



January 14, 2014

Mrs. Susan Bull
Maryland Department of the Environment (MDE)
Oil Control Program
1800 Washington Boulevard
Baltimore, Maryland 21230-1719

**Re: Request for Reduction in Supply Well Sampling
Gasoline Fueling Station – Royal Farms Store No. 96
505 and 513 Mechanics Valley Road, North East, MD
MDE OCP Case No. 2011-0729-CE Facility ID 13226
AEC Project # 05-056RF096**

Dear Mrs. Bull:

Advantage Environmental Consultants, LLC. (AEC) has prepared this letter to request a change in sampling requirements for the off-site supply wells located at 505 and 513 Mechanics Valley Road. These supply wells are currently sampled on a monthly basis. Figures 1 and 2 (attached) present the site features and potable well locations, respectively.

AEC installed Point of Entry Treatment (POET) water systems at both the 505 and 513 Mechanics Valley Road properties in July of 2011. Currently the 505 system is operational; the 513 system has been disabled by the building owner since at least December 2012. Recent testing on December 4, 2013 indicated the treatment system effluent sample results from the 505 residence were below the Maryland Department of the Environment (MDE) standards for all analyzed compounds. Results from a sample of the potable water at the 513 residence were above MDE standards for methyl tert-butyl ether (22.5 micrograms per liter).

Recent hydrasleeve groundwater samples from the on-site deep well monitoring network (MW-10D, 12D and 13D) indicated a lack of significant dissolved phase hydrocarbon impact on the down-gradient section of the Site. MW-10D, 12D and 13D serve as sentinel wells for the off-site potable wells located along Mechanics Valley Road. A summary of the hydrasleeve sampling results in tabular form is included as an attachment. Additionally, as discussed in the March 14, 2013 Packer Testing Report there was no measureable response in the shallow monitoring wells MW-10S, MW-12S or MW-13S during the packer testing or open-hole test pumping on any of the three deep monitoring wells. This indicates a lack of hydraulic connection between the overburden and bedrock systems.

Based on a variety of factors including the high efficiency of the POET system on the 505 Mechanics Valley Road and the low to non-detect levels of volatile organic compounds, including MTBE, in the on-site sentinel wells, AEC respectfully requests a reduction in sampling requirements to the 505 and 513 Mechanics Valley Road properties from monthly to quarterly. The suggested quarterly monitoring schedule is adequate to meet the monitoring requirements at the residences.

Please call the undersigned at (301) 776-0500 should you have any questions regarding this request.

Sincerely,

Advantage Environmental Consultants, LLC





A handwritten signature in blue ink that reads "Jeffrey Stein". The signature is written in a cursive, flowing style.



Jeffery S. Stein, P.G.
Principal

CC: T. Ruszin

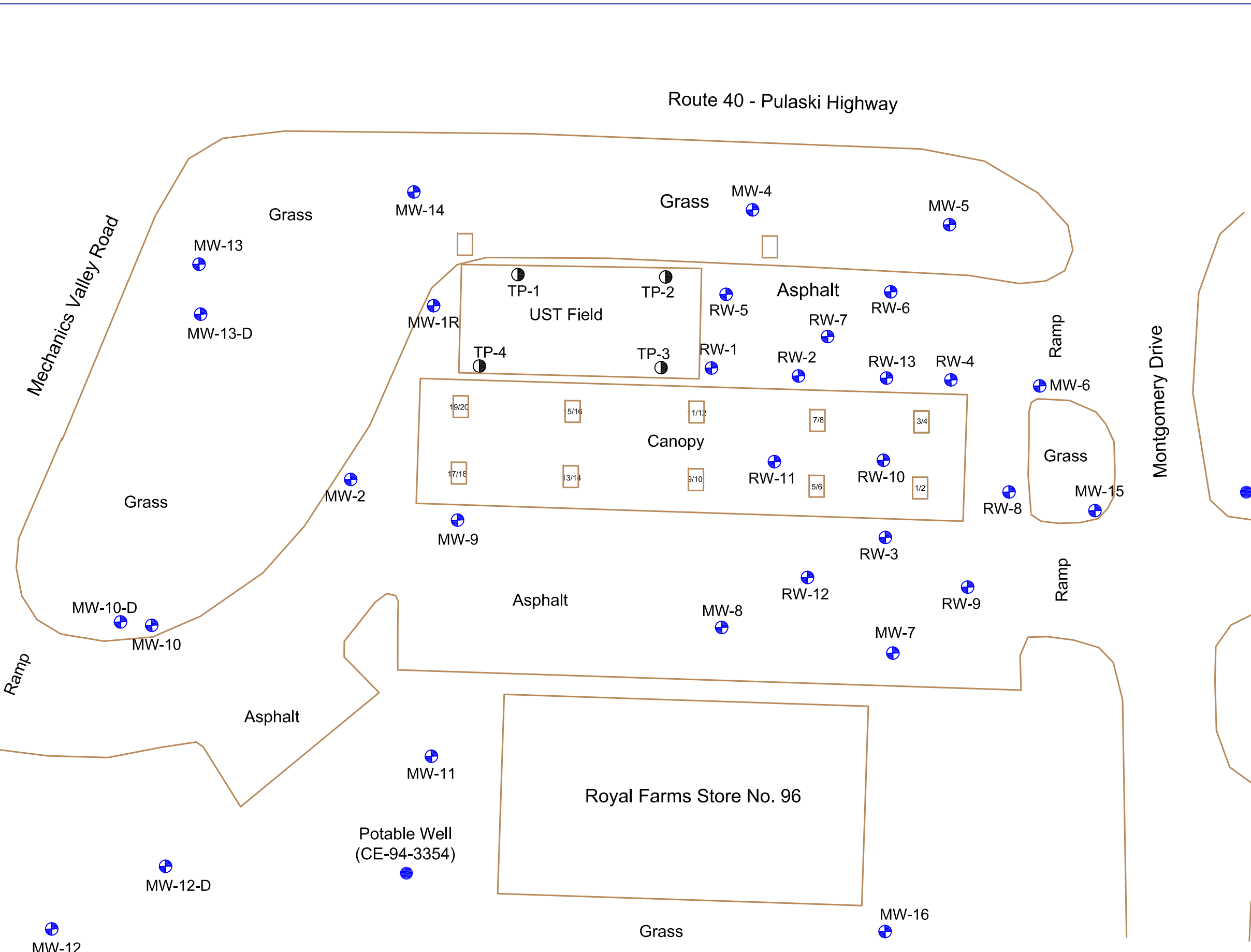
Attachment


Legend

-  Fuel Dispenser
-  UST Observation Well
-  Groundwater Monitoring/Recovery Well
-  Potable Well

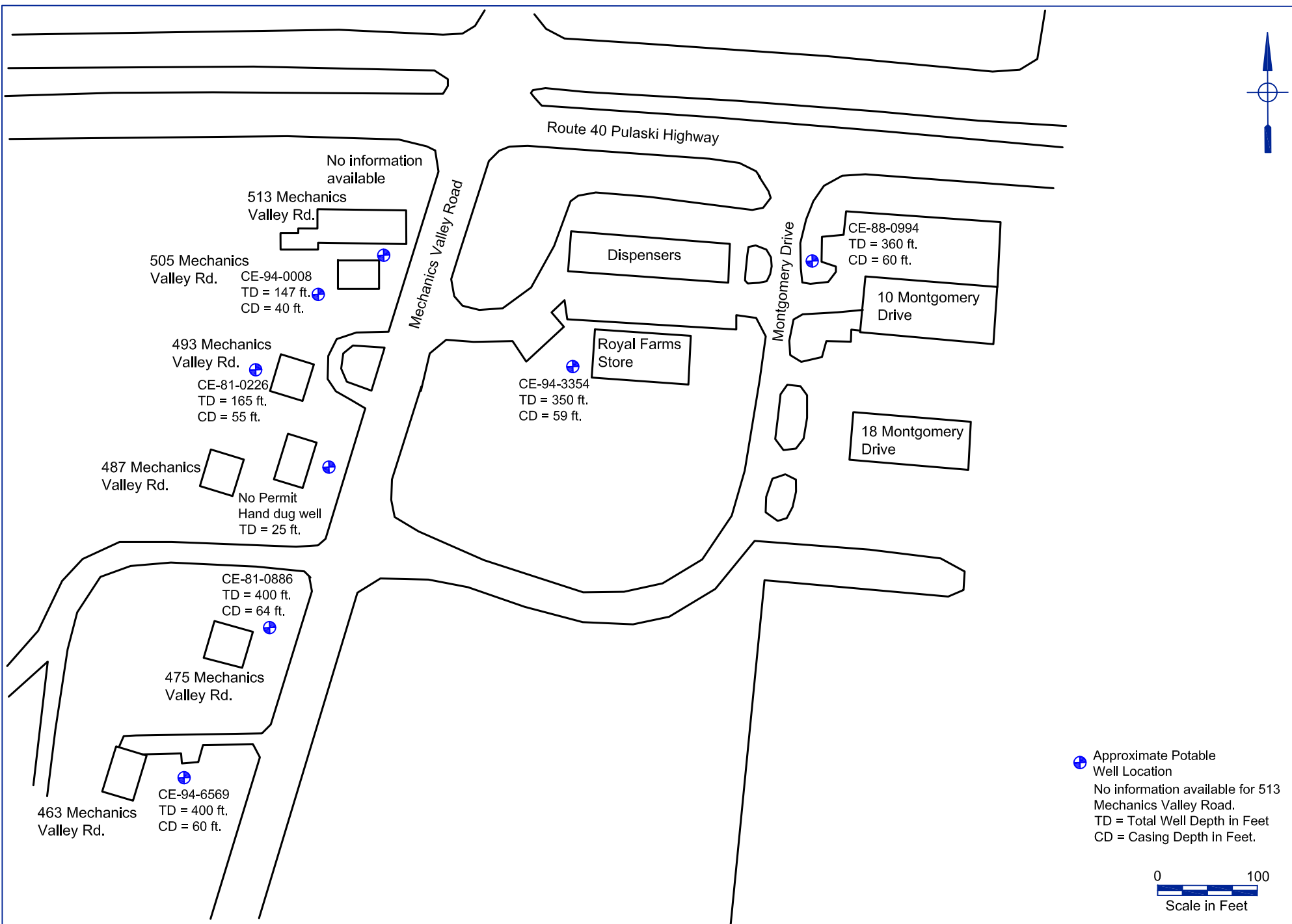



Scale in Feet



 Potable Well
(CE-88-0994)

Advantage Environmental Consultants, LLC 8610 Washington Blvd. Suite 217 Jessup, MD 20794 Phone 301-776-0500 Fax 301-776-1123	Project No.: 05-056	Drawn by: JDW	Figure 1 - Site Features Map Royal Farms No. 96 500 Mechanics Valley Road North East, MD
	Task No.: RF96	Date: 12-15-2012	
	File: Site Features	Revision No.: 2	



⊕ Approximate Potable Well Location
No information available for 513 Mechanics Valley Road.
TD = Total Well Depth in Feet
CD = Casing Depth in Feet.



Advantage Environmental Consultants, LLC
8610 Washington Blvd. Suite 217
Jessup, MD 20794
Phone 301-776-0500 Fax 301-776-1123

Project No.: 05-056	Drawn by: JSS
Task No.: RF96	Date: 12-15-2012
File: Site Area	Revision No.: 2

Figure 2 - Potable Well Location Map
Royal Farms No. 96
500 Mechanics Valley Road
North East, MD

Historical Monitoring/Recovery Well Groundwater Analytical Results
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901

Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naph	PCE	TPH GRO	TPH DRO
MW-10	12/15/2011	9.2	BDL	BDL	BDL	9.2	BDL	BDL	BDL	BDL	BDL
	3/15/2012	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	6/21/2012	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	9/6/2012	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	11/15/2012	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	2/21/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	5/30/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	8/13/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	11/8/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MW-12	12/15/2011	110	BDL	BDL	70	180	BDL	BDL	BDL	BDL	BDL
	3/15/2012	BDL	BDL	BDL	BDL	BDL	9	BDL	BDL	BDL	BDL
	6/21/2012	BDL	BDL	BDL	BDL	BDL	19	BDL	BDL	BDL	BDL
	9/6/2012	BDL	BDL	BDL	BDL	BDL	4.9	BDL	BDL	BDL	0.21
	11/16/2012	BDL	BDL	BDL	BDL	BDL	3.8	BDL	BDL	BDL	BDL
	2/22/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	5/29/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	8/13/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	11/8/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MW-13	12/15/2011	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	3/15/2012	BDL	11	BDL	380	391	BDL	BDL	BDL	BDL	BDL
	6/21/2012	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	9/6/2012	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	11/15/2012	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	2/21/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	5/29/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	8/13/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	11/8/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.21
MW-10D Shallow	8/16/2013	BDL	BDL	BDL	BDL	BDL	2.6	BDL	26.7	BDL	BDL
	11/8/2013	BDL	BDL	BDL	BDL	BDL	2.8	BDL	19.7	0.25	BDL
MW-10D Middle	8/16/2013	BDL	BDL	BDL	BDL	BDL	3.2	BDL	6.7	BDL	BDL
	11/8/2013	BDL	BDL	BDL	BDL	BDL	2.8	BDL	5.5	BDL	BDL
MW10D Deep	8/16/2013	BDL	BDL	BDL	BDL	BDL	3.5	BDL	3.5	BDL	BDL
	11/8/2013	BDL	BDL	BDL	BDL	BDL	3.6	BDL	BDL	BDL	NS
MW-12D Shallow	8/16/2013	BDL	BDL	BDL	BDL	BDL	2.6	BDL	BDL	BDL	0.34
	11/8/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.42
MW-12D (Mid-1)	8/16/2013	BDL	BDL	BDL	BDL	BDL	11.7	BDL	BDL	BDL	BDL
	11/8/2013	BDL	BDL	BDL	BDL	BDL	2.6	BDL	BDL	BDL	0.41

**Historical Monitoring/Recovery Well Groundwater Analytical Results
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901**

Well No.	Date	B	T	E	X	Total BTEX	MTBE	Naph	PCE	TPH GRO	TPH DRO
MW-12D (Mid-2)	8/16/2013	BDL	BDL	BDL	BDL	BDL	8.2	BDL	BDL	BDL	BDL
	11/8/2013	BDL	BDL	BDL	BDL	BDL	7.5	BDL	BDL	BDL	0.26
MW-12D Deep	8/16/2013	BDL	BDL	BDL	BDL	BDL	12.8	BDL	7.6	BDL	0.30
	11/8/2013	BDL	BDL	BDL	BDL	BDL	13.2	BDL	6.5	BDL	0.26
MW-13D Shallow	8/16/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	11/8/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.31
MW-13D Deep	8/16/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	11/8/2013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Type I and II Aquifers		5	1000	700	10000	NRS	20	0.65	5	0.047	0.047

TPH GRO and DRO results in parts per million or mg/l

BTEX, MTBE, and Naphthalene, Acetone, MEK, 1,2-Dichloroethane, PCE, Carbon Disulfide, and Isopropylbenzene results in parts per billion or ug/l

B = Benzene; T = Toluene; E = Ethylbenzene; X = Xylene

MTBE = Methyl-tert-butyl-ether

Naph = Naphthalene

PCE = Tetrachloroethene

TPH GRO = Total Petroleum Hydrocarbons Gasoline Range Organics

TPH DRO = Total Petroleum Hydrocarbons Diesel Range Organics

NS = Not Sampled

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

NRS = No Regulatory Standard

MW-10D Shallow collected at 25-29.5 feet below top of casing

MW-10D Middle collected at 89-94 feet below top of casing

MW-10D Deep collected at 185-190 feet below top of casing.

MW-12D Shallow collected at 41-51 feet below top of casing

MW-12D Mid 1 collected at 70-75 feet below top of casing

MW-12D Mid 2 collected at 95-100 feet below top of casing

MW-12 D Deep collected at 145-150 feet below top of casing

MW-13D Shallow collected at 37-42 feet below top of casing

MW-13D Deep collected at 134.5 to 139.5 feet below top of casing