapor	06/25/15 10:00	06/25/15 13:09
IAQ-I		5062505-02	Vapor	06/25/15 10:03	06/25/15 13:09

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, Staff Chemist

As a NELAP accredited laboratory, MSS certifies that all applicable test results meet NELAC requirements.

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: RF-064

Project Number: 05-056 RF-64
Project Manager: James Wolf

Reported:
07/08/15 13:24

IAQ-AA

5062505-01 (Vapor)
Sample Date: 06/25/15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD TO-15 (GC/MS)									
Acetone	**14.2**		ug/m³	2.40	2.40	1	07/06/15	07/06/15 13:02	CMK
Benzene	ND		ug/m³	0.64	0.16	1	07/06/15	07/06/15 13:02	CMK
Benzyl chloride	ND		ug/m³	1.00	0.25	1	07/06/15	07/06/15 13:02	CMK
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	07/06/15	07/06/15 13:02	CMK
Bromoform	ND		ug/m³	2.10	0.53	1	07/06/15	07/06/15 13:02	CMK
Bromomethane	ND		ug/m³	0.78	0.20	1	07/06/15	07/06/15 13:02	CMK
1,3-Butadiene	ND		ug/m³	0.44	0.11	1	07/06/15	07/06/15 13:02	CMK
Carbon disulfide	ND		ug/m³	0.62	0.16	1	07/06/15	07/06/15 13:02	CMK
Carbon tetrachloride	ND		ug/m³	1.30	0.33	1	07/06/15	07/06/15 13:02	CMK
Chlorobenzene	ND		ug/m³	0.92	0.23	1	07/06/15	07/06/15 13:02	CMK
Chloroethane	ND		ug/m³	0.53	0.27	1	07/06/15	07/06/15 13:02	CMK
Chloroform	ND		ug/m³	0.97	0.24	1	07/06/15	07/06/15 13:02	CMK
Chloromethane	**1.01**		ug/m³	0.41	0.10	1	07/06/15	07/06/15 13:02	CMK
3-Chloropropene	ND		ug/m³	0.63	0.16	1	07/06/15	07/06/15 13:02	CMK
Cyclohexane	ND		ug/m³	0.69	0.17	1	07/06/15	07/06/15 13:02	CMK
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	07/06/15	07/06/15 13:02	CMK
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	07/06/15	07/06/15 13:02	CMK
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	07/06/15	07/06/15 13:02	CMK
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	07/06/15	07/06/15 13:02	CMK
1,4-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	07/06/15	07/06/15 13:02	CMK
Dichlorodifluoromethane	**2.18**		ug/m³	0.99	0.99	1	07/06/15	07/06/15 13:02	CMK
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	07/06/15	07/06/15 13:02	CMK
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	07/06/15	07/06/15 13:02	CMK
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	07/06/15	07/06/15 13:02	CMK
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	07/06/15	07/06/15 13:02	CMK
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	07/06/15	07/06/15 13:02	CMK
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	07/06/15	07/06/15 13:02	CMK
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	07/06/15	07/06/15 13:02	CMK
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	07/06/15	07/06/15 13:02	CMK
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	07/06/15	07/06/15 13:02	CMK
Ethyl acetate	ND		ug/m³	0.72	0.72	1	07/06/15	07/06/15 13:02	CMK
Ethylbenzene	ND		ug/m³	0.87	0.22	1	07/06/15	07/06/15 13:02	CMK
4-Ethyltoluene	ND		ug/m³	0.98	0.25	1	07/06/15	07/06/15 13:02	CMK
Freon 113	ND		ug/m³	1.50	0.38	1	07/06/15	07/06/15 13:02	CMK

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, Staff Chemist

Maryland spectral Services

Analytical Chemistry Services

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: RF-064

Project Number: 05-056 RF-64
Project Manager: James Wolf

Reported:
07/08/15 13:24

IAQ-AA

5062505-01 (Vapor)
Sample Date: 06/25/15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD TO-15 (GC/MS) (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	07/06/15	07/06/15 13:02	CMK
n-Heptane	ND		ug/m³	0.82	0.21	1	07/06/15	07/06/15 13:02	CMK
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	07/06/15	07/06/15 13:02	CMK
Hexane	ND		ug/m³	14.0	14.0	1	07/06/15	07/06/15 13:02	CMK
2-Hexanone	ND		ug/m³	0.82	0.15	1	07/06/15	07/06/15 13:02	CMK
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	07/06/15	07/06/15 13:02	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	07/06/15	07/06/15 13:02	CMK
Methylene chloride	ND		ug/m³	14.0	14.0	1	07/06/15	07/06/15 13:02	CMK
Methyl ethyl ketone (2-Butanone)	ND		ug/m³	0.59	0.34	1	07/06/15	07/06/15 13:02	CMK
Methyl isobutyl ketone	ND		ug/m³	0.82	0.21	1	07/06/15	07/06/15 13:02	CMK
Naphthalene	ND		ug/m³	1.10	0.35	1	07/06/15	07/06/15 13:02	CMK
Propene	ND		ug/m³	0.34	0.34	1	07/06/15	07/06/15 13:02	CMK
n-Propylbenzene	ND		ug/m³	0.98	0.40	1	07/06/15	07/06/15 13:02	CMK
Styrene	ND		ug/m³	0.85	0.15	1	07/06/15	07/06/15 13:02	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	07/06/15	07/06/15 13:02	CMK
Tetrachloroethene	ND		ug/m³	1.40	0.35	1	07/06/15	07/06/15 13:02	CMK
Tetrahydrofuran	ND		ug/m³	0.59	0.15	1	07/06/15	07/06/15 13:02	CMK
Toluene	**1.32**		ug/m³	0.75	0.19	1	07/06/15	07/06/15 13:02	CMK
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	07/06/15	07/06/15 13:02	CMK
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	07/06/15	07/06/15 13:02	CMK
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	07/06/15	07/06/15 13:02	CMK
Trichloroethene	ND		ug/m³	1.10	0.28	1	07/06/15	07/06/15 13:02	CMK
Trichlorofluoromethane (Freon 11)	**1.52**		ug/m³	1.10	0.28	1	07/06/15	07/06/15 13:02	CMK
1,2,4-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	07/06/15	07/06/15 13:02	CMK
1,3,5-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	07/06/15	07/06/15 13:02	CMK
2,2,4-Trimethylpentane	ND		ug/m³	0.93	0.23	1	07/06/15	07/06/15 13:02	CMK
Vinyl acetate	ND		ug/m³	0.70	0.70	1	07/06/15	07/06/15 13:02	CMK
Vinyl bromide	ND		ug/m³	0.87	0.22	1	07/06/15	07/06/15 13:02	CMK
Vinyl chloride	ND		ug/m³	0.51	0.13	1	07/06/15	07/06/15 13:02	CMK
o-Xylene	ND		ug/m³	0.87	0.22	1	07/06/15	07/06/15 13:02	CMK
m- & p-Xylenes	ND		ug/m³	1.70	0.43	1	07/06/15	07/06/15 13:02	CMK
Surrogate: 4-Bromofluorobenzene			*73-109*	*106 %*		*07/06/15*	*07/06/15 13:02*		

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Will Brewington, Staff Chemist

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Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: RF-064

Project Number: 05-056 RF-64
Project Manager: James Wolf

Reported:
07/08/15 13:24

IAQ-I

5062505-02 (Vapor)
Sample Date: 06/25/15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD TO-15 (GC/MS)									
Acetone	**55.9**		ug/m³	2.40	2.40	1	07/06/15	07/06/15 13:42	CMK
Benzene	ND		ug/m³	0.64	0.16	1	07/06/15	07/06/15 13:42	CMK
Benzyl chloride	ND		ug/m³	1.00	0.25	1	07/06/15	07/06/15 13:42	CMK
Bromodichloromethane	ND		ug/m³	1.30	0.33	1	07/06/15	07/06/15 13:42	CMK
Bromoform	ND		ug/m³	2.10	0.53	1	07/06/15	07/06/15 13:42	CMK
Bromomethane	ND		ug/m³	0.78	0.20	1	07/06/15	07/06/15 13:42	CMK
1,3-Butadiene	ND		ug/m³	0.44	0.11	1	07/06/15	07/06/15 13:42	CMK
Carbon disulfide	ND		ug/m³	0.62	0.16	1	07/06/15	07/06/15 13:42	CMK
Carbon tetrachloride	ND		ug/m³	1.30	0.33	1	07/06/15	07/06/15 13:42	CMK
Chlorobenzene	ND		ug/m³	0.92	0.23	1	07/06/15	07/06/15 13:42	CMK
Chloroethane	ND		ug/m³	0.53	0.27	1	07/06/15	07/06/15 13:42	CMK
Chloroform	ND		ug/m³	0.97	0.24	1	07/06/15	07/06/15 13:42	CMK
Chloromethane	**1.20**		ug/m³	0.41	0.10	1	07/06/15	07/06/15 13:42	CMK
3-Chloropropene	ND		ug/m³	0.63	0.16	1	07/06/15	07/06/15 13:42	CMK
Cyclohexane	ND		ug/m³	0.69	0.17	1	07/06/15	07/06/15 13:42	CMK
Dibromochloromethane	ND		ug/m³	1.30	0.33	1	07/06/15	07/06/15 13:42	CMK
1,2-Dibromoethane (EDB)	ND		ug/m³	1.40	0.35	1	07/06/15	07/06/15 13:42	CMK
1,2-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	07/06/15	07/06/15 13:42	CMK
1,3-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	07/06/15	07/06/15 13:42	CMK
1,4-Dichlorobenzene	ND		ug/m³	1.20	0.30	1	07/06/15	07/06/15 13:42	CMK
Dichlorodifluoromethane	**2.27**		ug/m³	0.99	0.99	1	07/06/15	07/06/15 13:42	CMK
1,1-Dichloroethane	ND		ug/m³	0.81	0.20	1	07/06/15	07/06/15 13:42	CMK
1,2-Dichloroethane	ND		ug/m³	0.81	0.20	1	07/06/15	07/06/15 13:42	CMK
1,1-Dichloroethene	ND		ug/m³	0.79	0.20	1	07/06/15	07/06/15 13:42	CMK
cis-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	07/06/15	07/06/15 13:42	CMK
trans-1,2-Dichloroethene	ND		ug/m³	0.79	0.20	1	07/06/15	07/06/15 13:42	CMK
1,2-Dichloropropane	ND		ug/m³	0.92	0.23	1	07/06/15	07/06/15 13:42	CMK
cis-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	07/06/15	07/06/15 13:42	CMK
trans-1,3-Dichloropropene	ND		ug/m³	0.91	0.23	1	07/06/15	07/06/15 13:42	CMK
1,4-Dioxane	ND		ug/m³	0.72	0.18	1	07/06/15	07/06/15 13:42	CMK
Ethyl acetate	**3.50**		ug/m³	0.72	0.72	1	07/06/15	07/06/15 13:42	CMK
Ethylbenzene	ND		ug/m³	0.87	0.22	1	07/06/15	07/06/15 13:42	CMK
4-Ethyltoluene	ND		ug/m³	0.98	0.25	1	07/06/15	07/06/15 13:42	CMK
Freon 113	ND		ug/m³	1.50	0.38	1	07/06/15	07/06/15 13:42	CMK

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Will Brewington, Staff Chemist

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Maryland spectral Services

Analytical Chemistry Services

Analytical Results

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Project: RF-064

Project Number: 05-056 RF-64
Project Manager: James Wolf

Reported:
07/08/15 13:24

IAQ-I

5062505-02 (Vapor)
Sample Date: 06/25/15

Analyte	Result	Notes	Units	Reporting Limit (MRL)	Quantitation Limit (LOQ)	Dilution	Prepared	Analyzed	Analyst
VOLATILE ORGANICS BY EPA METHOD TO-15 (GC/MS) (continued)									
Freon 114	ND		ug/m³	1.40	1.40	1	07/06/15	07/06/15 13:42	CMK
n-Heptane	ND		ug/m³	0.82	0.21	1	07/06/15	07/06/15 13:42	CMK
Hexachlorobutadiene	ND		ug/m³	2.10	2.10	1	07/06/15	07/06/15 13:42	CMK
Hexane	ND		ug/m³	14.0	14.0	1	07/06/15	07/06/15 13:42	CMK
2-Hexanone	ND		ug/m³	0.82	0.15	1	07/06/15	07/06/15 13:42	CMK
Isopropylbenzene (Cumene)	ND		ug/m³	1.10	0.40	1	07/06/15	07/06/15 13:42	CMK
Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.72	0.21	1	07/06/15	07/06/15 13:42	CMK
Methylene chloride	ND		ug/m³	14.0	14.0	1	07/06/15	07/06/15 13:42	CMK
Methyl ethyl ketone (2-Butanone)	**1.36**		ug/m³	0.59	0.34	1	07/06/15	07/06/15 13:42	CMK
Methyl isobutyl ketone	ND		ug/m³	0.82	0.21	1	07/06/15	07/06/15 13:42	CMK
Naphthalene	**1.42**		ug/m³	1.10	0.35	1	07/06/15	07/06/15 13:42	CMK
Propene	ND		ug/m³	0.34	0.34	1	07/06/15	07/06/15 13:42	CMK
n-Propylbenzene	ND		ug/m³	0.98	0.40	1	07/06/15	07/06/15 13:42	CMK
Styrene	ND		ug/m³	0.85	0.15	1	07/06/15	07/06/15 13:42	CMK
1,1,2,2-Tetrachloroethane	ND		ug/m³	1.40	0.35	1	07/06/15	07/06/15 13:42	CMK
Tetrachloroethene	ND		ug/m³	1.40	0.35	1	07/06/15	07/06/15 13:42	CMK
Tetrahydrofuran	ND		ug/m³	0.59	0.15	1	07/06/15	07/06/15 13:42	CMK
Toluene	**1.51**		ug/m³	0.75	0.19	1	07/06/15	07/06/15 13:42	CMK
1,2,4-Trichlorobenzene	ND		ug/m³	1.50	0.38	1	07/06/15	07/06/15 13:42	CMK
1,1,1-Trichloroethane	ND		ug/m³	1.10	0.28	1	07/06/15	07/06/15 13:42	CMK
1,1,2-Trichloroethane	ND		ug/m³	1.10	0.28	1	07/06/15	07/06/15 13:42	CMK
Trichloroethene	ND		ug/m³	1.10	0.28	1	07/06/15	07/06/15 13:42	CMK
Trichlorofluoromethane (Freon 11)	**2.87**		ug/m³	1.10	0.28	1	07/06/15	07/06/15 13:42	CMK
1,2,4-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	07/06/15	07/06/15 13:42	CMK
1,3,5-Trimethylbenzene	ND		ug/m³	0.98	0.25	1	07/06/15	07/06/15 13:42	CMK
2,2,4-Trimethylpentane	ND		ug/m³	0.93	0.23	1	07/06/15	07/06/15 13:42	CMK
Vinyl acetate	ND		ug/m³	0.70	0.70	1	07/06/15	07/06/15 13:42	CMK
Vinyl bromide	ND		ug/m³	0.87	0.22	1	07/06/15	07/06/15 13:42	CMK
Vinyl chloride	ND		ug/m³	0.51	0.13	1	07/06/15	07/06/15 13:42	CMK
o-Xylene	ND		ug/m³	0.87	0.22	1	07/06/15	07/06/15 13:42	CMK
m- & p-Xylenes	ND		ug/m³	1.70	0.43	1	07/06/15	07/06/15 13:42	CMK
Surrogate: 4-Bromofluorobenzene			*73-109*	*105 %*	*07/06/15*		*07/06/15 13:42*		

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Will Brewington, Staff Chemist

As a NELAP accredited laboratory, MSS certifies that all applicable test results meet NELAC requirements.

RF-064

Air Analysis by TO-15

Chain of Custody

Client Contact Information	Project Manager: J. Wolf	Carrier:	1 of 1 COCs
Company: AEC	Phone:	Samplers Name(s) R. Swanger	
Address: 8610 Washington Blvd	Site Contact:		
City/State/Zip Jessup, MD 20794			
Phone:			
FAX:			
Project Name: 05-056-RF64	Analysis Turnaround Time		
Site:	Standard (Specify)		
PO #	Rush (Specify)		

Client Sample ID	Sample Date Start	Time Start (24 hr clock)	Sample Date Stop	Time Stop (24 hr clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Incoming Canister Pressure ("Hg) (Lab)	Sample Regulator ID	Can ID	Can Size (L)	TO-15 FULL LIST	TO-15 ABREVIATED LIST	Indoor / Ambient Air	Soil Gas / Subslab	Comments
IAQ-AA	6/24/15	10:00	6/25/15	10:00	30	6		S-66	132	6	X		X		5062505-01
IAQ-01	6/24/15	10:03	6/25/15	10:05	30	6		SAL	073	6	X		X		-02

Special Instructions/QC Requirements & Comments:
Email Results: R Swanger + J Wolf

Canisters Shipped by:	Date/Time:	Canisters Received by:	Date/Time:
Samples Relinquished by: R Swanger	Date/Time: 6/25/15 13:09	Received by: Andrew Boucher	Date/Time: 6/25/15 13:09
Relinquished by:	Date/Time:	Received by:	Date/Time:

TO-15 COC.xls

216-603-607

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Reported:
07/08/15 13:24

Analytical Results

Project: RF-064

Project Number: 05-056 RF-64
Project Manager: James Wolf

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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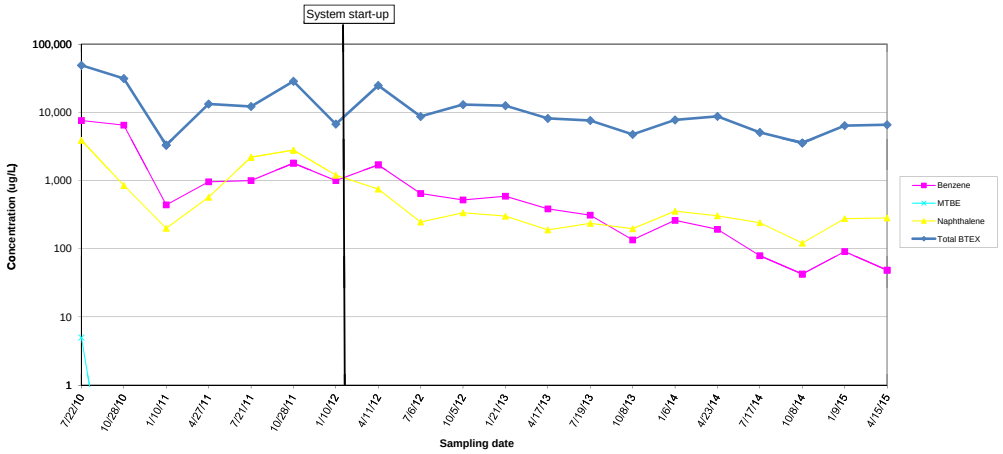
Will Brewington, Staff Chemist

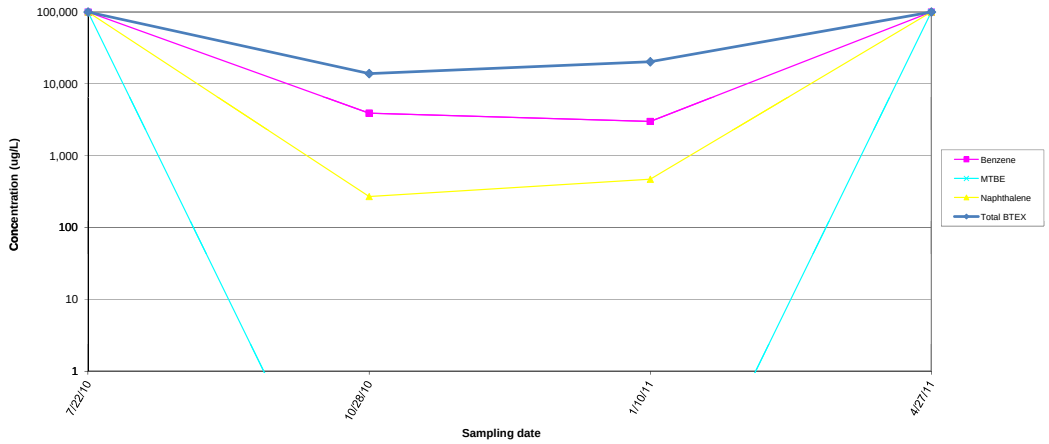
As a NELAP accredited laboratory, MSS certifies that all applicable test results meet NELAC requirements.

Attachment D

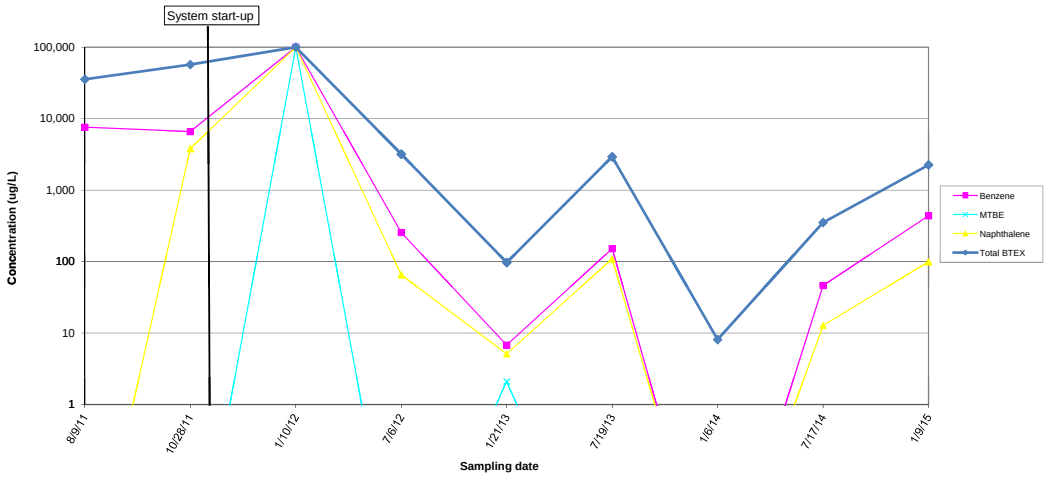
Graph 1 - MW-1 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



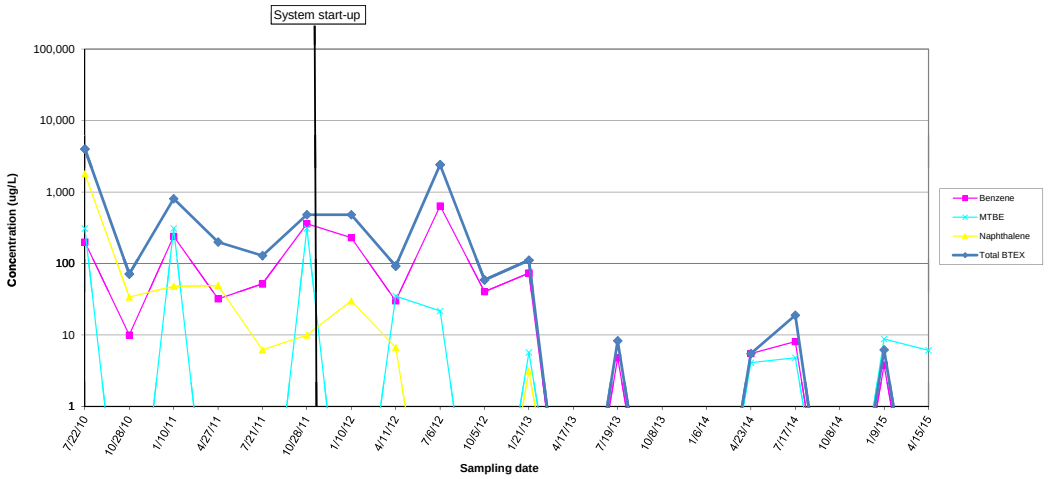
Graph 2 - MW-2 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



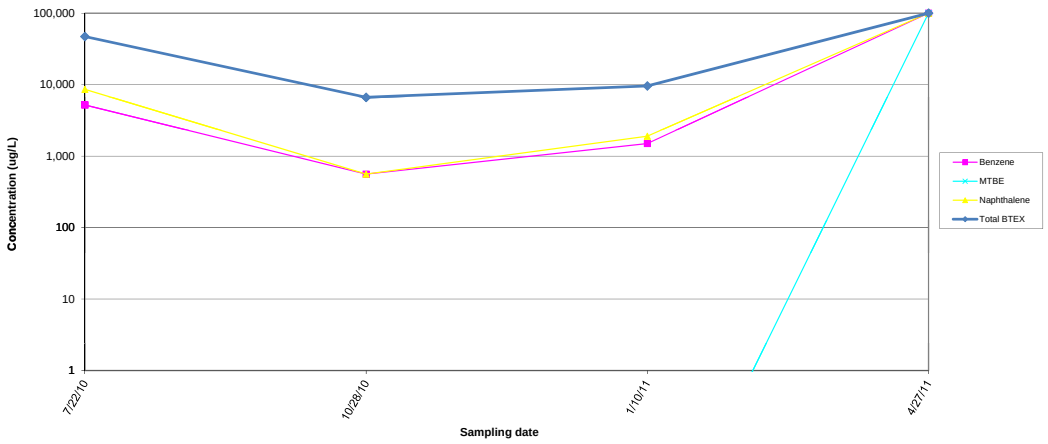
Graph 3 - MW-2R Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



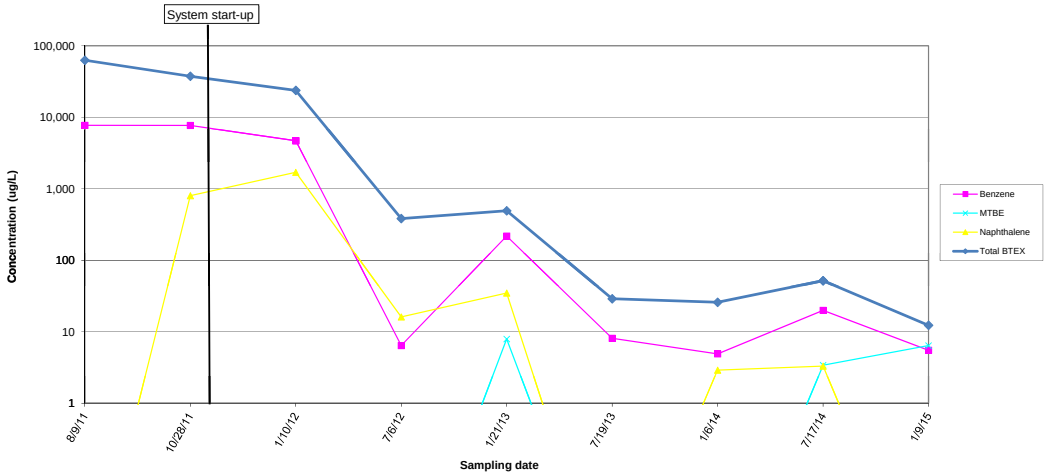
Graph 4 - MW-3 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



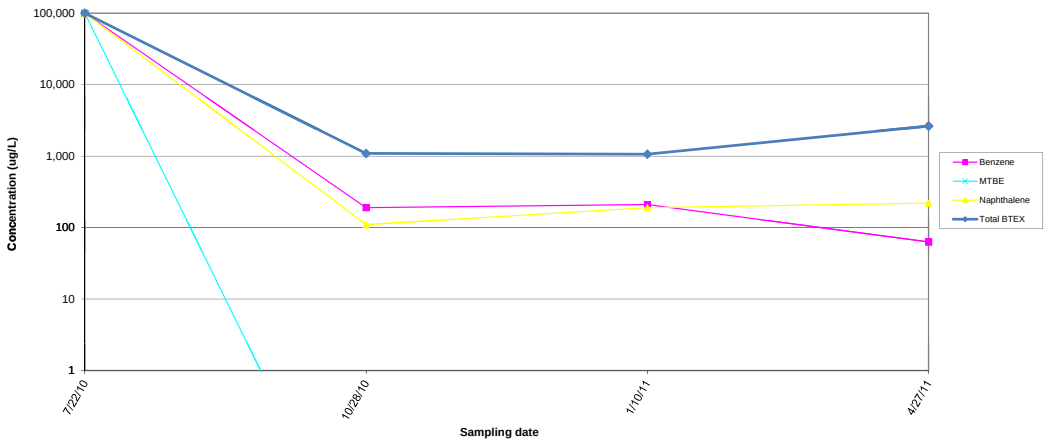
Graph 5 - MW-4 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



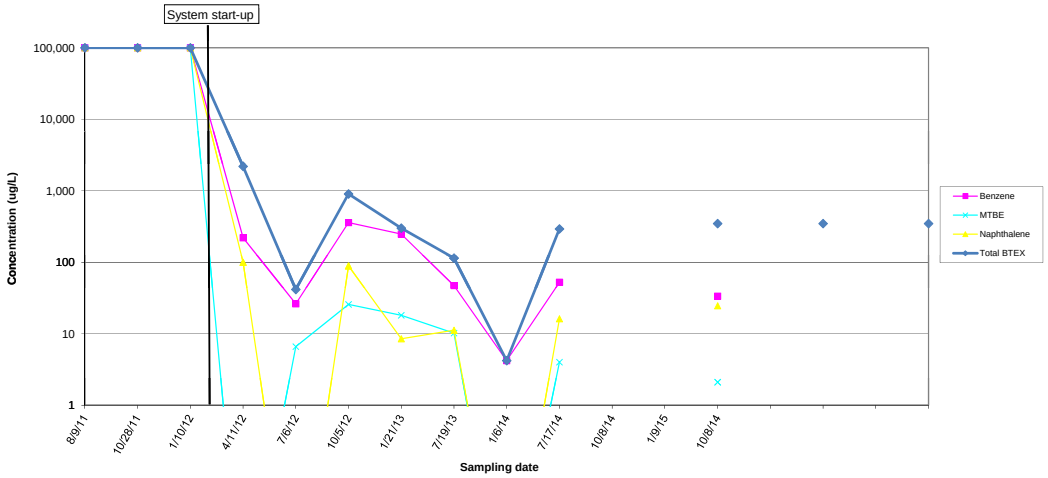
Graph 3 - MW-2R Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



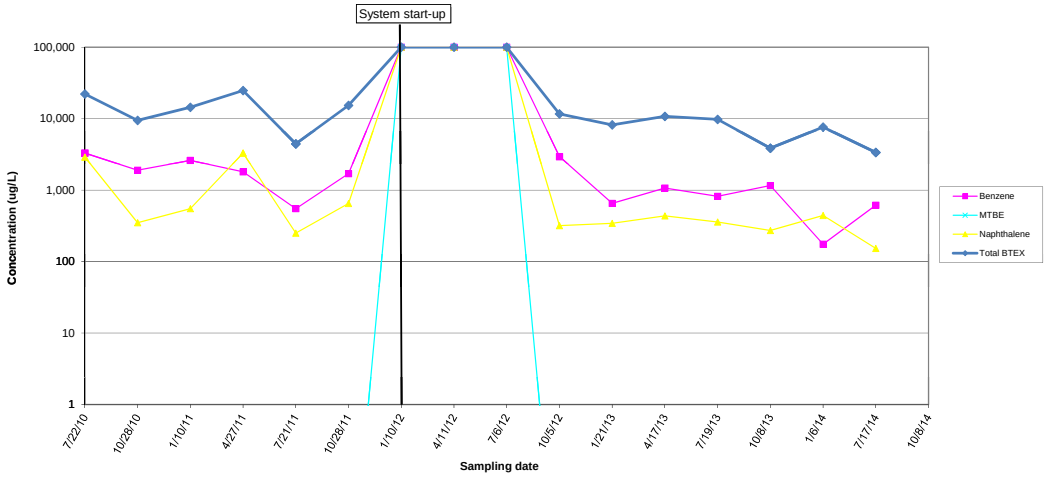
Graph 7 - MW-5 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



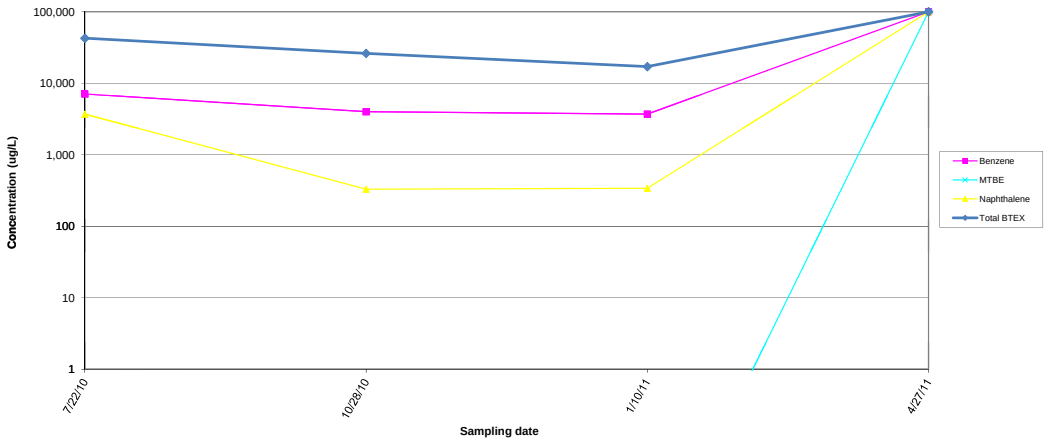
Graph 8 - MW-5R Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



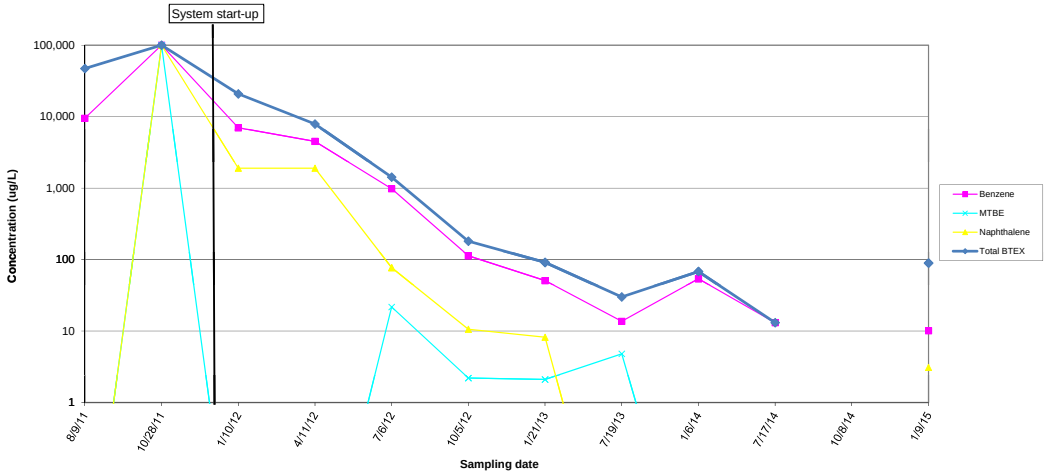
Graph 9 - MW-6 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



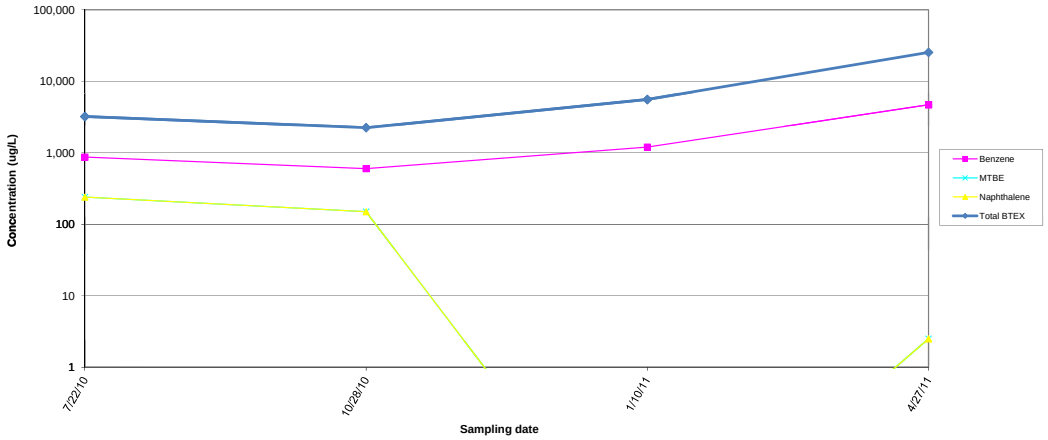
Graph 10 - MW-7 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



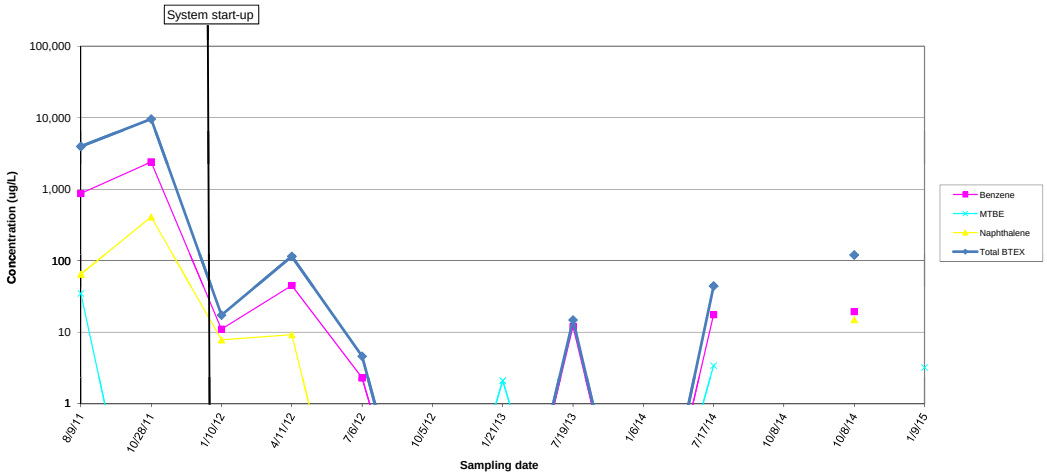
Graph 11 - MW-7R Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



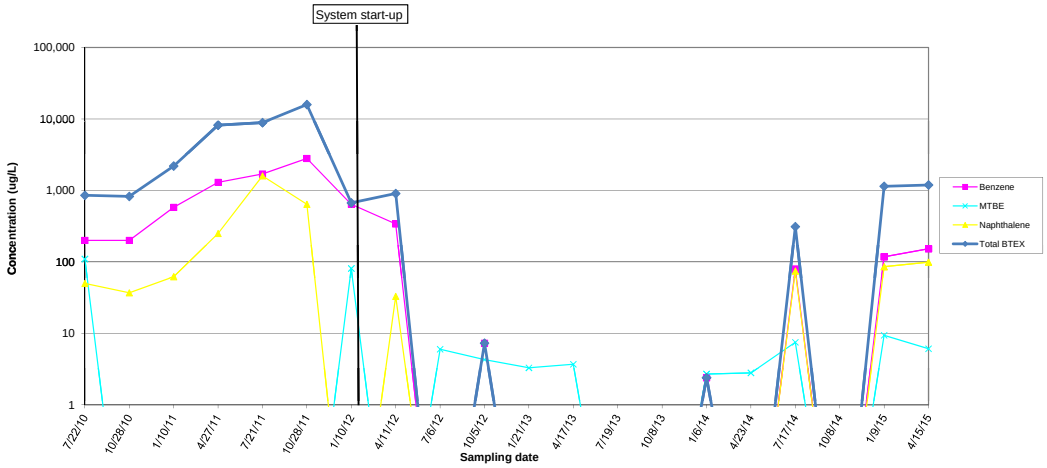
Graph 12 - MW-8 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



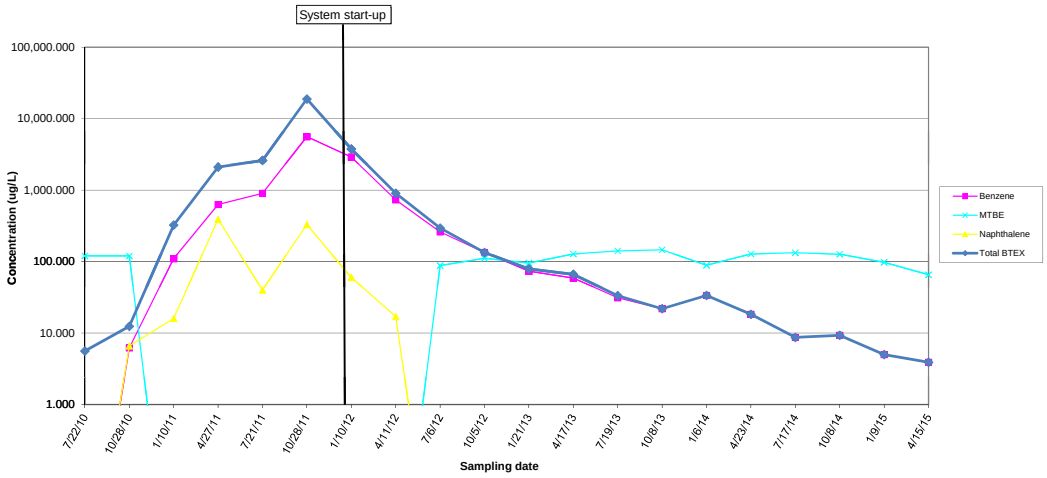
Graph 13 - MW-8R Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



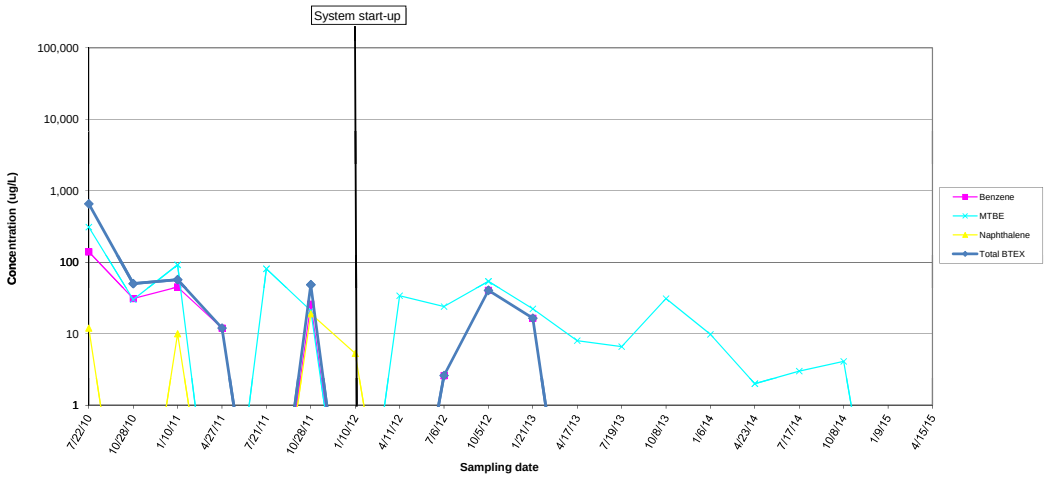
Graph 14 - MW-9 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



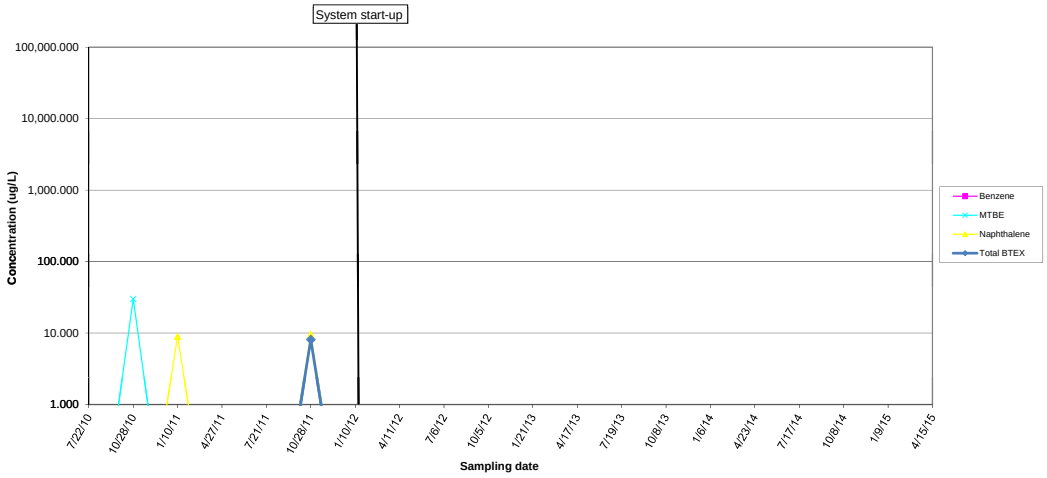
Graph 15 - MW-10 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



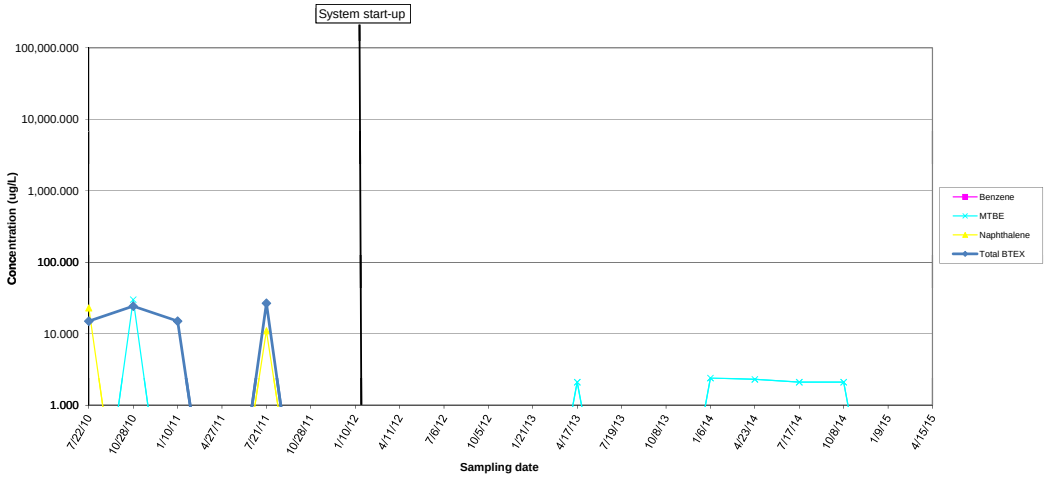
Graph 16 - MW-11 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



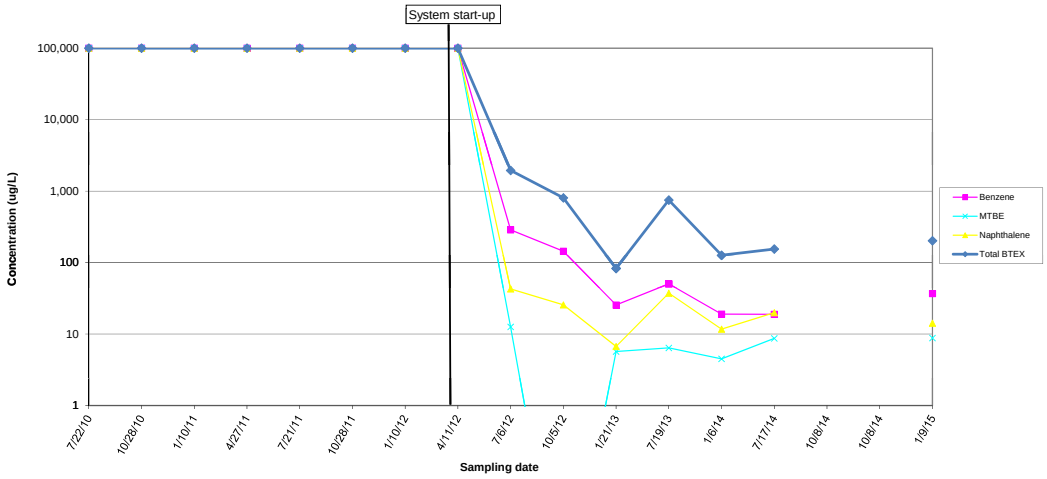
Graph 17 - MW-12 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



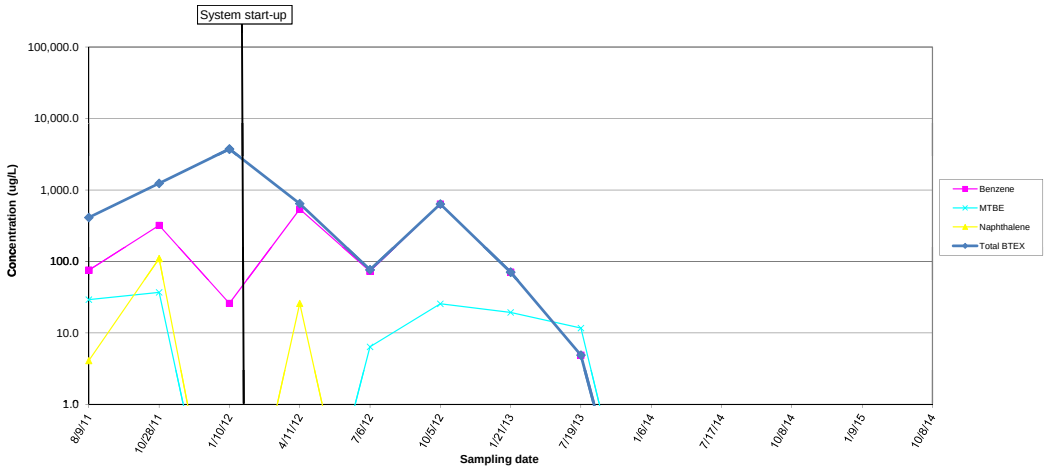
Graph 18 - MW-13 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



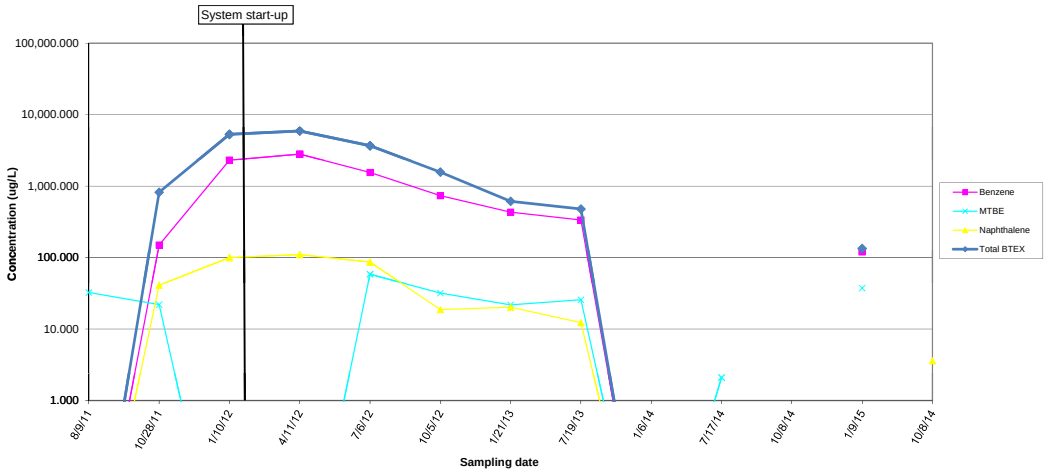
Graph 19 - MW-14 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



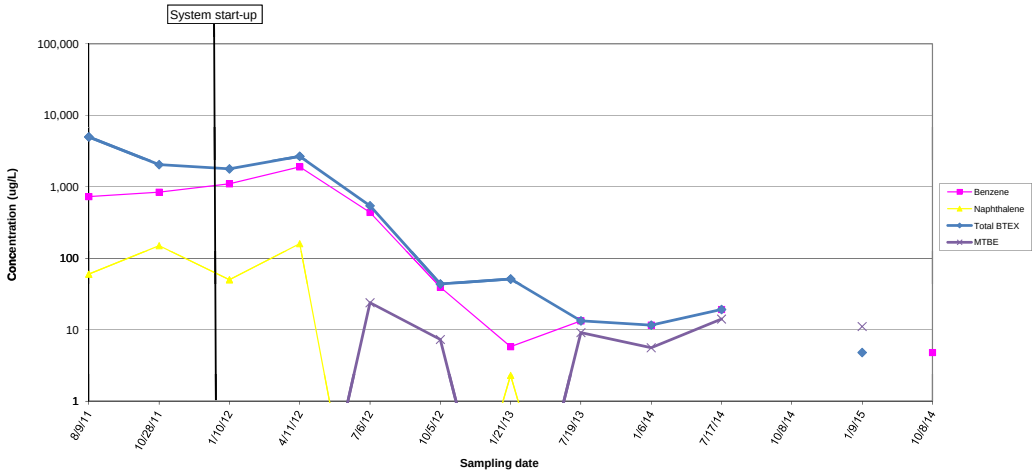
Graph 20 - MW-15 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



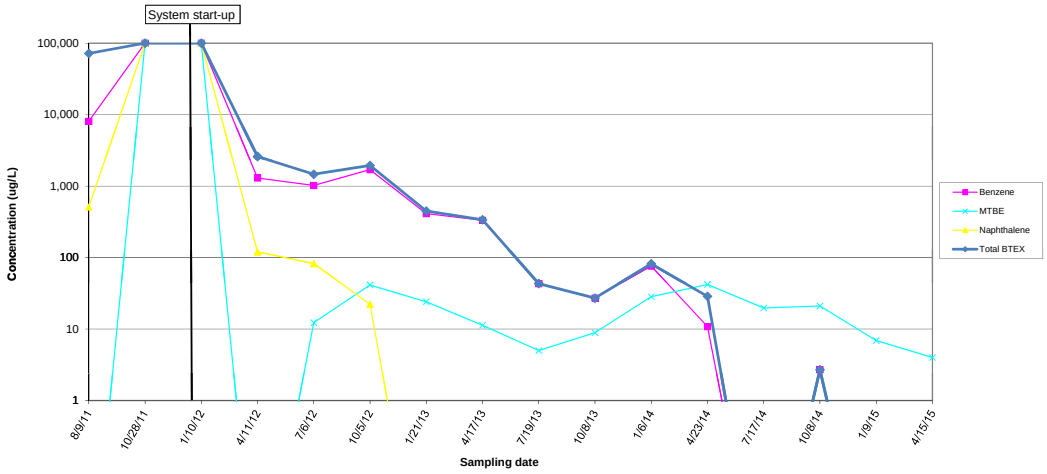
Graph 21 - MW-16 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



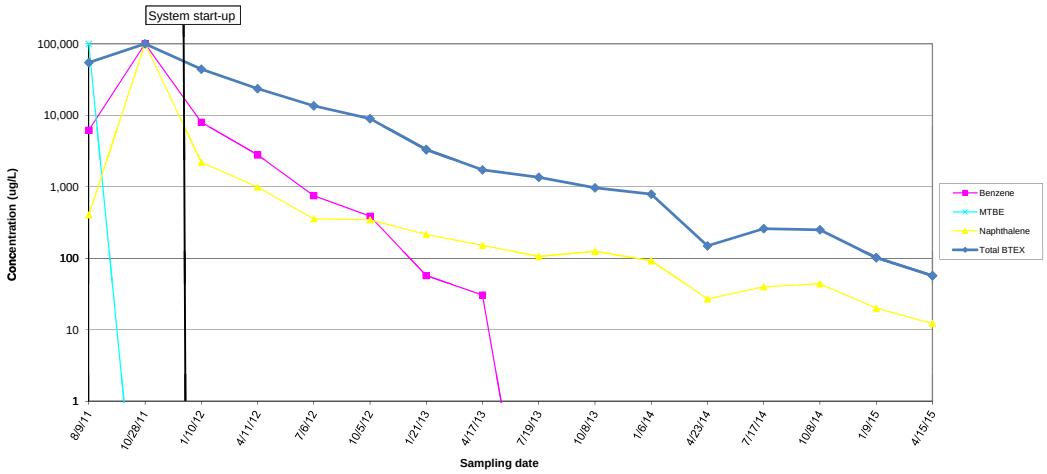
Graph 22 - MW-17 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



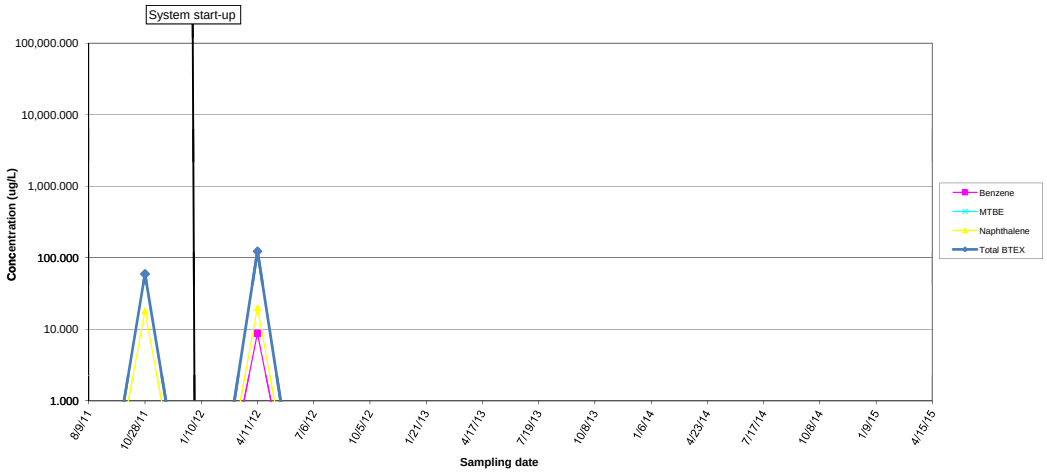
Graph 23 - MW-18 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



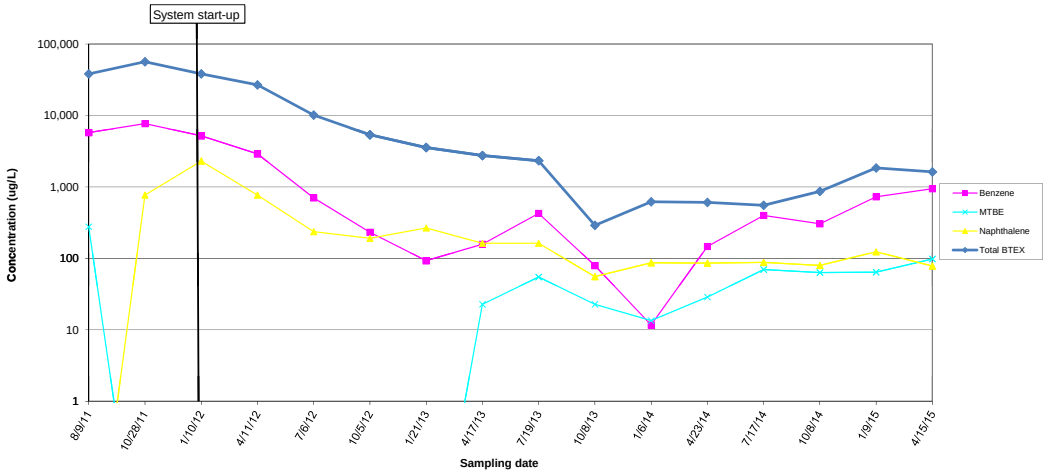
Graph 24 - MW-19 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



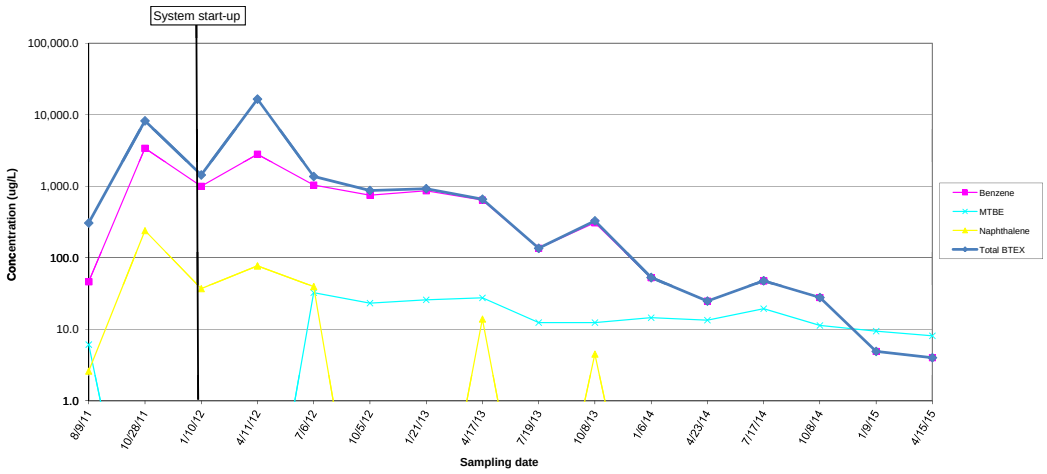
Graph 25 - MW-20 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



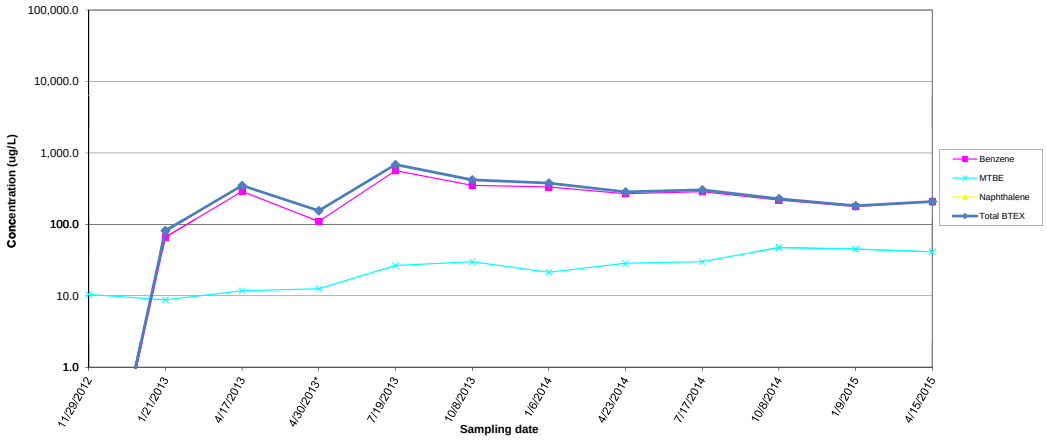
Graph 26 - MW-21 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



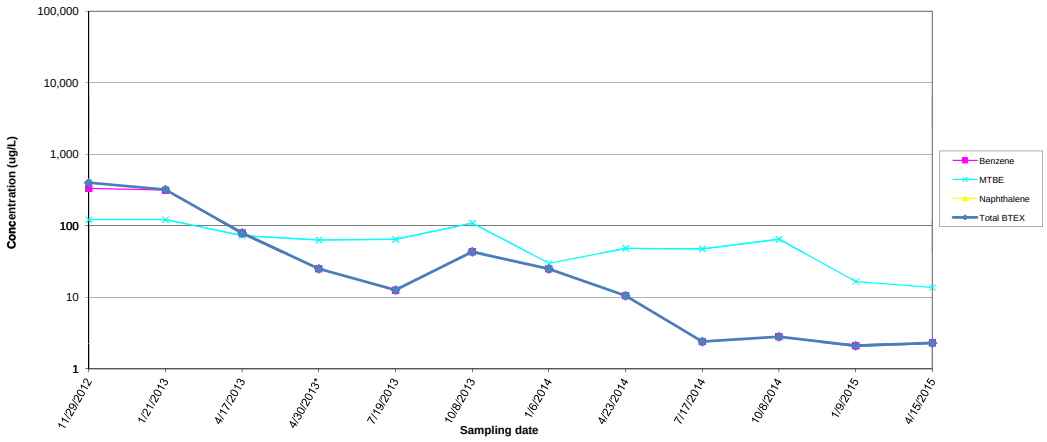
Graph 27 - MW-22 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



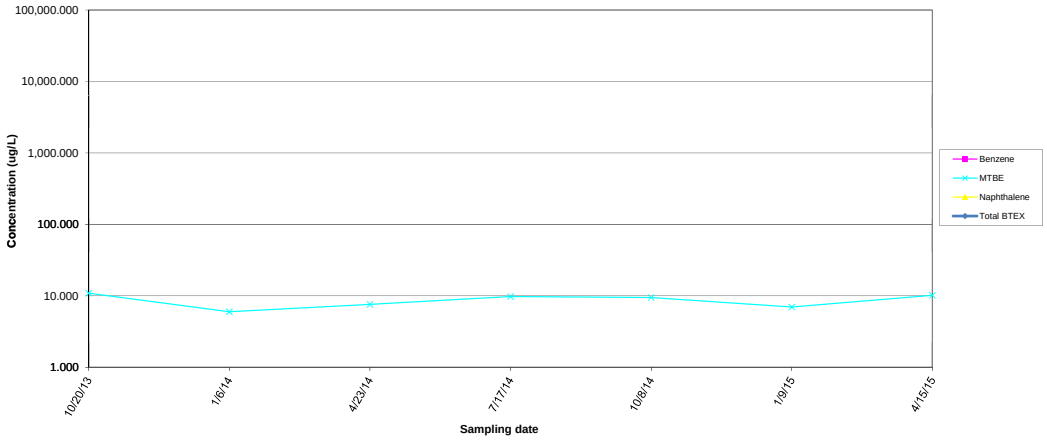
Graph 28 - MW-23 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



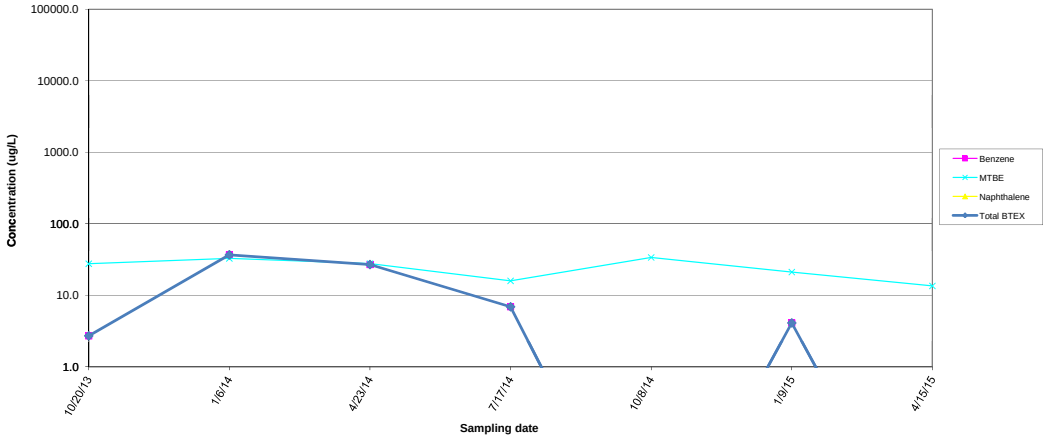
Graph 29 - MW-24 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



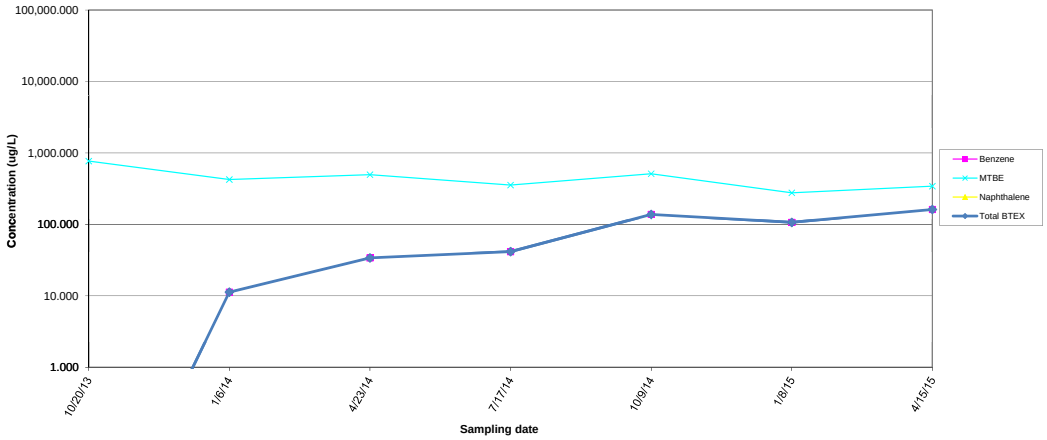
Graph 30 - MW-25 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



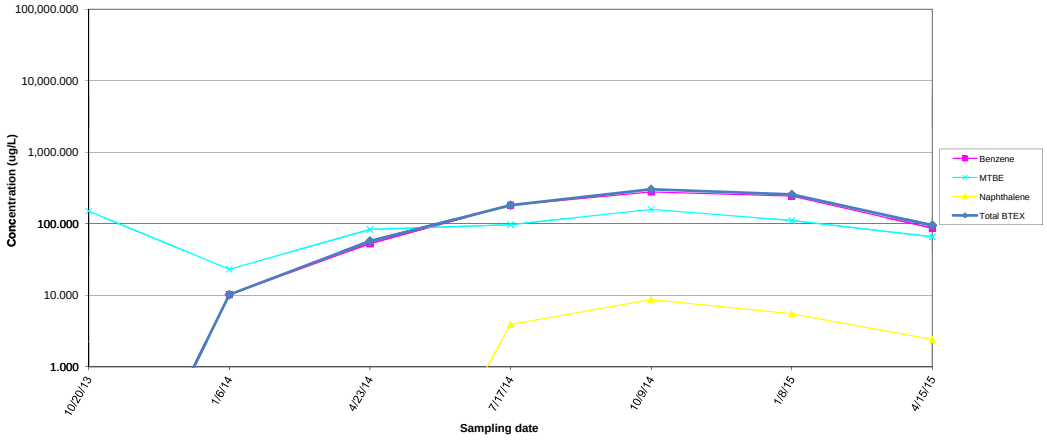
Graph 31 - MW-26 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



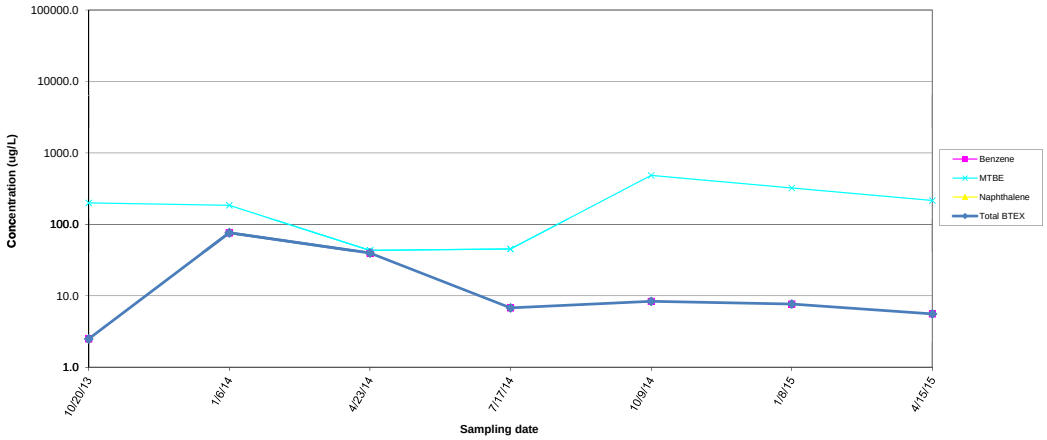
Graph 32 - MW-27 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



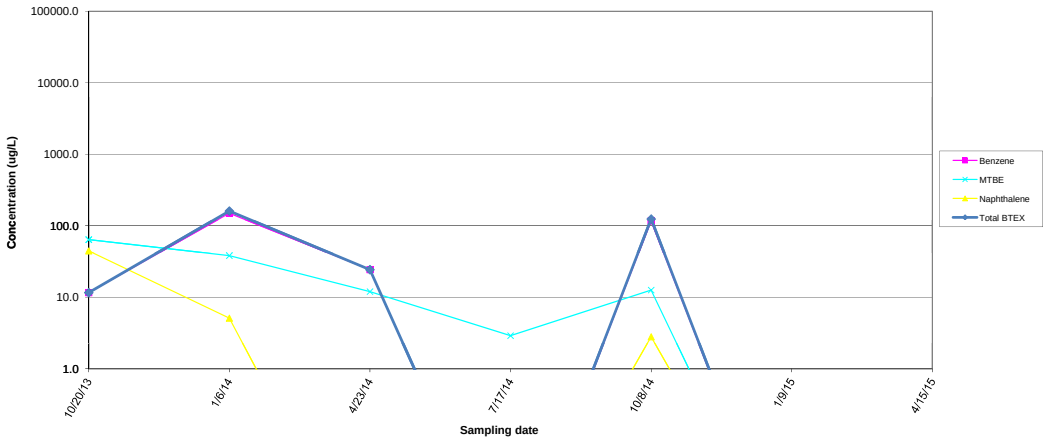
Graph 33 - MW-28 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



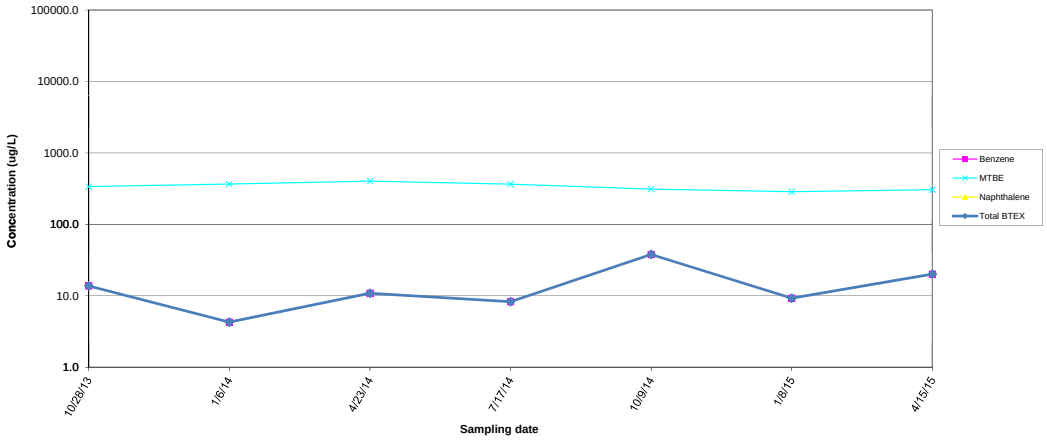
Graph 34 - MW-29 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



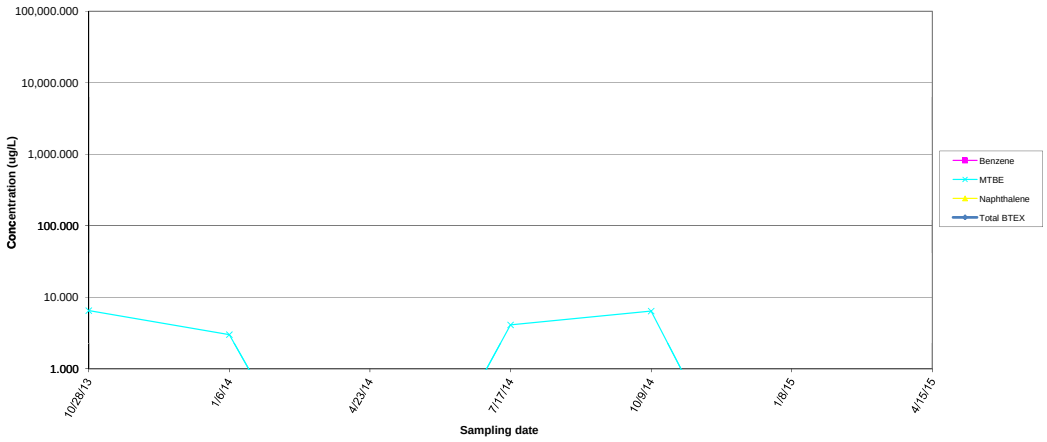
Graph 35 - MW-30 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



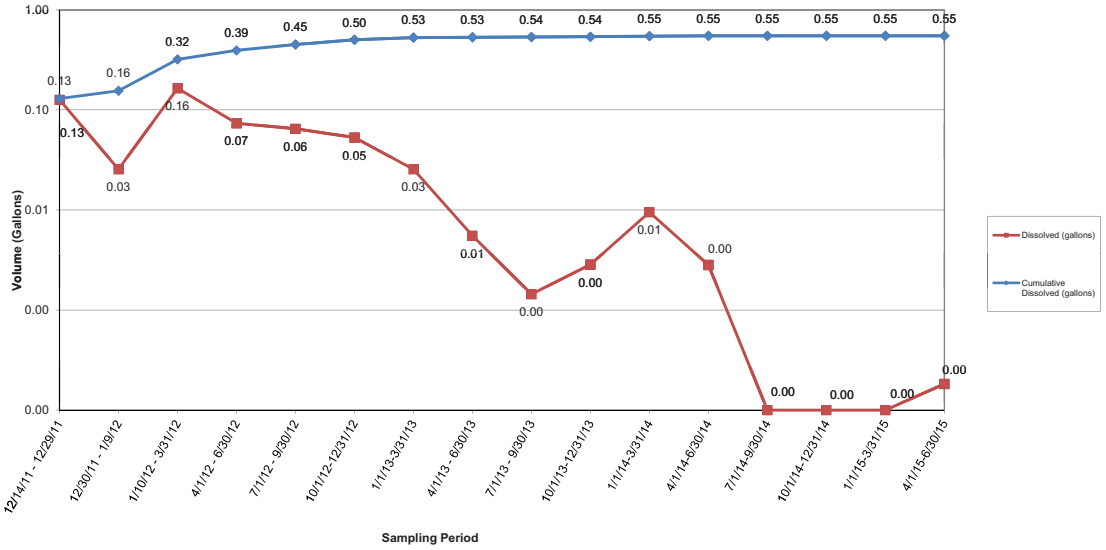
Graph 36 - CMW-1 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



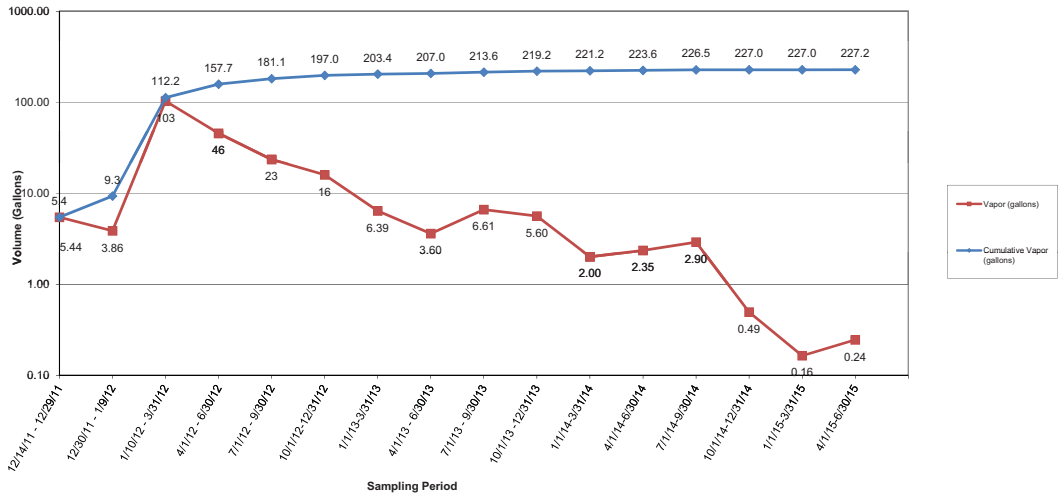
Graph 37 - CMW-2 Benzene, MTBE, Naphthalene, and Total BTEX Concentration vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



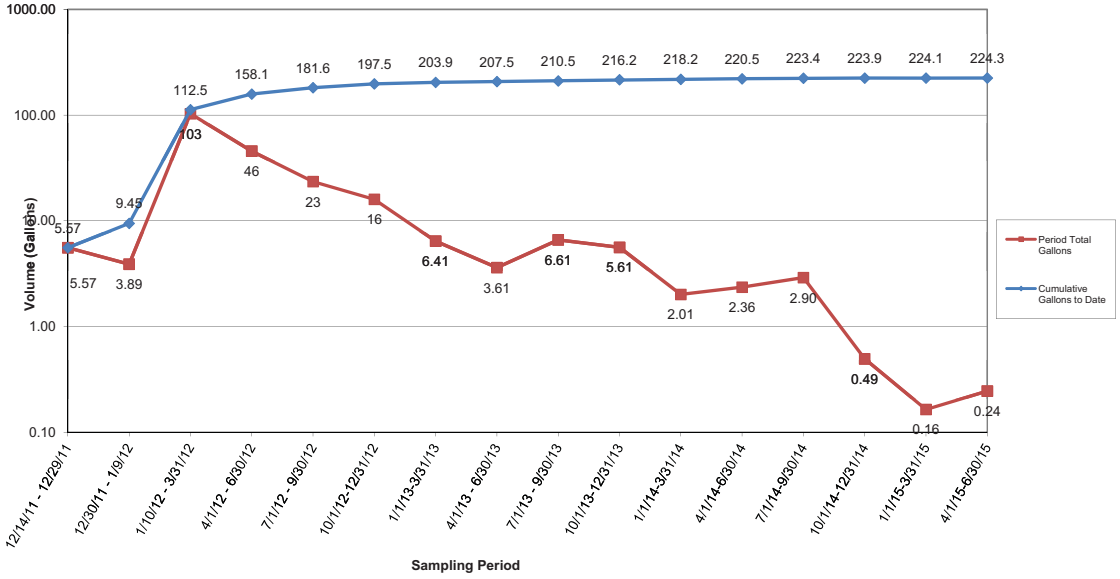
Graph 38 - Dissolved Phase Hydrocarbon Recovery (gal.) vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



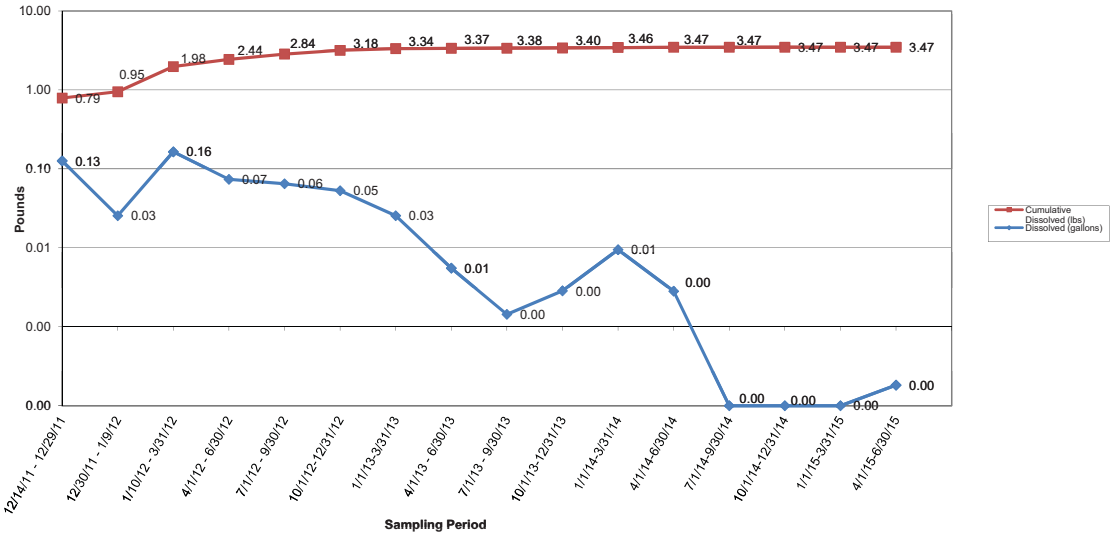
Graph 39 - Vapor Phase Hydrocarbon Recovery vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD

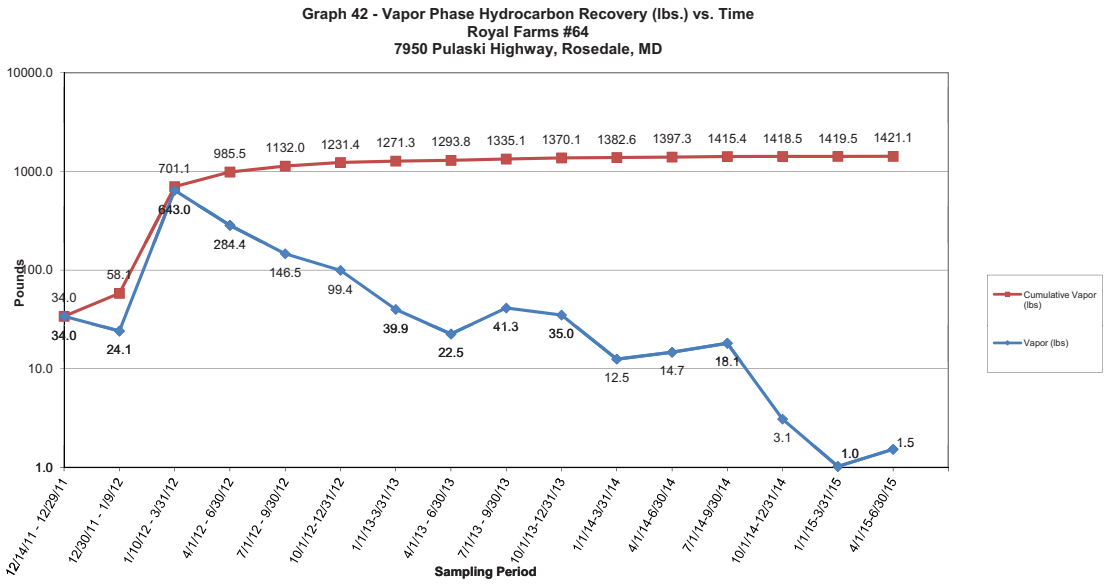


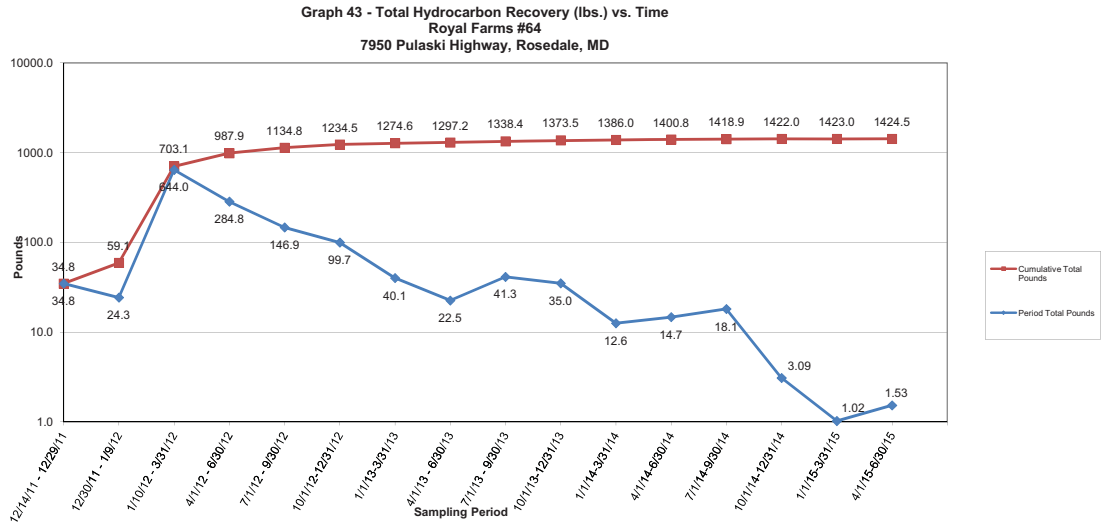
Graph 40 - Total Petroleum Hydrocarbon Recovery (gal.) vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD



Graph 41 - Dissolved Phase Hydrocarbon Recovery (lbs.) vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD




Graph 42 - Vapor Phase Hydrocarbon Recovery (lbs.) vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD
Pounds
Sampling Period
Cumulative Vapor (lbs)
Vapor (lbs)
10000.0
1000.0
100.0
10.0
1.0
12/14/11 - 12/29/11
12/30/11 - 1/9/12
1/10/12 - 3/31/12
4/1/12 - 6/30/12
7/1/12 - 9/30/12
10/1/12-12/31/12
1/1/13-3/31/13
4/1/13 - 6/30/13
7/1/13 - 9/30/13
10/1/13-12/31/13
1/1/14-3/31/14
4/1/14-6/30/14
7/1/14-9/30/14
10/1/14-12/31/14
1/1/15-3/31/15
4/1/15-6/30/15
34.0
58.1
701.1
985.5
1132.0
1231.4
1271.3
1293.8
1335.1
1370.1
1382.6
1397.3
1415.4
1418.5
1419.5
1421.1
34.0
24.1
643.0
284.4
146.5
99.4
39.9
22.5
41.3
35.0
12.5
14.7
18.1
3.1
1.0
1.5

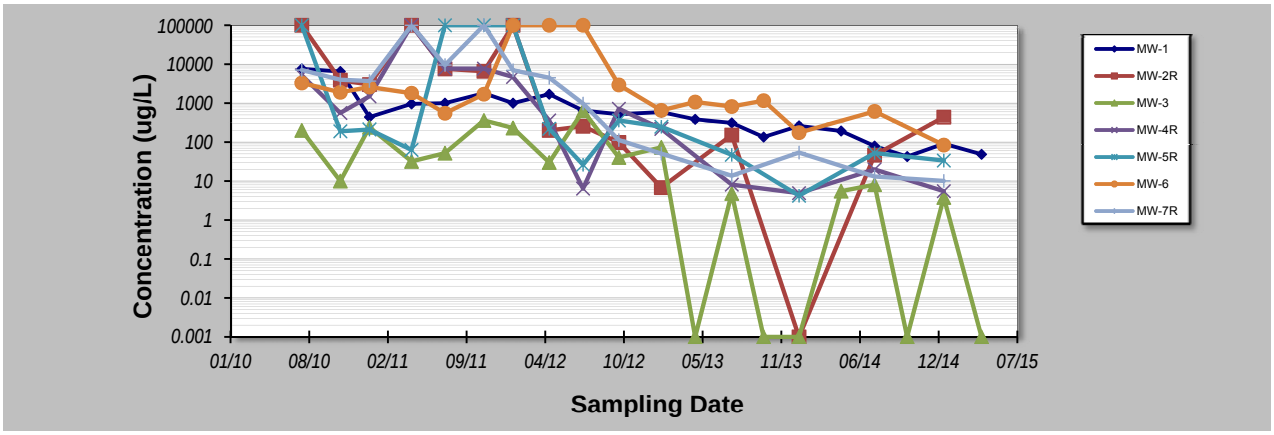

Graph 43 - Total Hydrocarbon Recovery (lbs.) vs. Time
Royal Farms #64
7950 Pulaski Highway, Rosedale, MD
Pounds
Sampling Period
Cumulative Total Pounds
Period Total Pounds
10000.0
1000.0
100.0
10.0
1.0
12/14/11 - 12/29/11
12/30/11 - 1/9/12
1/10/12 - 3/31/12
4/1/12 - 6/30/12
7/1/12 - 9/30/12
10/1/12-12/31/12
1/1/13-3/31/13
4/1/13 - 6/30/13
7/1/13 - 9/30/13
10/1/13-12/31/13
1/1/14-3/31/14
4/1/14-6/30/14
7/1/14-9/30/14
10/1/14-12/31/14
1/1/15-3/31/15
4/1/15-6/30/15
34.8
59.1
703.1
987.9
1134.8
1234.5
1274.6
1297.2
1338.4
1373.5
1386.0
1400.8
1418.9
1422.0
1423.0
1424.5
34.8
24.3
644.0
284.8
146.9
99.7
40.1
22.5
41.3
35.0
12.6
14.7
18.1
3.09
1.02
1.53

Attachment E

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-15	Job ID:	05-056
Facility Name:	RF-64	Constituent:	Benzene
Conducted By:	James Wolf	Concentration Units:	ug/L

Sampling Point ID:		MW-1	MW-2R	MW-3	MW-4R	MW-5R	MW-6	MW-7R
Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	22-Jul-10	7600	100000	200	5200	100000	3300	7100
2	28-Oct-10	6500	3900	10	560	190	1900	4000
3	10-Jan-11	440	3000	240	1500	210	2600	3700
4	27-Apr-11	960	100000	32	100000	63	1800	100000
5	21-Jul-11	1000	7600	52	7710	100000	550	9500
6	28-Oct-11	1800	6600	360	7700	100000	1700	100000
7	10-Jan-12	1000	100000	230	4700	100000	100000	7000
8	11-Apr-12	1700	200	30	360	220	100000	4500
9	6-Jul-12	646	255	639	6.4	26.2	100000	978
10	5-Oct-12	520	97.9	40.4	718	359	2940	113
11	21-Jan-13	590	6.8	73.4	218	248	652	50.8
12	17-Apr-13	385		0.001			1070	
13	19-Jul-13	311	152	4.8	8.1	47.2	820	13.7
14	8-Oct-13	135		0.001			1160	
15	6-Jan-14	261	0.001	0.001	4.9	4.2	175	53.9
16	23-Apr-14	193		5.5				
17	17-Jul-14	79.2	46.2	8.1	19.9	52.4	615	13.1
18	8-Oct-14	42.6		0.001				
19	9-Jan-15	91	437	3.8	5.5	33.6	84	10.1
20	15-Apr-15	48.6		0.001				
21								
22								
23								
24								
25								
Coefficient of Variation:		1.70	1.89	1.71	2.97	1.71	2.06	2.17
Mann-Kendall Statistic (S):		-147	-58	-90	-63	-41	-61	-72
Confidence Factor:		>99.9%	99.9%	99.8%	99.9%	97.7%	99.4%	>99.9%
Concentration Trend:		Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

4 0.001 indicates that the laboratory analytical results are below laboratory detection limits.

5 100000 indicates that a sheen was detected in the monitoring well and no sample was collected.

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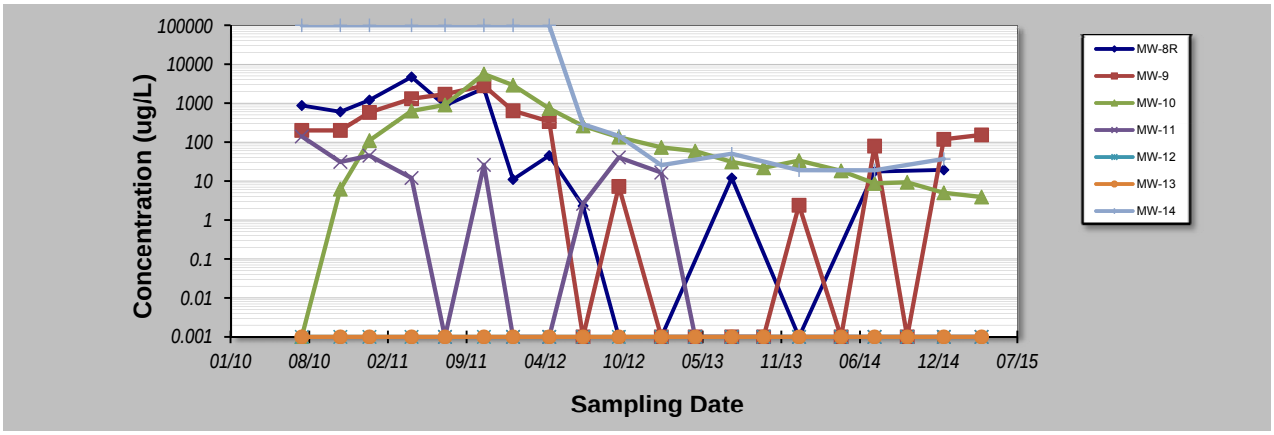
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-15	Job ID:	05-056
Facility Name:	RF-64	Constituent:	Benzene
Conducted By:	James Wolf	Concentration Units:	ug/L

Sampling Point ID:		MW-8R	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14
Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	22-Jul-10	870	200	0.001	140	0.001	0.001	100000
2	28-Oct-10	600	200	6.2	31	0.001	0.001	100000
3	10-Jan-11	1200	580	110	45	0.001	0.001	100000
4	27-Apr-11	4700	1300	630	12	0.001	0.001	100000
5	21-Jul-11	870	1700	900	0.001	0.001	0.001	100000
6	28-Oct-11	2400	2800	5600	26	0.001	0.001	100000
7	10-Jan-12	11	640	2900	0.001	0.001	0.001	100000
8	11-Apr-12	45	340	730	0.001	0.001	0.001	100000
9	6-Jul-12	2.3	0.001	260	2.6	0.001	0.001	287
10	5-Oct-12	0.001	7.3	134	40.4	0.001	0.001	144
11	21-Jan-13	0.001	0.001	73.3	16.5	0.001	0.001	25.5
12	17-Apr-13		0.001	58.8	0.001	0.001	0.001	
13	19-Jul-13	12	0.001	31.1	0.001	0.001	0.001	50.3
14	8-Oct-13		0.001	21.9	0.001	0.001	0.001	
15	6-Jan-14	0.001	2.4	33.6	0.001	0.001	0.001	19
16	23-Apr-14		0.001	18.3	0.001	0.001	0.001	
17	17-Jul-14	17.5	79.2	8.7	0.001	0.001	0.001	18.9
18	8-Oct-14		0.001	9.3	0.001	0.001	0.001	
19	9-Jan-15	19.4	118	5	0.001	0.001	0.001	36.9
20	15-Apr-15		153	3.9	0.001	0.001	0.001	
21								
22								
23								
24								
25								
Coefficient of Variation:		1.81	1.80	2.35	2.09	0.00	0.00	0.97
Mann-Kendall Statistic (S):		-45	-60	-88	-88	0	0	-69
Confidence Factor:		98.6%	97.3%	99.8%	99.8%	48.7%	48.7%	>99.9%
Concentration Trend:		Decreasing	Decreasing	Decreasing	Decreasing	Stable	Stable	Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.
4. 0.001 indicates that the laboratory analytical results are below laboratory detection limits.
5. 100000 indicates that a sheen was detected in the monitoring well and no sample was collected.

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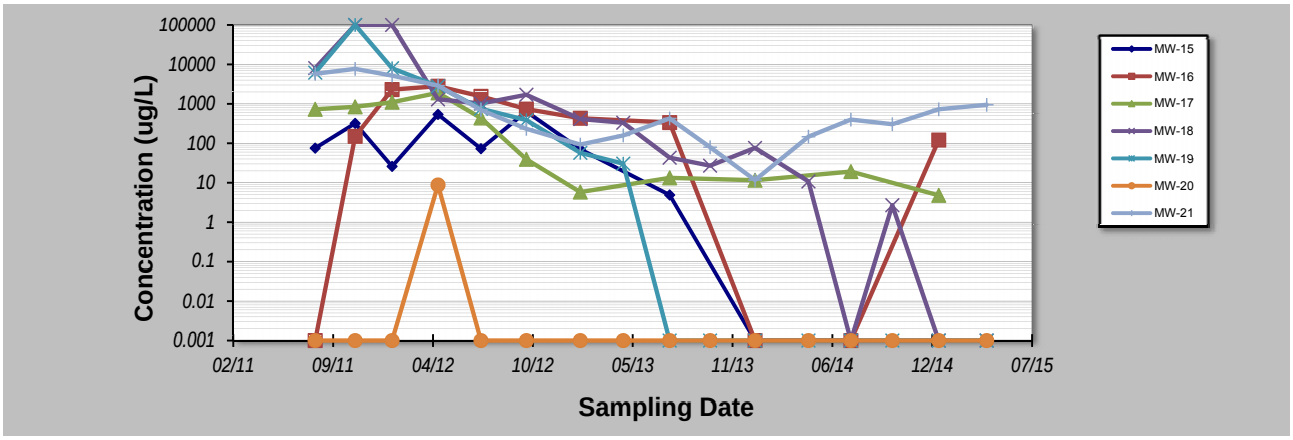
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-15	Job ID:	05-056
Facility Name:	RF-64	Constituent:	Benzene
Conducted By:	James Wolf	Concentration Units:	ug/L

Sampling Point ID:		MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21
Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	9-Aug-11	75.5	0.001	728	8050	6180	0.001	5770
2	28-Oct-11	320	150	840	100000	100000	0.001	7700
3	10-Jan-12	26	2300	1100	100000	8000	0.001	5200
4	11-Apr-12	540	2800	1900	1300	2800	8.8	2900
5	6-Jul-12	73.1	1550	438	1020	749	0.001	702
6	5-Oct-12	637	736	39.3	1700	388	0.001	232
7	21-Jan-13	70.9	432	5.8	413	57.4	0.001	93
8	17-Apr-13				332	30.5	0.001	158
9	19-Jul-13	4.9	335	13.3	43.2	0.001	0.001	427
10	8-Oct-13				27.1	0.001	0.001	79.6
11	6-Jan-14	0.001	0.001	11.6	76.4	0.001	0.001	11.7
12	23-Apr-14				10.8	0.001	0.001	147
13	17-Jul-14	0.001	0.001	19.2	0.001	0.001	0.001	399
14	8-Oct-14				2.7	0.001	0.001	305
15	9-Jan-15	0.001	121	4.8	0.001	0.001	0.001	728
16	15-Apr-15				0.001	0.001	0.001	945
17								
18								
19								
20								
Coefficient of Variation:		2.28	1.39	1.65	2.63	3.46	3.99	1.51
Mann-Kendall Statistic (S):		-19	-26	-22	-115	-86	-9	-38
Confidence Factor:		88.9%	95.7%	92.4%	>99.9%	>99.9%	63.9%	95.2%
Concentration Trend:		No Trend	Decreasing	Prob. Decreasing	Decreasing	Decreasing	No Trend	Decreasing



Notes:

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3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

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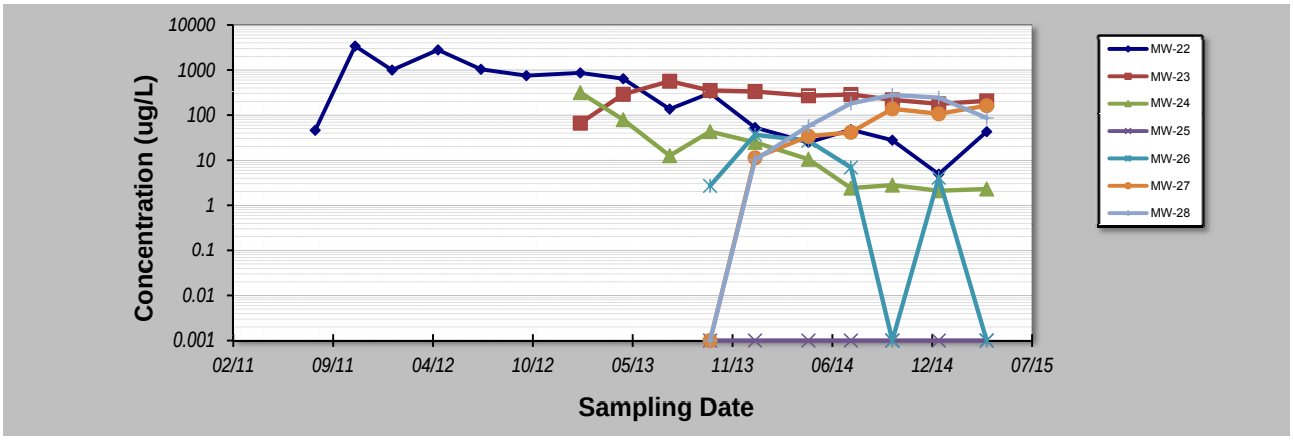
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-15	Job ID:	05-056
Facility Name:	RF-64	Constituent:	Benzene
Conducted By:	James Wolf	Concentration Units:	ug/L

Sampling Point ID:		MW-22	MW-23	MW-24	MW-25	MW-26	MW-27	MW-28
Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	9-Aug-11	46.1						
2	28-Oct-11	3400						
3	10-Jan-12	1000						
4	11-Apr-12	2800						
5	6-Jul-12	1040						
6	5-Oct-12	751						
7	21-Jan-13	864	66.3	316				
8	17-Apr-13	642	290	79.1				
9	19-Jul-13	136	566	12.6				
10	8-Oct-13	308	352	43.1	0.001	2.7	0.001	0.001
11	6-Jan-14	52.9	334	24.9	0.001	36.7	11.3	10.2
12	23-Apr-14	24.8	269	10.5	0.001	26.9	34	57
13	17-Jul-14	47.6	287	2.4	0.001	6.9	41.6	182
14	8-Oct-14	27.8	219	2.8	0.001	0.001	138	279
15	9-Jan-15	4.9	178	2.1	0.001	4.1	107	244
16	15-Apr-15	43	207	2.3	0.001	0.001	162	86.8
17								
18								
19								
20								
Coefficient of Variation:		1.39	0.60	2.97	0.00	1.16	0.91	0.92
Mann-Kendall Statistic (S):		-64	-27	-27	0	-3	19	13
Confidence Factor:		99.6%	98.0%	98.0%	45.2%	59.4%	99.9%	96.5%
Concentration Trend:		Decreasing	Decreasing	Decreasing	Stable	No Trend	Increasing	Increasing



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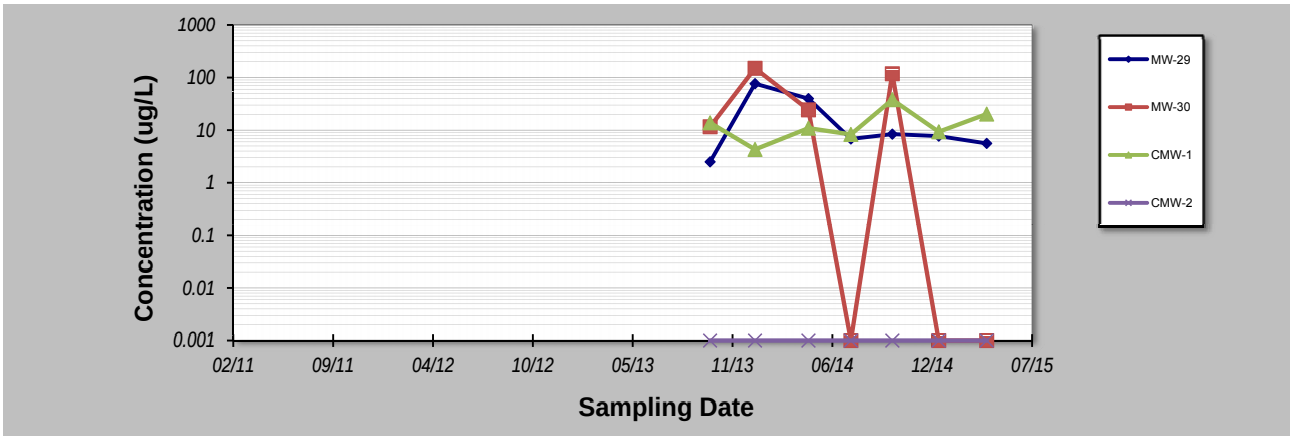
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-15	Job ID:	05-056
Facility Name:	RF-64	Constituent:	Benzene
Conducted By:	James Wolf	Concentration Units:	ug/L

Sampling Point ID:	MW-29	MW-30	CMW-1	CMW-2			
Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)					
1	9-Aug-11						
2	28-Oct-11						
3	10-Jan-12						
4	11-Apr-12						
5	6-Jul-12						
6	5-Oct-12						
7	21-Jan-13						
8	17-Apr-13						
9	19-Jul-13						
10	8-Oct-13	2.5	11.6	13.8	0.001		
11	6-Jan-14	76.5	150	4.3	0.001		
12	23-Apr-14	39.8	24.3	10.9	0.001		
13	17-Jul-14	6.8	0.001	8.3	0.001		
14	8-Oct-14	8.4	118	38	0.001		
15	9-Jan-15	7.7	0.001	9.3	0.001		
16	15-Apr-15	5.6	0.001	20.2	0.001		
17							
18							
19							
20							
Coefficient of Variation:		2.70	1.59	2.76	0.00		
Mann-Kendall Statistic (S):		2	-12	12	0		
Confidence Factor:		54.8%	91.1%	91.1%	45.2%		
Concentration Trend:		No Trend	Prob. Decreasing	Prob. Increasing	Stable		



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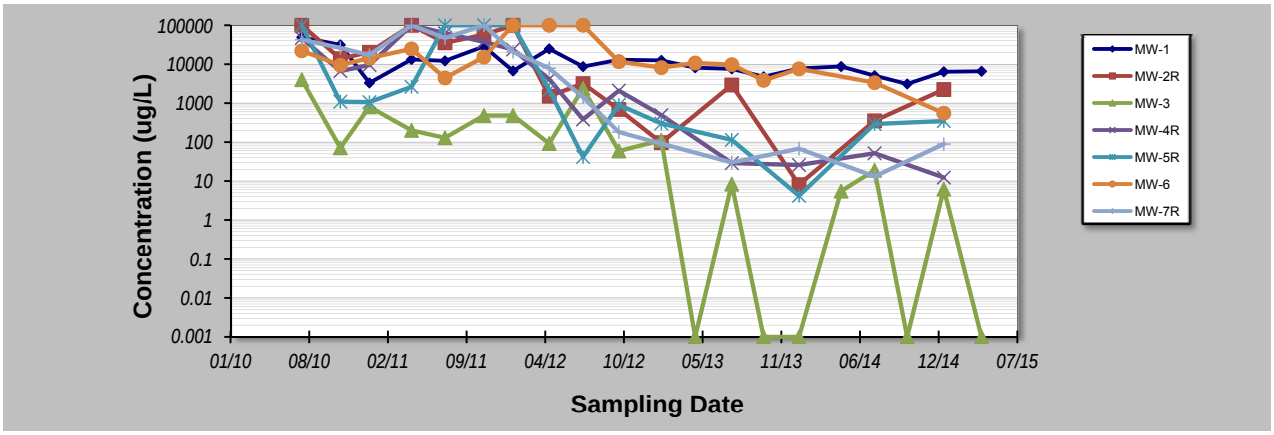
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **10-Jul-15**
Facility Name: **RF-64**
Conducted By: **James Wolf**

Job ID: **05-056**
Constituent: **BTEX**
Concentration Units: **ug/L**

Sampling Point ID:		MW-1	MW-2R	MW-3	MW-4R	MW-5R	MW-6	MW-7R
Sampling Event	Sampling Date	BTEX CONCENTRATION (ug/L)						
1	22-Jul-10	49000	100000	4000	47100	100000	22100	42700
2	28-Oct-10	31400	13890	71.3	6650	1090	9450	26200
3	10-Jan-11	3310	20300	807	9580	1064	14400	17110
4	27-Apr-11	13260	100000	200	100000	2633	24700	100000
5	21-Jul-11	12200	35490	129	62810	100000	4430	47070
6	28-Oct-11	28600	57100	481.6	37500	100000	15300	100000
7	10-Jan-12	6734	100000	482	23800	100000	100000	20800
8	11-Apr-12	24790	1510	92.2	4140	2194	100000	7880
9	6-Jul-12	8697	3181	2412	382.9	41.6	100000	1424
10	5-Oct-12	13001	691.5	59	2099	902.5	11640	181
11	21-Jan-13	12541	97	111.5	492	300.2	8171	91.2
12	17-Apr-13	8152		0.001			10750	
13	19-Jul-13	7603	2928	8.3	28.9	114.3	9750	30
14	8-Oct-13	4752		0.001			3853	
15	6-Jan-14	7752	8.1	0.001	25.8	4.2	7613	68
16	23-Apr-14	8739		5.5				
17	17-Jul-14	5082	351.8	18.9	51.7	292.4	3362	13.1
18	8-Oct-14	3110		0.001				
19	9-Jan-15	6392	2246	6.2	12.3	347.7	552	89.4
20	15-Apr-15	6587.6		0.001				
21								
22								
23								
24								
25								
Coefficient of Variation:		0.89	1.37	2.26	1.52	1.67	1.36	1.42
Mann-Kendall Statistic (S):		-96	-56	-110	-75	-51	-61	-74
Confidence Factor:		99.9%	99.8%	>99.9%	>99.9%	99.4%	99.4%	>99.9%
Concentration Trend:		Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing



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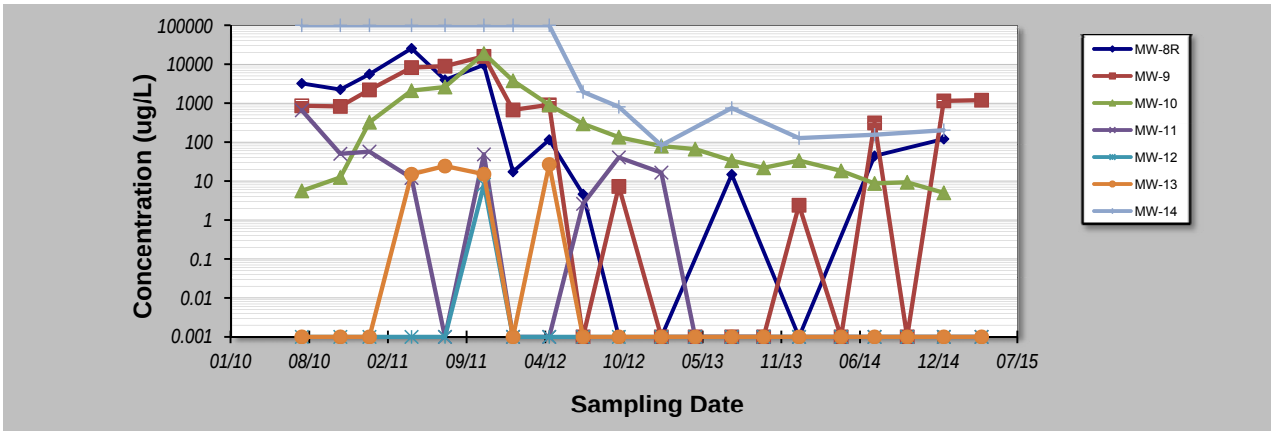
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **10-Jul-15**
Facility Name: **RF-64**
Conducted By: **James Wolf**

Job ID: **05-056**
Constituent: **BTEX**
Concentration Units: **ug/L**

Sampling Point ID:		MW-8R	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14
Sampling Event	Sampling Date	BTEX CONCENTRATION (ug/L)						
1	22-Jul-10	3210	855	5.6	657	0.001	0.001	100000
2	28-Oct-10	2240	825	12.4	50.2	0.001	0.001	100000
3	10-Jan-11	5560	2195	324	57	0.001	0.001	100000
4	27-Apr-11	25400	8200	2098	12	0.001	15	100000
5	21-Jul-11	3966	8900	2600	0.001	0.001	24.3	100000
6	28-Oct-11	9600	15900	18800	48.5	8.1	15	100000
7	10-Jan-12	17.3	670	3760	0.001	0.001	0.001	100000
8	11-Apr-12	115	906	903.6	0.001	0.001	26.7	100000
9	6-Jul-12	4.6	0.001	294.6	2.6	0.001	0.001	1946
10	5-Oct-12	0.001	7.3	134	40.4	0.001	0.001	804.3
11	21-Jan-13	0.001	0.001	78.9	16.5	0.001	0.001	82.8
12	17-Apr-13		0.001	66.2	0.001	0.001	0.001	
13	19-Jul-13	14.8	0.001	33.4	0.001	0.001	0.001	749.1
14	8-Oct-13		0.001	21.9	0.001	0.001	0.001	
15	6-Jan-14	0.001	2.4	33.6	0.001	0.001	0.001	127
16	23-Apr-14		0.001	18.3	0.001	0.001	0.001	
17	17-Jul-14	44.1	311.6	8.7	0.001	0.001	0.001	154.7
18	8-Oct-14		0.001	9.3	0.001	0.001	0.001	
19	9-Jan-15	120.6	1143	5	0.001	0.001	0.001	202.2
20	15-Apr-15		1193		0.001	0.001	0.001	
21								
22								
23								
24								
25								
Coefficient of Variation:		2.00	2.01	2.81	3.29	4.46	2.14	0.96
Mann-Kendall Statistic (S):		-44	-49	-83	-92	-9	-35	-63
Confidence Factor:		98.4%	94.0%	99.8%	99.9%	60.1%	86.3%	99.9%
Concentration Trend:		Decreasing	Prob. Decreasing	Decreasing	Decreasing	No Trend	No Trend	Decreasing



Notes:

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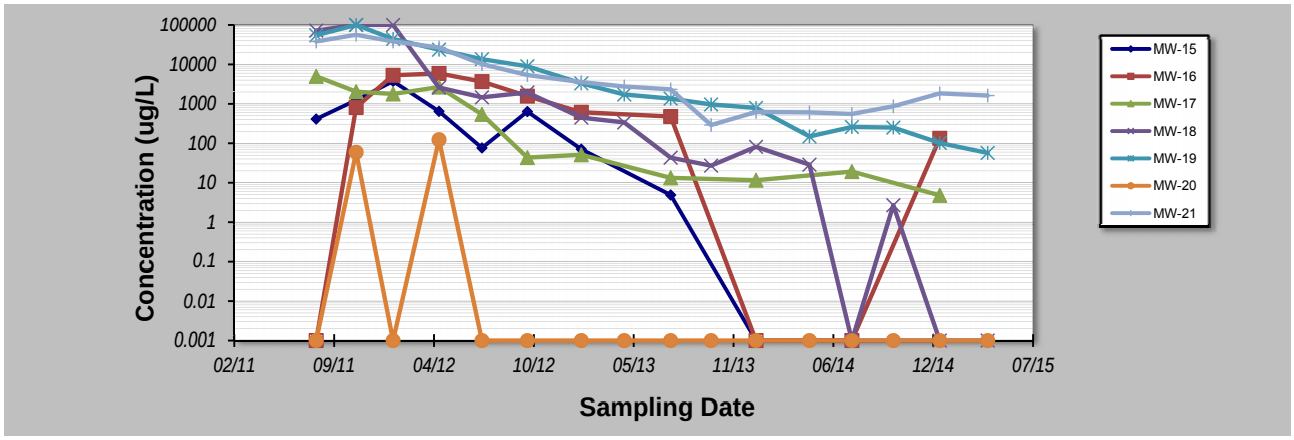
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-15	Job ID:	05-056
Facility Name:	RF-64	Constituent:	BTEX
Conducted By:	James Wolf	Concentration Units:	ug/L

Sampling Point ID:		MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21
Sampling Event	Sampling Date	BTEX CONCENTRATION (ug/L)						
1	9-Aug-11	412	0.001	4985	71900	54650	0.001	38170
2	28-Oct-11	1240	820	2040	100000	100000	59.4	56400
3	10-Jan-12	3744	5300	1780	100000	44200	0.001	38200
4	11-Apr-12	645.1	5910	2665	2590	23600	123.8	26800
5	6-Jul-12	76.4	3671	541.9	1464.7	13559	0.001	10132
6	5-Oct-12	637	1570.2	43.5	1943.7	8968	0.001	5369
7	21-Jan-13	70.9	612.5	51.2	447.9	3313.4	0.001	3562
8	17-Apr-13				338.2	1725	0.001	2749
9	19-Jul-13	4.9	477.7	13.3	43.2	1358	0.001	2327.9
10	8-Oct-13				27.1	966	0.001	291
11	6-Jan-14	0.001	0.001	11.6	81.5	788	0.001	621
12	23-Apr-14				28.7	149.1	0.001	607.7
13	17-Jul-14	0.001	0.001	19.2	0.001	259.2	0.001	554.1
14	8-Oct-14				2.7	250.3	0.001	867
15	9-Jan-15	0.001	134.1	4.8	0.001	102	0.001	1843.7
16	15-Apr-15				0.001	57	0.001	1624.5
17								
18								
19								
20								
Coefficient of Variation:		1.57	1.41	1.32	2.19	1.83	2.92	1.49
Mann-Kendall Statistic (S):		-31	-30	-36	-115	-130	-21	-82
Confidence Factor:		98.1%	97.8%	99.3%	>99.9%	>99.9%	81.3%	>99.9%
Concentration Trend:		Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	No Trend	Decreasing



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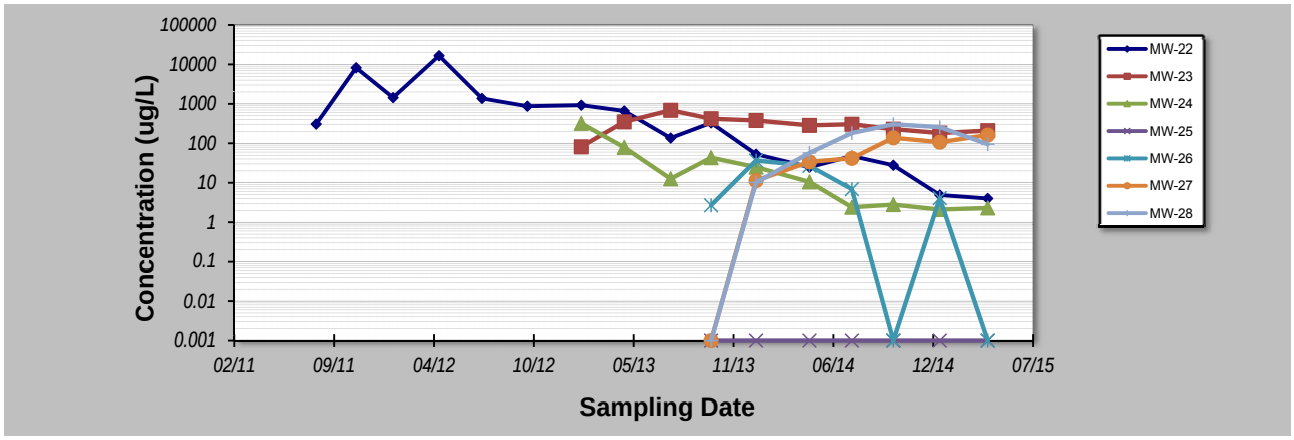
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-15	Job ID:	05-056
Facility Name:	RF-64	Constituent:	BTEX
Conducted By:	James Wolf	Concentration Units:	ug/L

Sampling Point ID:		MW-22	MW-23	MW-24	MW-25	MW-26	MW-27	MW-28
Sampling Event	Sampling Date	BTEX CONCENTRATION (ug/L)						
1	9-Aug-11	307						
2	28-Oct-11	8230						
3	10-Jan-12	1441						
4	11-Apr-12	16600						
5	6-Jul-12	1372.7						
6	5-Oct-12	872.8						
7	21-Jan-13	926	81.6	320.6				
8	17-Apr-13	660.2	350.2	79.1				
9	19-Jul-13	136	687.7	12.6				
10	8-Oct-13	329	420.1	43.1	0.001	2.7	0.001	0.001
11	6-Jan-14	52.9	379.2	24.9	0.001	36.7	11.3	10.2
12	23-Apr-14	24.8	285.2	10.5	0.001	26.9	34	57
13	17-Jul-14	47.6	304.4	2.4	0.001	6.9	41.6	182
14	8-Oct-14	27.8	228.3	2.8	0.001	0.001	138	303.9
15	9-Jan-15	4.9	182.3	2.1	0.001	4.1	107	256.9
16	15-Apr-15	4	209.3	2.3	0.001	0.001	162	95
17								
18								
19								
20								
Coefficient of Variation:		2.10	0.64	2.97	0.00	1.16	0.91	0.93
Mann-Kendall Statistic (S):		-80	-27	-27	0	-3	19	13
Confidence Factor:		>99.9%	98.0%	98.0%	45.2%	59.4%	99.9%	96.5%
Concentration Trend:		Decreasing	Decreasing	Decreasing	Stable	No Trend	Increasing	Increasing



Notes:

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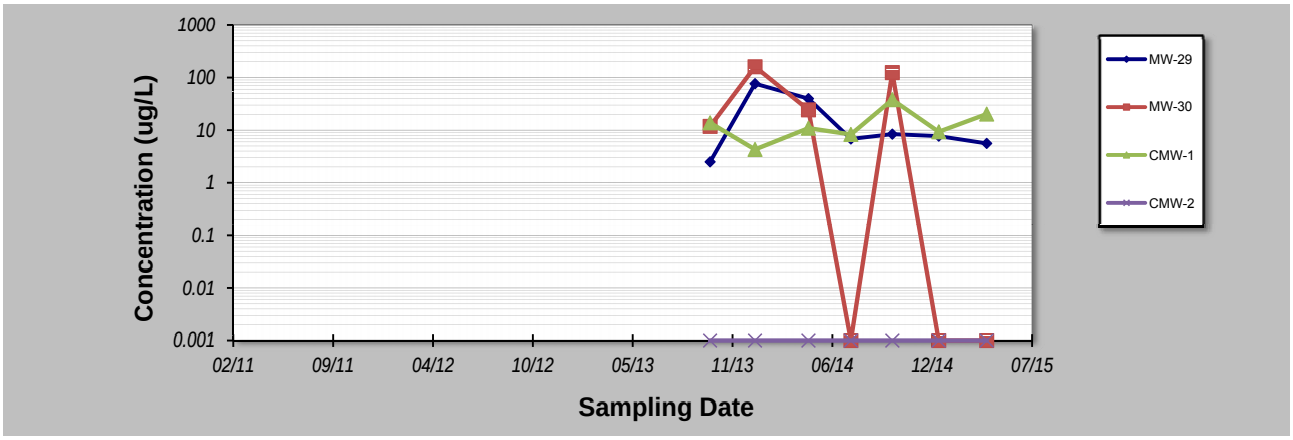
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	10-Jul-15	Job ID:	05-056
Facility Name:	RF-64	Constituent:	BTEX
Conducted By:	James Wolf	Concentration Units:	ug/L

Sampling Point ID:	MW-29	MW-30	CMW-1	CMW-2			
Sampling Event	Sampling Date	BTEX CONCENTRATION (ug/L)					
1	9-Aug-11						
2	28-Oct-11						
3	10-Jan-12						
4	11-Apr-12						
5	6-Jul-12						
6	5-Oct-12						
7	21-Jan-13						
8	17-Apr-13						
9	19-Jul-13						
10	8-Oct-13	2.5	11.8	13.8	0.001		
11	6-Jan-14	76.5	160.5	4.3	0.001		
12	23-Apr-14	39.8	24.3	10.9	0.001		
13	17-Jul-14	6.8	0.001	8.3	0.001		
14	8-Oct-14	8.4	124.3	38	0.001		
15	9-Jan-15	7.7	0.001	9.3	0.001		
16	15-Apr-15	5.6	0.001	20.2	0.001		
17							
18							
19							
20							
Coefficient of Variation:		2.70	1.61	2.76	0.00		
Mann-Kendall Statistic (S):		2	-12	12	0		
Confidence Factor:		54.8%	91.1%	91.1%	45.2%		
Concentration Trend:		No Trend	Prob. Decreasing	Prob. Increasing	Stable		



Notes:

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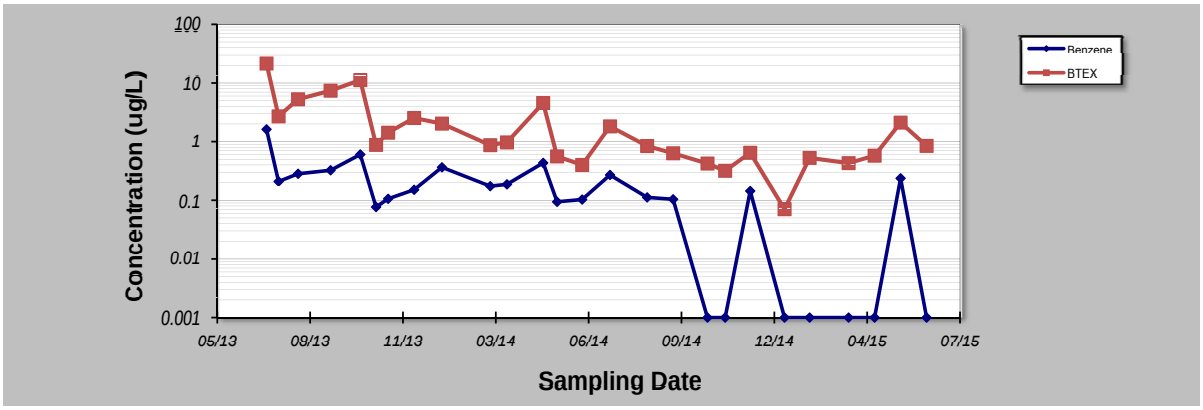
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Aug-15	Job ID:	05-056
Facility Name:	RF-64	Constituent:	Vapor Effluent - Tedlar Bags
Conducted By:	James Wolf	Concentration Units:	ug/L

Sampling Point ID:		Benzene	BTEX					
Sampling Event	Sampling Date	VAPOR EFFLUENT - TEDLAR BAGS CONCENTRATION (ug/L)						
1	28-Jun-13	1.62	21.49					
2	11-Jul-13	0.209	2.7					
3	1-Aug-13	0.283	5.28					
4	5-Sep-13	0.325	7.4					
5	7-Oct-13	0.604	11.2					
6	24-Oct-13	0.0767	0.88					
7	6-Nov-13	0.106	1.42					
8	4-Dec-13	0.151	2.53					
9	3-Jan-14	0.365	2.03					
10	24-Feb-14	0.174	0.87					
11	14-Mar-14	0.187	0.97					
12	22-Apr-14	0.434	4.56					
13	7-May-14	0.0942	0.56					
14	3-Jun-14	0.103	0.4					
15	3-Jul-14	0.27	1.82					
16	12-Aug-14	0.112	0.842					
17	9-Sep-14	0.104	0.633					
18	16-Oct-14	0.001	0.423					
19	4-Nov-14	0.001	0.3182					
20	1-Dec-14	0.144	0.645					
21	7-Jan-15	0.001	0.0704					
22	3-Feb-15	0.001	0.528					
23	17-Mar-15	0.001	0.430					
24	14-Apr-15	0.001	0.5768					
25	12-May-15	0.237	2.11					
26	9-Jun-15	0.001	0.8471					
27								
28								
29								
30								
Coefficient of Variation:		1.50	1.67					
Mann-Kendall Statistic (S):		-156	-167					
Confidence Factor:		>99.9%	>99.9%					
Concentration Trend:		Decreasing	Decreasing					



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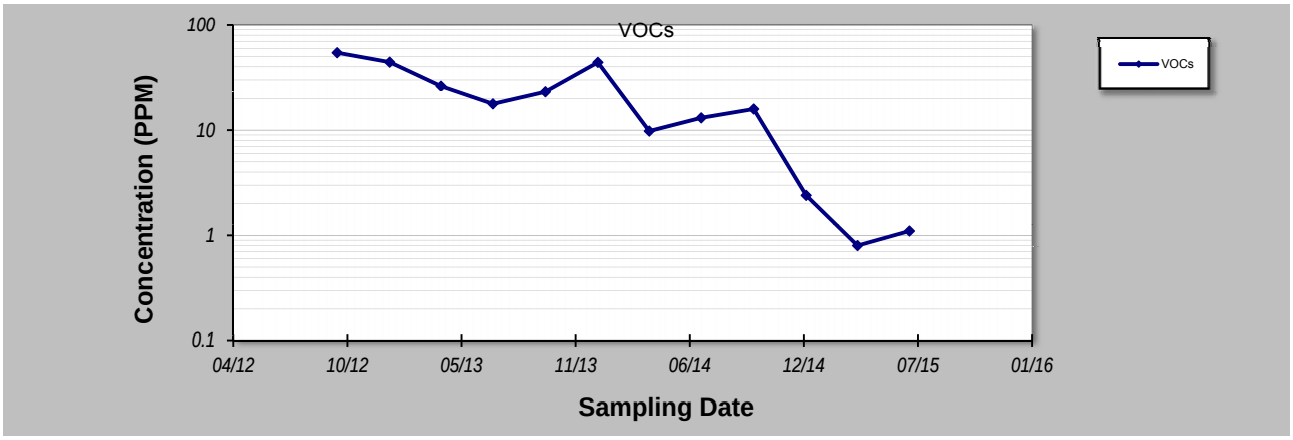
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	4-Aug-15	Job ID:	05-056
Facility Name:	RF-64	Constituent:	Quarterly Avg.Vapor Effluent - PID Screening
Conducted By:	James Wolf	Concentration Units:	PPM

Sampling Point ID: VOCs

Sampling Event	Sampling Date	QUARTERLY AVG.VAPOR EFFLUENT - PID SCREENING CONCENTRATION (PPM)						
1	30-Sep-12	54.5						
2	31-Dec-12	44.3						
3	31-Mar-13	26.2						
4	30-Jun-13	17.8						
5	30-Sep-13	23.2						
6	31-Dec-13	44.1						
7	31-Mar-14	9.8						
8	30-Jun-14	13.1						
9	30-Sep-14	15.9						
10	31-Dec-14	2.4						
11	31-Mar-15	0.8						
12	30-Jun-15	1.1						
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.86						
Mann-Kendall Statistic (S):		-50						
Confidence Factor:		>99.9%						
Concentration Trend:		Decreasing						



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Attachment F

INDOOR AIR BUILDING SURVEY
and SAMPLING FORM

Preparer's name: James Wolf Date: 6/24/15

Preparer's affiliation: AEC Phone #: 301776 0500

Part I - Occupants

Building Address: 1207 Chesaco Ave, MD 21237

Property Contact: Margaret Zaby Owner / Renter / other: _____

Contact's Phone: home (410) 682 2115 work ( ) _____ cell ( ) _____

# of Building occupants: Children under age 13 _____ Children age 13-18 _____ Adults _____

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial

Describe building: 2-Story w/ basement Year constructed: 1951

Sensitive population: day care / nursing home / hospital / school / other (specify): N/A

Number of floors below grade: 1 (full basement / crawl space / slab on grade)

Number of floors at or above grade: 2

Depth of basement below grade surface: 0-5 ft. Basement size: 850 ft^2

Basement floor construction: concrete / dirt / floating / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify) _____

Basement sump present? *Yes* / *No* Sump pump? *Yes* / *No* Water in sump? *Yes* / *No*

Type of heating system (circle all that apply):

hot air circulation	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard

other (specify): _____

Type of ventilation system (circle all that apply):

central air conditioning	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake

other (specify): _____

Type of fuel utilized (circle all that apply):

Natural gas / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / *No*

Is there a whole house fan? *Yes / No*

Septic system? *Yes / Yes (but not used) / No*

Irrigation/private well? *Yes / Yes (but not used) / No*

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____

Existing subsurface depressurization (radon) system in place? *Yes / No* *active / passive*

Sub-slab vapor/moisture barrier in place? *Yes / No*
Type of barrier: _____

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): N/A

Other stationary sources nearby (gas stations, emission stacks, etc.): Royal Farms #64

Heavy vehicular traffic nearby (or other mobile sources): Pulaski Hwy & Chesaco Ave

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment	Standard household	
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents	cleaning supplies and	
Oven cleaners		
Carpet / upholstery cleaners	air fresheners. All materials	
Other house cleaning products		
Moth balls	removed and stored in	
Polishes / waxes		
Insecticides	the remediation compound	
Furniture / floor polish		
Nail polish / polish remover	for the duration of the	
Hairspray		
Cologne / perfume	IAQ testing.	
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

Part V – Miscellaneous Items

Do any occupants of the building smoke? *Yes* / *No* How often? _____

Last time someone smoked in the building? Unknown hours / *days* *ago*

Does the building have an attached garage directly connected to living space? *Yes* / *No*

If so, is a car usually parked in the garage? *Yes* / *No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes* / *No*

Do the occupants of the building have their clothes dry cleaned? *Yes* / *No*

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes* / *No*

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes* / *No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes* / No

If so, when and which chemicals? _____

Has there ever been a fire in the building? *Yes* / *No* If yes, when? _____

Has painting or staining been done in the building in the last 6 months? *Yes* / *No*

If yes, when _____ and where? _____

Part VI – Sampling Information

Sample Technician: R. Swaringer Phone number: (301) 776 - 0500

Sample Source: Indoor Air / Sub-Slab / Near Slab Soil Gas / Ambient Air

Sampler Type: Stainless Steel Canister / Other (specify): _____

Analytical Method: LL TO-15 Certified Laboratory: Maryland Spectral Services

Sample locations (floor, room):

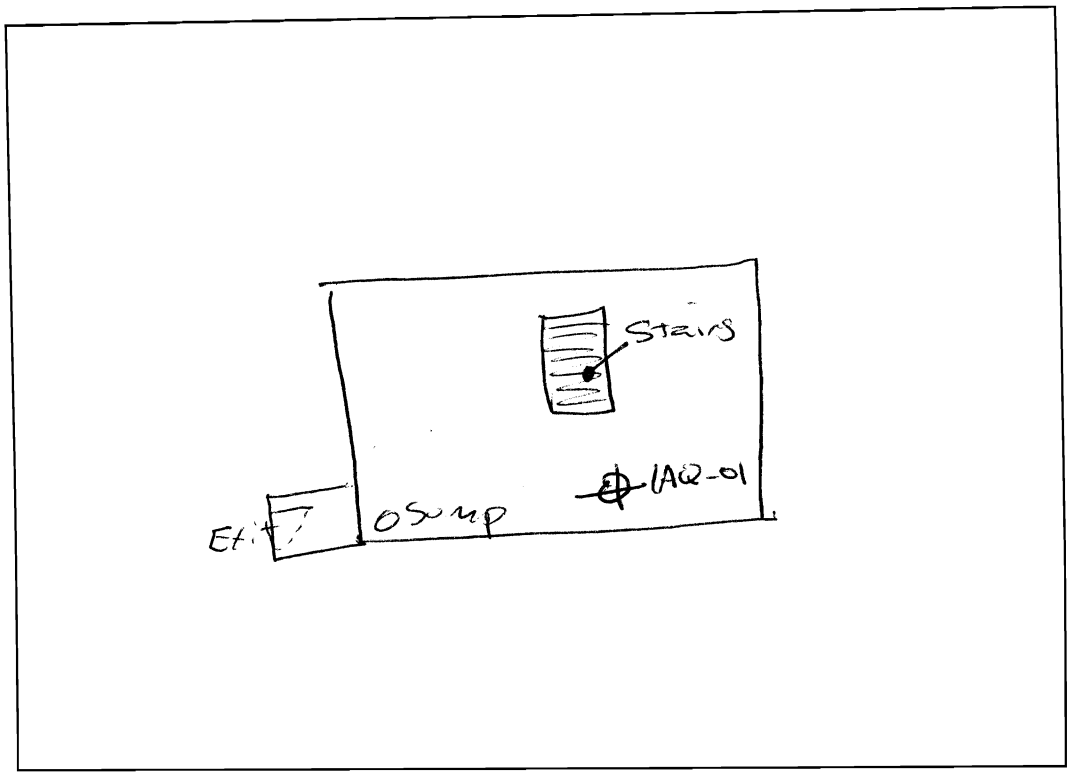
Field ID # IAQ - 01 Field ID # _____ - _____

Field ID # _____ - _____ Field ID # _____ - _____

Were "Instructions for Occupants" followed? *Yes* / *No*

If not, describe modifications: _____

Provide Drawing of Sample Location(s) in and outside Building



Part VII - Meteorological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: 75° Fair. No precip.

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

Attachment G

Dual Phase System Monitoring Worksheet
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Date: 4/14/2015
Time: 9:00
Recorded By: STD

Main Control Panel	
System Running (Y/N)	Yes
Warrick Lights on (Y/N)	No
Circuits Tripped (Y/N)	No
Stripper Backpressure (psig)	11.5
Run Time	433.7
Electric (kw/h)	94,374
Dual Phase System - Building Interior	
Vacuum Transducer (in Hg)	20
LRP Temperature (°F)	205
Dilution Valve (% open)	0
AOS Temperature (°F)	150
AOS Backpressure (psi)	5.3
AOS Oil Level	Acceptable
AWS Pump Pressure (psi)	8
Ambient Room Temperature (°F)	55
Sump Pump Pressure (psi)	50
Bag Filter Pressure (psi)	No Reading
Carbon 1 Pressure (psi)	48
Carbon 2 Pressure (psi)	42
Flow Meter Totalizer Value (gallons)	2,644,000
Average Flow Rate (gal/min)	2.74

Backflushed Carbon Tank #2
Alarm visit was made on 4/6, system was restarted

Dual Phase System Monitoring Worksheet
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Date: 4/28/2015
Time: 9:00
Recorded By: RS

Main Control Panel	
System Running (Y/N)	Yes
Warrick Lights on (Y/N)	No
Circuits Tripped (Y/N)	No
Stripper Backpressure (psig)	12.0
Run Time	630.7
Electric (kw/h)	1,396
Dual Phase System - Building Interior	
Vacuum Transducer (in Hg)	19
LRP Temperature (°F)	200
Dilution Valve (% open)	0
AOS Temperature (°F)	150
AOS Backpressure (psi)	7.0
AOS Oil Level	Low
AWS Pump Pressure (psi)	10
Ambient Room Temperature (°F)	50
Sump Pump Pressure (psi)	36
Bag Filter Pressure (psi)	No Reading
Carbon 1 Pressure (psi)	38
Carbon 2 Pressure (psi)	30
Flow Meter Totalizer Value (gallons)	2,664,750
Average Flow Rate (gal/min)	1.75

Changed bag filters
Backflushed Carbon Tank #2

Dual Phase System Monitoring Worksheet
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Date: 5/12/2015
Time: 8:00
Recorded By: STD

Main Control Panel	
System Running (Y/N)	Yes
Warrick Lights on (Y/N)	No
Circuits Tripped (Y/N)	No
Stripper Backpressure (psig)	11.0
Run Time	768.4
Electric (kw/h)	6,708
Dual Phase System - Building Interior	
Vacuum Transducer (in Hg)	19.5
LRP Temperature (°F)	215
Dilution Valve (% open)	0
AOS Temperature (°F)	152
AOS Backpressure (psi)	6.0
AOS Oil Level	Acceptable
AWS Pump Pressure (psi)	5
Ambient Room Temperature (°F)	68
Sump Pump Pressure (psi)	48
Bag Filter Pressure (psi)	No Reading
Carbon 1 Pressure (psi)	42
Carbon 2 Pressure (psi)	34
Flow Meter Totalizer Value (gallons)	2,678,865
Average Flow Rate (gal/min)	1.71

Changed front bag filter
Backflushed Carbon Tank #1

Dual Phase System Monitoring Worksheet
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Date: 5/26/2015
Time: 13:30
Recorded By: STD

Main Control Panel	
System Running (Y/N)	Yes
Warrick Lights on (Y/N)	No
Circuits Tripped (Y/N)	No
Stripper Backpressure (psig)	11.0
Run Time	1,029.6
Electric (kw/h)	14,815
Dual Phase System - Building Interior	
Vacuum Transducer (in Hg)	22
LRP Temperature (°F)	174
Dilution Valve (% open)	0
AOS Temperature (°F)	75
AOS Backpressure (psi)	2.0
AOS Oil Level	Low
AWS Pump Pressure (psi)	5
Ambient Room Temperature (°F)	No Reading
Sump Pump Pressure (psi)	71
Bag Filter Pressure (psi)	No Reading
Carbon 1 Pressure (psi)	No Reading
Carbon 2 Pressure (psi)	No Reading
Flow Meter Totalizer Value (gallons)	2,697,839
Average Flow Rate (gal/min)	1.21

System is running with bottom of bag filter pots leaking, needs repair
System is left off pending repair.
5/29 - filter pots are repaired with epoxy. System restarted.

Dual Phase System Monitoring Worksheet
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Date: 6/9/2015
Time: 8:50
Recorded By: JDW

Main Control Panel	
System Running (Y/N)	Yes
Warrick Lights on (Y/N)	No
Circuits Tripped (Y/N)	No
Stripper Backpressure (psig)	16.0
Run Time	1,222.7
Electric (kw/h)	20,886
Dual Phase System - Building Interior	
Vacuum Transducer (in Hg)	22.1
LRP Temperature (°F)	208
Dilution Valve (% open)	0
AOS Temperature (°F)	147
AOS Backpressure (psi)	2.1
AOS Oil Level	Low
AWS Pump Pressure (psi)	8
Ambient Room Temperature (°F)	68
Sump Pump Pressure (psi)	48
Bag Filter Pressure (psi)	No Reading
Carbon 1 Pressure (psi)	38
Carbon 2 Pressure (psi)	35
Flow Meter Totalizer Value (gallons)	2,716,000
Average Flow Rate (gal/min)	1.57

Both bag filters changed
Bolts on AOS replaced
Changed vacuum inlet filter
Oil is changed
Radiator is back-flushed

Dual Phase System Monitoring Worksheet
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Rosedale, MD

Date: 6/23/2015
Time: 8:10
Recorded By: RS

Main Control Panel	
System Running (Y/N)	Yes
Warrick Lights on (Y/N)	No
Circuits Tripped (Y/N)	No
Stripper Backpressure (psig)	12.0
Run Time	1,410.2
Electric (kw/h)	26,865
Dual Phase System - Building Interior	
Vacuum Transducer (in Hg)	18
LRP Temperature (°F)	210
Dilution Valve (% open)	50
AOS Temperature (°F)	60
AOS Backpressure (psi)	3.0
AOS Oil Level	Low
AWS Pump Pressure (psi)	0
Ambient Room Temperature (°F)	70
Sump Pump Pressure (psi)	25
Bag Filter Pressure (psi)	No Reading
Carbon 1 Pressure (psi)	38
Carbon 2 Pressure (psi)	35
Flow Meter Totalizer Value (gallons)	2,753,243
Average Flow Rate (gal/min)	3.3

Both bag filters changed
Oil is added
Gate valve at C1 inlet is changed