April 20, 2015

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

Re: **Rebound Evaluation Work Plan - Revised**
Royal Farms Store # 96
500 Mechanics Valley Road
North East, MD
OCP Case No. 2011-0729-CE
MDE Facility No. 13326

Dear Mrs. DeBartolomeo,

Advantage Environmental Consultants, LLC (AEC), on behalf of Royal Farms / Two Farms, Inc. (Royal Farms), is presenting this work plan for a Rebound Evaluation following the proposed deactivation of the Vapor Extraction / Groundwater Extraction (VE/GE) remediation system located at 500 Mechanics Valley Road in North East, MD (i.e. the "Site").

Throughout operation of the VE/GE system, AEC has maintained a regular monitoring schedule. Groundwater quality has been monitored using a quarterly sampling schedule. VE/GE system performance has been monitored for general operation and maintenance (O&M) parameters on a biweekly basis. Using results from periodic sampling and field measurements, removal rates of hydrocarbons from the subsurface at the Site have been quantified. Since system start-up, concentrations of dissolved phase hydrocarbons (DPH) reported from quarterly sampling have diminished to the point where asymptotic levels have been achieved. A diminishing trend has also been shown from recovery data for vapor phase hydrocarbons (VPH) and DPH. A graphical representation of time series recovery data for DPH and VPH is included in Graphs 1 through 24 in Attachment A. Based on the asymptotic groundwater DPH concentrations and asymptotic DPH and VPH recovery trends, remediation system operation will be suspended in order to perform a rebound evaluation.

The evaluation will be performed by sampling select representative wells on a monthly basis for the first 6 months and then quarterly for the remainder of the rebound test. The rebound test will continue for 12 months unless the evaluation determines that a restart of the VE/GE system is necessary. Eight wells in the remediation zone have been selected based on their elevated concentrations of volatile organic compounds (VOCs) prior to start-up of the VE/GE system (December 11, 2012) and their location within the remediation system's zone of influence for vapor extraction and groundwater recovery. The selected wells include MW-8, RW-1, RW-2, RW-4, RW-6, RW-8, RW-11, and RW-12. A figure depicting the well locations is included as Figure 1 of Attachment B. A figure showing vacuum influence from the system and groundwater gradient under pumping conditions is included as Figure 2 of Attachment B.

Established Baseline for Rebound Evaluation

The rebound evaluation will focus on concentrations of benzene, total BTEX (benzene, toluene, ethylbenzene, and xylenes), and naphthalene (i.e., the target analytes (TAs)). Baseline (C_0) concentrations for these constituents have been established by calculating the arithmetic mean of concentrations reported from sampling events after the discovery of the release and prior to the start-up of the VE/GE. Prior to start-up of the VE/GE system, liquid phase hydrocarbons (LPH) were encountered in wells in the remediation zone. In the case that LPH was encountered, the well was not sampled. The mean concentrations prior to start-up do not factor in the presence of LPH and are derived from sampling results only.

The C_0 values for each of the TAs for each well that will be utilized for the rebound study are listed in Tables 1 and 2 of Attachment C.

Evaluation Parameters for Rebound Evaluation

AEC proposes using the following technique to analyze groundwater concentration rebound following the termination of remediation activities at the Site. The techniques are based on work conducted by the US Department of Energy at the Idaho National Engineering and Environmental Laboratory Test Area North facility. Specifically, the rebound analysis techniques are outlined in two documents which are related and are titled:

- Medial Zone Rebound Test for Operable Unit 1-07B Test Area North, ICP/EXT-04-00557 Revision 0, Idaho Completion Project, Bechtel BWXT Idaho, LLC, September 2004.

- New Pump and Treat Facility Medial Zone Rebound Test Plan, Operable Unit 1-07B, Test Area North, ICP/EXT-04-00557 Revision 1, Idaho Completion Project, Bechtel BWXT Idaho, LLC, November 2004.

The referenced approach includes periodic sampling of selected wells in the remediation area. Concentrations of TAs reported from each sampling event during the rebound evaluation are compared to the established baseline concentration.

This process uses the baseline pre-remediation TA concentration (C_0), which is then divided into a rebound concentration (C). The result is a ratio (C/C_0) showing percentage of rebound relative to the baseline concentration. The C/C_0 ratio also allows direct comparison of rebound response between monitoring locations with different initial concentrations. A separate C/C_0 ratio will be calculated for each TA in each selected well.

For instance, current C/C_0 ratios can be calculated using the most recent groundwater sample results (collected in November 2014). The reported concentration of each TA becomes C in the C/C_0 ratio while the C_0 values are the established baseline concentration for the same TA in the same well. C/C_0 values for all TAs in all wells are currently less than 0.01 or 1%. Current C/C_0 ratios are listed in Table 1 of Attachment C. Table 2 shows restart threshold values for each TA in each selected well based on Case C discussed below. This table will also be used for rebound analysis following each sampling event.

Using the C/C_0 ratio which represents DPH rebound relative to the pre-startup mean concentration, the following three potential rebound responses are possible:

- Case A – Little-to-No Rebound Criterion, defined as the C/C_0 ratio remaining less than 25 percent within the rebound evaluation period;

- Case B – Gradual Rebound Criterion, defined as the C/C_0 ratio increasing to greater than or equal to 25 percent but less than 75 percent within the rebound evaluation period; and,
- Case C - Rapid Rebound Criterion, defined as the C/C_0 ratio increasing to greater than or equal to 75 percent within the rebound evaluation period.

It is important to note that the observed rebound responses could vary from well to well, and more than one type of response could be observed at different wells and for different TAs.

Restart Conditions

If the C/C_0 ratio for a single TA in the same well is greater than 75 percent (Rapid Rebound Criterion-Case C) during two consecutive sampling events, then the rebound test will be terminated and remediation will be restarted. MDE will be notified within 48 hours of this condition. The rebound evaluation will be suspended and normal VE/GE system operation and maintenance procedures will be reinstated for one month.

Following the one month restart period, samples from the eight selected wells will be collected and laboratory analyzed for VOCs and fuel oxygenates. Results will be compared to the established baseline to determine the C/C_0 ratios. If the Little-to-No Rebound Criterion is met, the VE/GE system will once again be deactivated and the rebound evaluation will restart. If Little-to-No Rebound Criterion is not met, VE/GE system operation will continue for an additional month at which time the sampling and analysis of the eight selected wells will repeat.

Methyl-tert-butyl-ether (MTBE)

In addition to the TA's established above, MTBE will be included in all laboratory analysis and data tables compiled and reported to MDE. Since the release, MTBE was not detected above MDE standards in any of the selected rebound evaluation wells. Due to the low relative concentrations of MTBE historically reported, MTBE will not be used as a VE/GE system restart parameter. In the event that MTBE is reported above MDE standards from rebound evaluation sampling, AEC will report the finding to MDE for consideration of whether or not additional measures are warranted.

Completion of the Rebound Evaluation

The rebound evaluation will be considered complete if the sampling and rebound evaluation activities continue for one year without the restart criteria being reached. After completion of the rebound test, the data will be aggregated and averaged to determine if the observed response meets the Little-to-No Rebound Criterion (Case A) or the Gradual Rebound Criterion (Case B).

If the Little-to-No Rebound Criterion (less than 25 percent rebound) is met, remediation will be considered to be completed to the maximum extent possible. As such, monitored natural attenuation or closure of the regulatory case will be evaluated.

If the Gradual Rebound Criterion (25 to 75 percent rebound) is met, then the rebound test data will be evaluated to determine whether to restart the remediation system, allow additional time for further rebound evaluation, proceed into an in-situ chemical oxidation (ISCO), monitored natural attenuation or enhanced bioremediation polishing approach, or regulatory case closure.

Proposed Modification of Sampling Procedure

Sampling results from the recovery wells and GE system influent have been used to evaluate well specific recovery and overall VE/GE system efficiency. Recovery well samples have historically been taken from sample ports on the GE portion of the VE/GE system. Similar sampling is not possible with the VE/GE system shut down. Pumps will be removed from each well and recovery

well samples will be taken using the purge and bail method as is currently used for quarterly monitoring well network sampling. The quarterly well sampling as required by MDE will be maintained throughout the rebound evaluation. Results from the quarterly sampling will be used for the rebound assessment analysis during the months in which quarterly sampling is performed.

The table below shows the proposed sampling schedule for the rebound evaluation in the case that VE/GE system reactivation criteria is not met within one year. The recovery wells will continue to be sampled on a quarterly basis. In addition, the selected rebound evaluation wells will be sampled monthly for the first six month then resume their quarterly sampling. It should be noted that AEC has submitted a request to modify the sampling requirements for the tank-pit observation wells. A response from MDE is pending.

Analysis:	Select VOCs + Oxygenates	VOCs+oxygenates TPH DRO and TPH GRO				MNA Parameters
Wells:	Eight Rebound Evaluation Wells**	Monitoring Wells	Recovery Wells	Tank-pit wells	Deep wells*	MW-6. MW-7, MW-8, MW-9 and MW-11
Month 1	X	X	X	X	X	X
Month 2	X					
Month 3	X					
Month 4	X	X	X	X	X	
Month 5	X					
Month 6	X					
Month 7		X	X	X	X	X
Month 8						
Month 9	X					
Month 10		X	X	X	X	
Month 11						
Month 12	X					

*Annual sampling of all deep well intervals will continue on the existing schedule
** MW-8, RW-1, RW-2, RW-4, RW-6, RW-8, RW-11, and RW-12
TPH - Total Petroleum Hydrocarbons
DRO – Diesel Range Organics
GRO – Gasoline Range Organics
MNA – Monitored Natural Attenuation

Monitoring of Deep Bedrock (Sentinel) Wells

Monitoring of the three sentinel wells has been performed since VE/GE system start-up and will continue throughout the rebound evaluation. Studies performed at the Site have shown limited connectivity between the sentinel wells and the surface aquifer in which the remediation efforts are focused. For this reason, AEC has not assigned immediate restart criteria based upon sampling results for the sentinel wells.

Subsurface Soil Investigation

Following the rebound study, a follow-up soil quality investigation will be conducted. Once the rebound assessment has continued for one year without the restart criteria being met, AEC will submit a Rebound Study Summary Report and Soil Quality Investigation Work Plan. This document will include a plan for soil sampling with the objective of comparing onsite soils to the cleanup standards outlined in AEC's Corrective Action Plan Addendum dated March 28, 2013.

Sincerely,

Advantage Environmental Consultants, LLC

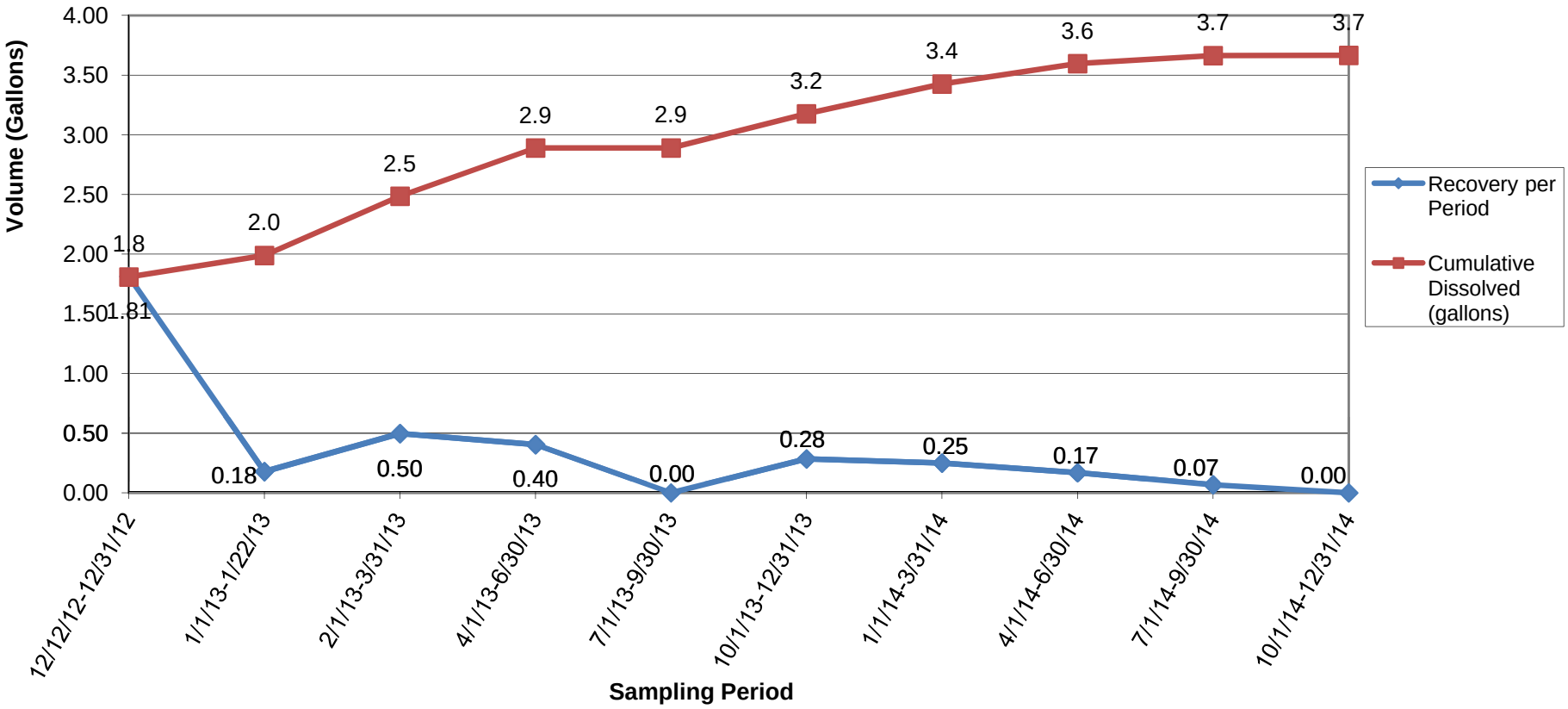
Jeffery Stein
Principal

Attachments

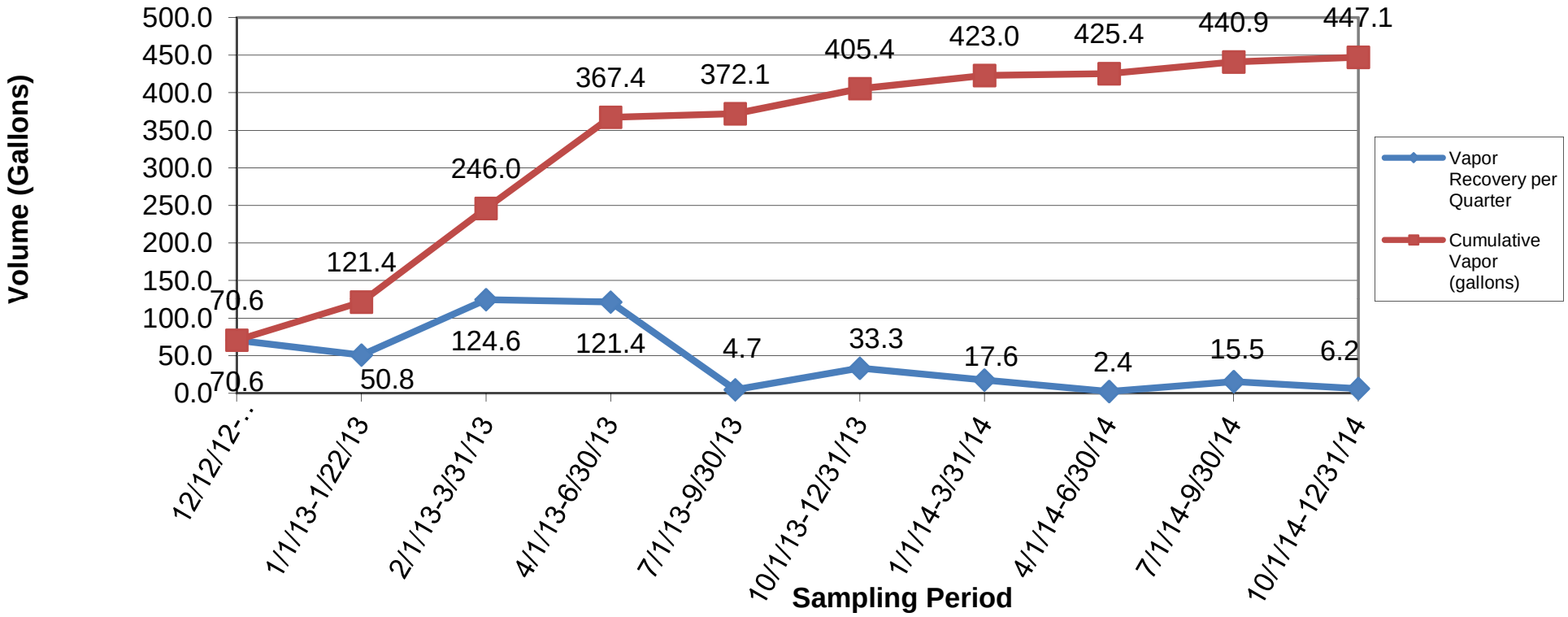
cc: T. Ruszin

ATTACHMENT A

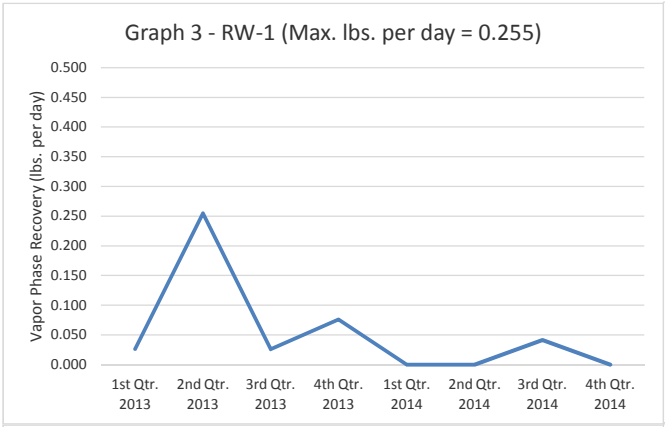
Graph 1 - Dissolved Phase Hydrocarbon Recovery (gal.) vs. Time
Royal Farms #96
500 Mechanics Valley Road, North East, MD

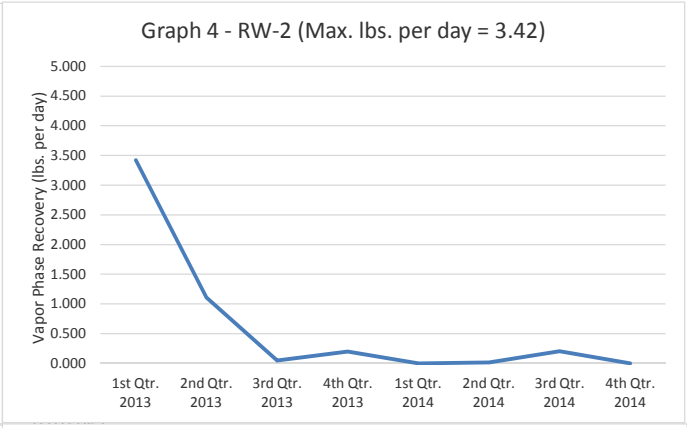


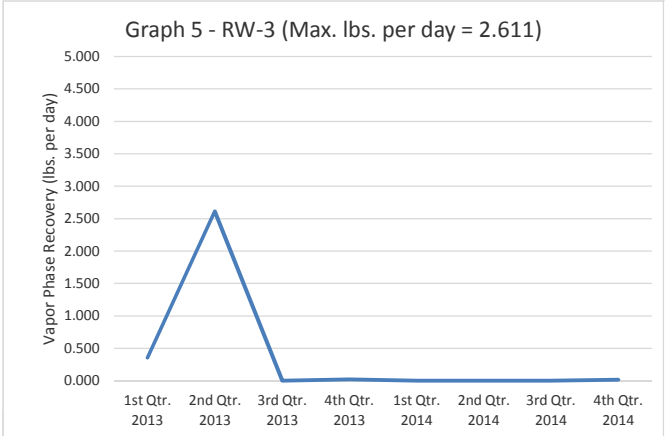
Graph 2 - Vapor Phase Hydrocarbon Recovery (gal.) vs. Time
Royal Farms #96
500 Mechanics Valley Road, North East, MD

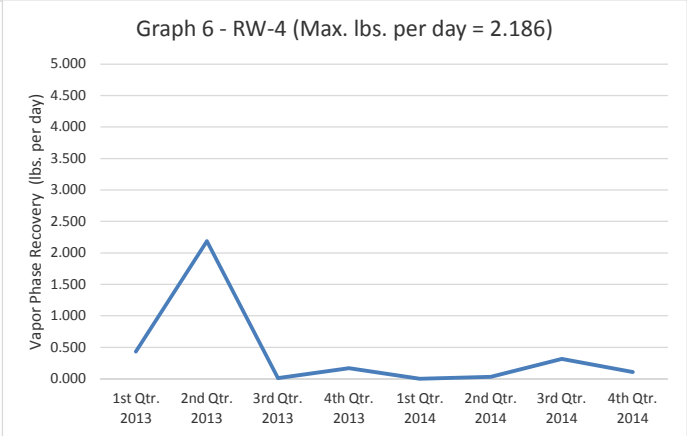


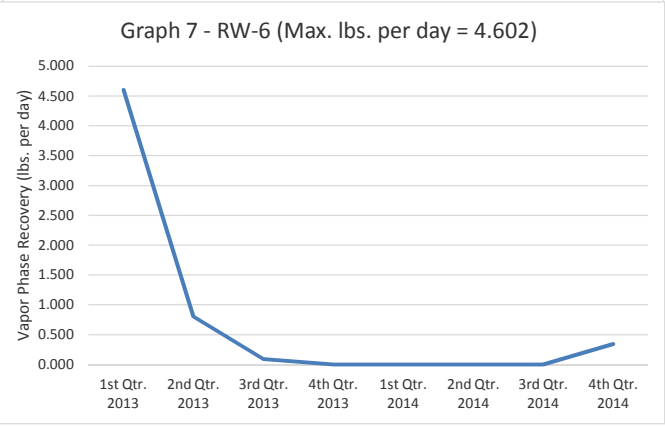
Total Vapor Petroleum Hydrocarbon Recovery (lbs. per day) vs. Time
Royal Farms #96
500 Mechanics Valley Road, North East, MD

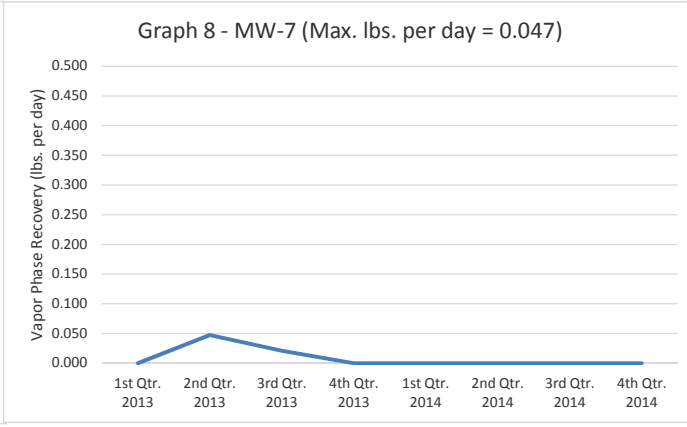












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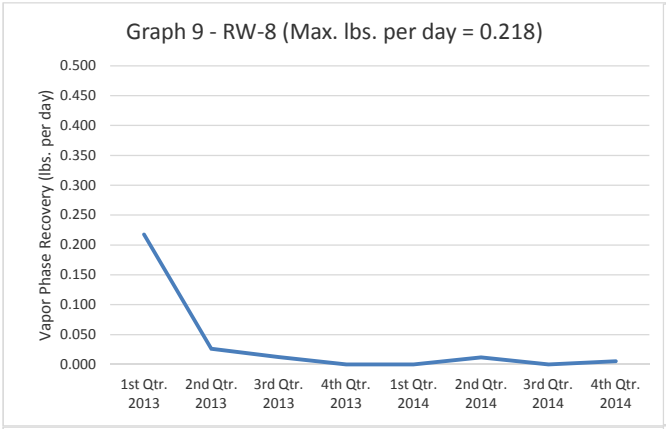
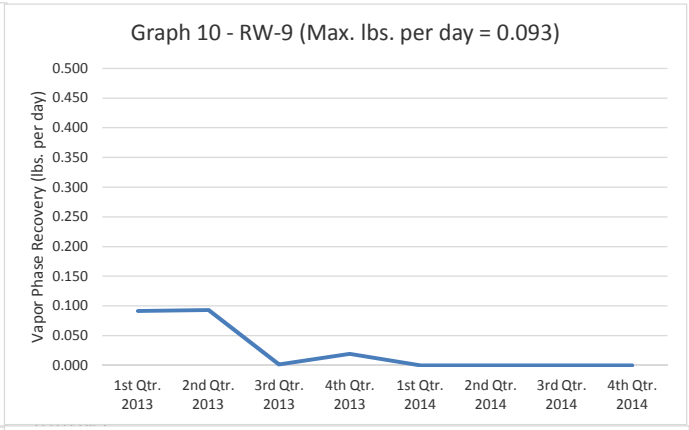
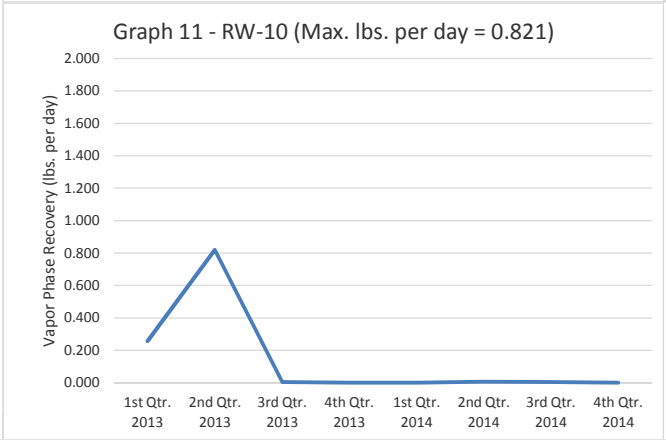
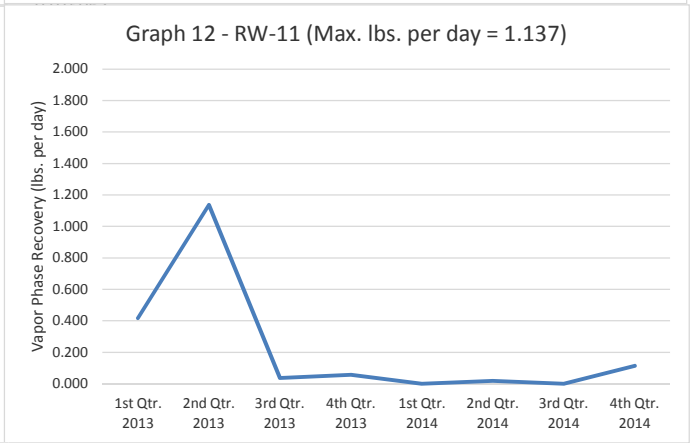
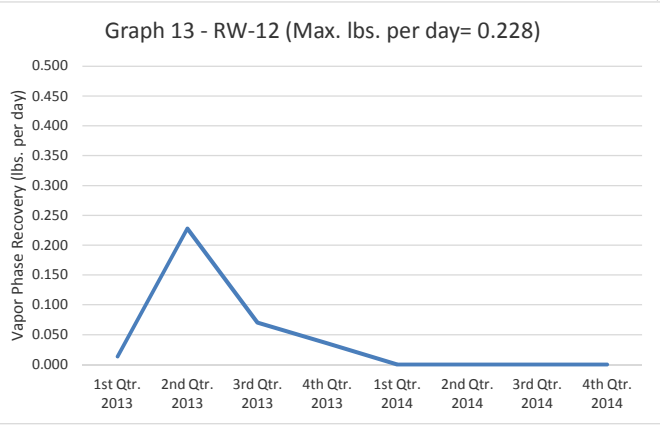
Royal Farms #96
500 Mechanics Valley Road, North East, MD











Total Dissolved Petroleum Hydrocarbon Recovery (gal.) vs. Time
Royal Farms #96
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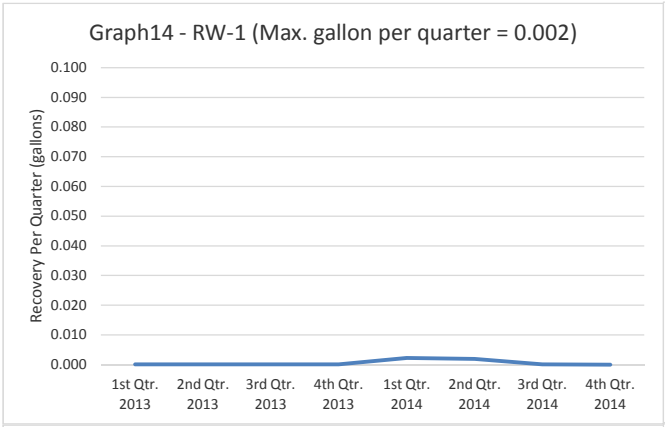

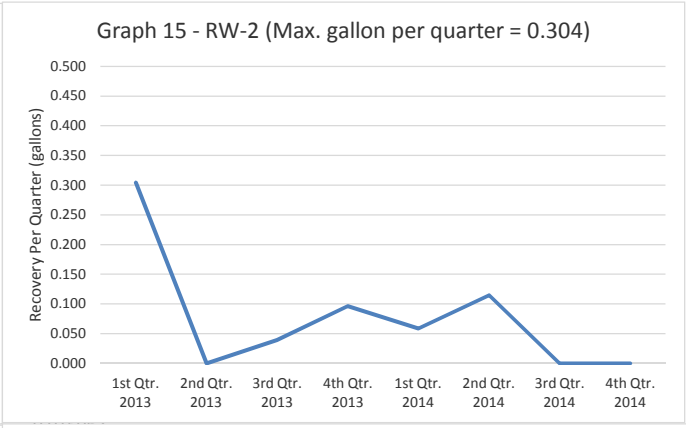

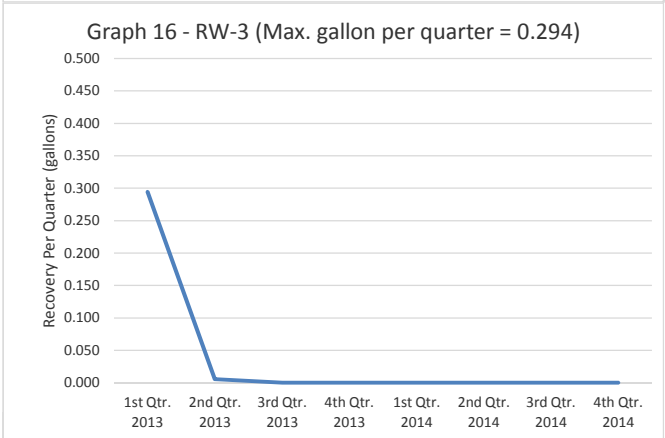

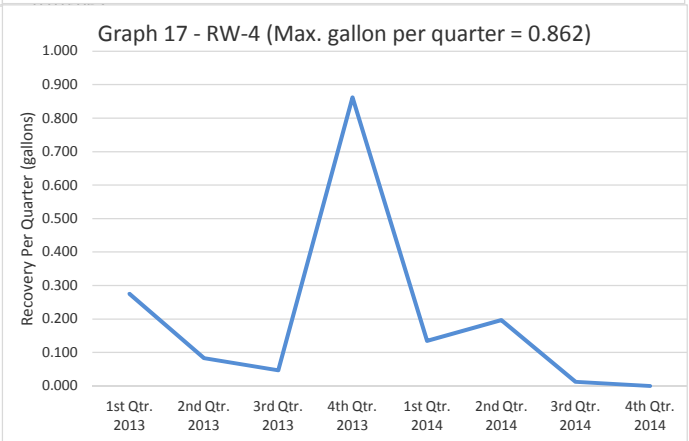

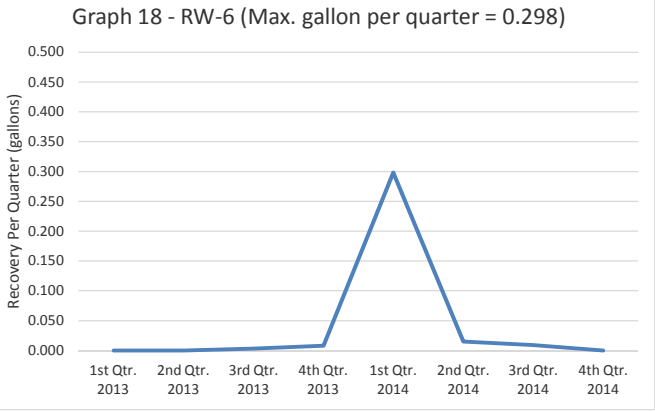

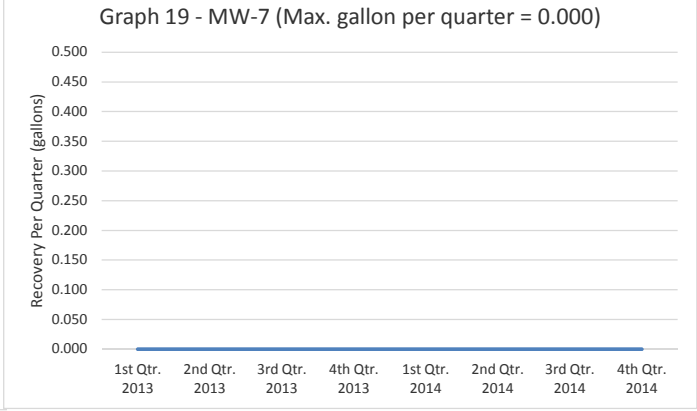

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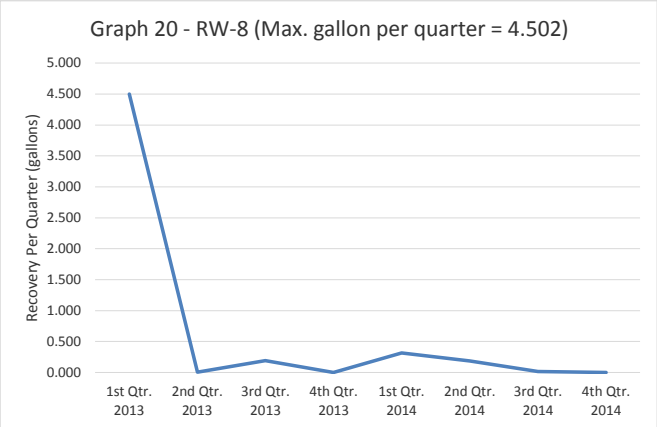
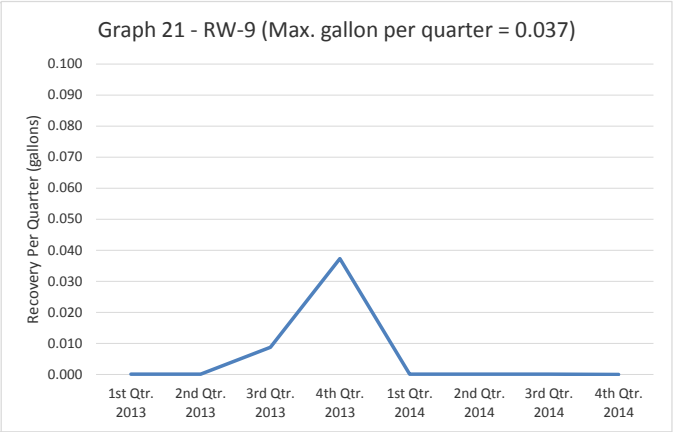
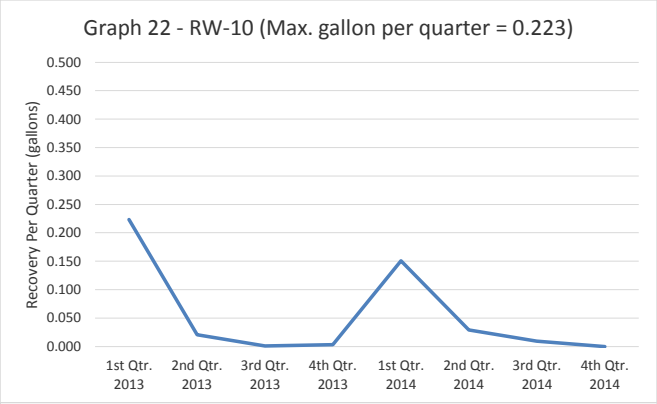
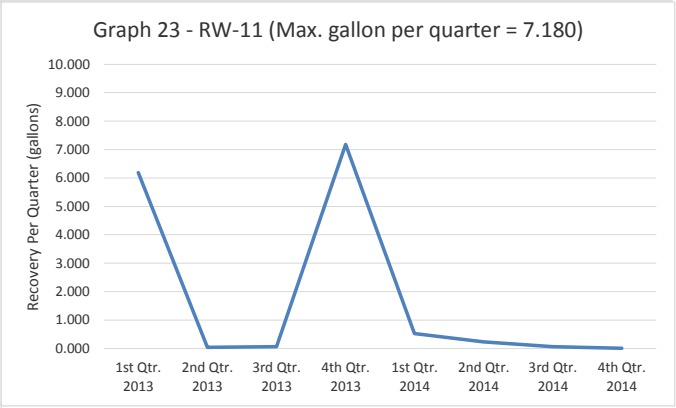
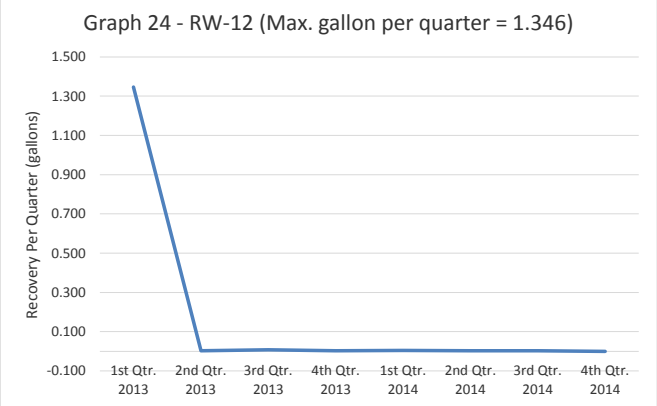
Royal Farms #96
500 Mechanics Valley Road, North East, MD



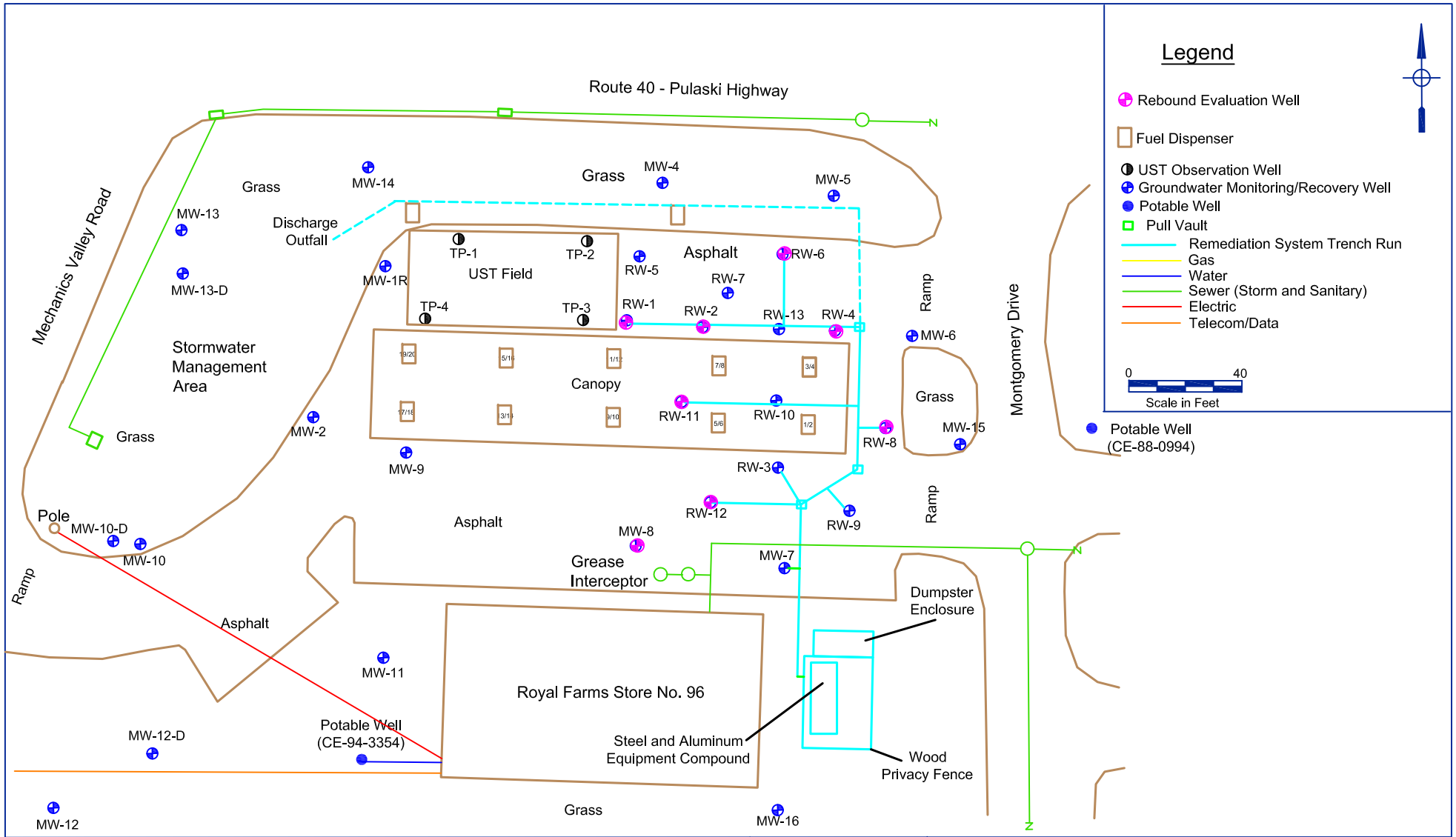








ATTACHMENT B



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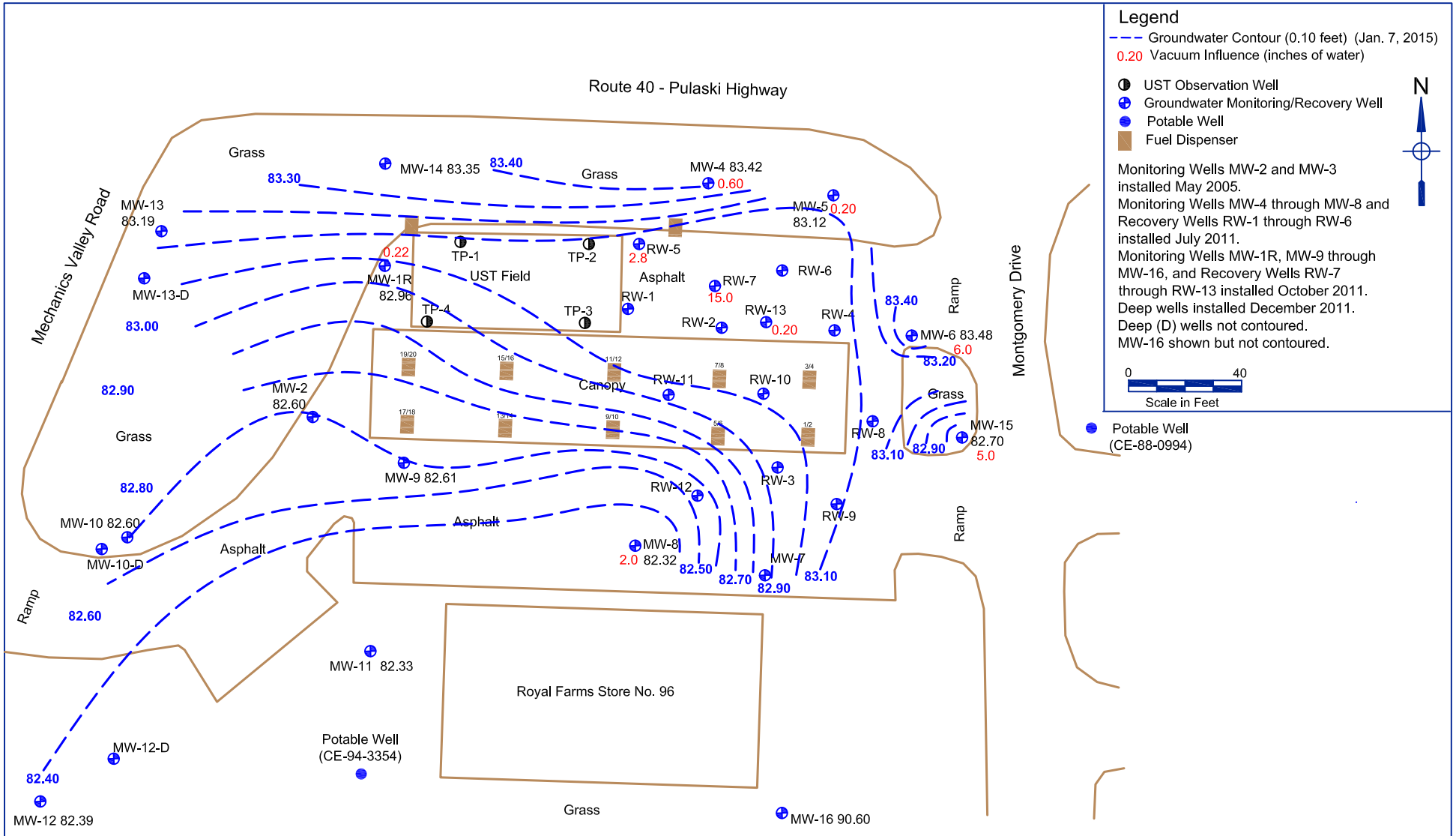
8610 Washington Blvd. Suite 217
Jessup, MD 20794
Phone 301-776-0500 Fax 301-776-1123

Project No.: 05-056	Drawn by: JDW
Task No.: RF96	Date: 3-30-2015
File: Site Features	Revision No.: 2

Figure 1 - Site Features Map with Selected Rebound Evaluation Wells
Royal Farms No. 96
500 Mechanics Valley Road
North East, MD



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Jessup, MD 20794
Phone 301-776-0500 Fax 301-776-1123

Project No.: 05-056	Drawn by: JDW
Task No.: RF96	Date: 2-16-2015
File: Site Features	Revision No.: 5

Figure 2 - Vacuum Influence and Active Pumping Gradient Map
Royal Farms No. 96
500 Mechanics Valley Road
North East, MD

ATTACHMENT C

Table 1 - Historical Groundwater Sampling Analytical Results
and Rebound Evaluation Calculations
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901

Well No.	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE
MW-8	8/4/2011	**5.2**	12	0.001	7	24.2	0.001	0.001
	9/15/2011	**11**	11	6.2	44	72.2	**26**	0.001
	12/15/2011	**18**	0.001	0.001	6.9	24.9	0.001	0.001
	3/15/2012	**28**	5.2	0.001	2300	2333.2	0.001	0.001
	6/21/2012	**6.2**	0.001	0.001	0.001	6.2	0.001	0.001
	9/6/2012	**33.2**	0.001	0.001	0.001	33.2	0.001	0.001
	11/16/2012	3.4	0.001	0.001	0.001	3.4	0.001	0.001
Baseline: Pre-Start-up Mean (C_o):		15.0				356.8	26.0	0.0
11/2014 Concentration (C)		0.001				0.001	0.001	0.001
11/2014 Rebound Concentration (C/C_0)		0.000067				0.000003	0.000038	NA
	2/22/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	5/30/2013	**18.6**	0.001	0.001	0.001	18.6	0.001	2.8
	8/13/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	11/7/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2/11/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	5/22/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	8/15/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	11/7/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001
RW-1	8/4/2011	**260**	700	240	1360	2560	**250**	
	9/15/2011	**2600**	**9400**	**4100**	**24200**	40300	**2600**	
	12/15/2011	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/15/2012	**660**	**2700**	560	**771400**	775320	**2500**	**2500**
	11/19/2012	**317**	**1480**	196	1540	3533	**57.1**	**57.1**
Baseline: Pre-Start-up Mean (C_o):		959.3				205428.3	1351.8	1278.6
11/2014 Concentration (C)		0.001				0.001	0.001	0.001
11/2014 Rebound Concentration (C/C_0)		0.000001				0.000000	0.000001	NA
	2/25/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	5/30/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	8/12/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	11/6/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2/10/2014	0.001	3.2	0.001	2.1	5.3	0.001	0.001
	5/22/2014	0.001	2.3	0.001	2.1	4.4	0.001	0.001
	8/15/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	11/5/2014	0.001	0..001	0.001	0.001	0.001	0.001	0.001
RW-2	8/4/2011	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	9/15/2011	**17300**	**30000**	**3800**	**17400**	68500	**3500**	0.001

Table 1 - Historical Groundwater Sampling Analytical Results
and Rebound Evaluation Calculations
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901

Well No.	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE
	12/15/2011	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/15/2012	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/20/2012	**162**	972	165	2113	3412	**88.5**	0.001
Baseline: Pre-Start-up Mean (C_o):		8731.0				35956.0	1794.3	0.0
11/2014 Concentration (C)		0.001				0.001	0.001	0.001
11/2014 Rebound Concentration (C/C_0)		0.000000				0.000000	0.000001	NA
	2/25/2013	**16.1**	31.3	3.7	282	333.1	**46.1**	0.001
	5/30/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	8/12/2013	**7.9**	35.7	5.1	38.9	87.6	0.001	0.001
	11/6/2013	**31.4**	40.1	6.9	90.8	169.2	**16.8**	0.001
	2/10/2014	**6.7**	41.4	13.1	75.7	136.9	**28.1**	0.001
	5/22/2014	**27.9**	105	11.1	122.5	266.5	**21**	0.001
	8/15/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	11/5/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001
RW-4	8/4/2011	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	9/15/2011	**15400**	**25000**	**3300**	**15800**	59500	**2700**	0.001
	12/15/2011	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/15/2012	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/20/2012	**13100**	**29500**	**2140**	**15520**	60260	**558**	0.001
Baseline: Pre-Start-up Mean (C_o):		14250.0				59880.0	1629.0	0.0
11/2014 Concentration (C)		0.001				0.001	0.001	0.001
11/2014 Rebound Concentration (C/C_0)		0.000000				0.000000	0.000001	NA
	2/25/2013	**14**	47.9	0.001	239.8	301.7	**47.6**	0.001
	5/30/2013	**11.8**	25.5	5.6	47.8	90.7	**6.5**	0.001
	8/12/2013	4.9	26.4	5.7	66.3	103.3	**4.0**	0.001
	11/6/2013	**192**	335	86.8	902	1515.8	**258.0**	0.001
	2/10/2014	**31.7**	132	19.3	131.3	314.3	**44.3**	0.001
	5/22/2014	46.3	181	22.9	208.8	459	32.5	0.001
	8/15/2014	**3.4**	14.1	**2.1**	13.1	32.7	**7.2**	0.001
	11/5/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001
RW-6	6/8/2011	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	7/26/2011	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	8/4/2011	**730**	**2700**	**800**	4800	9030	**400**	0.001
	9/15/2011	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	12/15/2012	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/15/2012	**3700**	**8000**	660	2190	14550	**950**	0.001

Table 1 - Historical Groundwater Sampling Analytical Results
and Rebound Evaluation Calculations
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901

Well No.	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE
	6/21/2012	**750**	**2100**	260	1900	5010	**150**	0.001
	11/20/2012	**332**	540	70.3	1166	2108.3	**101**	0.001
Baseline: Pre-Start-up Mean (C_o):		1378.0				7674.6	400.3	0.0
11/2014 Concentration (C)		0.001				0.001	0.001	0.001
11/2014 Rebound Concentration (C/C_0)		0.000001				0.000000	0.000002	NA
	2/25/2013	**21.2**	90.1	14.5	245.4	371.2	**35.2**	0.001
	5/30/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	8/12/2013	0.001	0.001	0.001	7.0	7.0	0.001	0.001
	11/6/2013	0.001	3.6	0.001	10.5	14.1	0.001	0.001
	2/11/2014	**10.0**	148	31.5	505.0	694.5	**6.8**	0.001
	5/22/2014	0.001	10.5	2.3	21.5	34.3	0.001	0.001
	8/15/2014	0.001	7.6	0.001	16.5	24.1	0.001	0.001
	11/5/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001
RW-8	12/15/2011	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/15/2012	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	11/19/2012	**2460**	**5990**	343	1895	10688	0.001	0.001
Baseline: Pre-Start-up Mean (C_o):		2460.0				10688.0	250.0	0.0
11/2014 Concentration (C)		0.001				0.001	0.001	0.001
11/2014 Rebound Concentration (C/C_0)		0.000000				0.000000	0.000004	NA
	2/25/2013	**821**	**2800**	171	1137	4929	0.001	0.001
	5/30/2013	0.001	3.5	0.001	2.0J	5.5	0.001	0.001
	8/12/2013	**33.3**	290	20.7	84.8	428.8	**13.2**	0.001
	11/6/2013	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	2/10/2014	4.6	312	40.6	372	729.2	**14.4**	0.001
	5/22/2014	**6.9**	93.5	29.9	301	431.3	**30.6**	0.001
	8/15/2014	0.001	12.5	3.1	27.2	42.8	**2.5**	0.001
	11/5/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001
RW-11	12/15/2011	LPH	LPH	LPH	LPH	LPH	LPH	LPH
	3/15/2012	**4200**	**7200**	**770**	2600	14770	**200**	0.001
	11/20/2012	**5930**	**19100**	**1250**	9290	35570	**409**	0.001
Baseline: Pre-Start-up Mean (C_o):		5065.0				25170.0	304.5	0.0
11/2014 Concentration (C)		8.500				8.500	0.001	0.001
11/2014 Rebound Concentration (C/C_0)		0.001678				0.000338	0.000003	NA
	2/25/2013	**1240**	**2820**	71.7	2649	6780.7	**151**	0.001
	5/30/2013	3.9	21.7	0.001	21.3	46.9	0.001	2.1
	8/12/2013	**12**	39.3	3.7	95.0	150	0.001	0.001

Table 1 - Historical Groundwater Sampling Analytical Results
and Rebound Evaluation Calculations
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901

Well No.	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	Naphthalene	MTBE
	11/6/2013	**805**	**5370**	**826**	5630	12631	**194**	0.001
	2/10/2014	**79.9**	438	86.6	613	1217.5	**24.3**	0.001
	5/22/2014	**67.8**	206	17.2	236.2	527.2	5.6	0.001
	8/15/2014	**26.8**	66.1	3.8	70.9	167.6	0.001	0.001
	11/5/2014	8.5	0.001	0.001	0.001	8.5	0.001	0.001
RW-12	12/15/2011	NS	NS	NS	NS	NS	NS	NS
	3/15/2012	NS	NS	NS	NS	NS	NS	NS
	11/19/2012	**184**	838	47.9	976	2045.9	**26.3**	0.001
Baseline: Pre-Start-up Mean (C_0):		184.0				2045.9	26.3	0.0
11/2014 Concentration (C)		0.001				0.001	0.001	0.001
11/2014 Rebound Concentration (C/C_0)		0.000005				0.000000	0.000038	NA
	2/25/2013	**22.4**	320	37.7	1094	1474.1	**14.1**	0.001
	5/30/2013	2.4	0.001	0.001	0.001	2.4	0.001	2.4
	8/12/2013	0.001	2.4	0.001	14.9	17.3	0.001	2.1
	11/6/2013	0.001	0.001	0.001	4.3	4.3	0.001	0.001
	2/10/2014	0.001	2.9	0.001	6.6	9.5	0.001	0.001
	5/22/2014	0.001	0.001	0.001	5.9	5.9	0.001	0.001
	8/15/2014	0.001	0.001	0.001	7.3	7.3	0.001	0.001
	11/5/2014	0.001	0.001	0.001	0.001	0.001	0.001	0.001
MDE Standards for Type I and II Aquifers		**5**	**1000**	**700**	**10000**	**NRS**	**0.65**	**20**

Sampling data from the former RW-3 is incorporated into the dataset for RW-6. MW-3 was located in the same location as RW-6 prior to installation of the VE/GE System.

Results in parts per billion or ug/l

MTBE - Methyl-tert-butyl-ether

0.001 = Below Detection Limits (Value Assigned For Computational Purposes)

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

Assigned Value

NRS = No Regulatory Standard

Table 2 - Rebound Evaluation Restart Threshold Values
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901

Well ID	Sample Date	Analyte	Pre-Start-up Mean (C_o):	Case C Threshold*
MW-8	11/7/2015	Benzene	15	11.3
	11/7/2015	Total BTEX	356.8	267.6
	11/7/2015	Naphthalene	26	19.5
RW-1	11/5/2015	Benzene	959.3	719.5
	11/5/2015	Total BTEX	205428.3	154071.2
	11/5/2015	Naphthalene	1351.8	1013.9
RW-2	11/5/2015	Benzene	8731	6548.3
	11/5/2015	Total BTEX	35956	26967.0
	11/5/2015	Naphthalene	1794.3	1345.7
RW-4	11/5/2015	Benzene	14250	10687.5
	11/5/2015	Total BTEX	59880	44910.0
	11/5/2015	Naphthalene	1629	1221.8
RW-6	11/5/2015	Benzene	1378	1033.5
	11/5/2015	Total BTEX	7674.6	5756.0
	11/5/2015	Naphthalene	400.3	300.2
RW-8	11/5/2015	Benzene	2460	1845.0
	11/5/2015	Total BTEX	10688	8016.0
	11/5/2015	Naphthalene	100	75.0
RW-11	11/5/2015	Benzene	5065	3798.8
	11/5/2015	Total BTEX	25170	18877.5
	11/5/2015	Naphthalene	304.5	228.4
RW-12	11/5/2015	Benzene	184	138.0
	11/5/2015	Total BTEX	2045.9	1534.4
	11/5/2015	Naphthalene	26.3	19.7

* - Trigger Values for restart in ug/L. Restart is necessary if an analyte in a single well is above this value for two consecutive sampling events.

Case C - Rapid Rebound Criteria (Rebound ratio greater than or equal to 0.75)