



February 15, 2016

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

Re: **Rebound Evaluation – Round Two – Month Five**
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 data and analysis package for the fifth month of the second round of the Rebound Evaluation following 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"). Sampling procedures and analysis parameters used for this Rebound Evaluation are outlined in AEC's Rebound Evaluation Work Plan – Revised dated April 20, 2015 and approved by MDE in a letter dated May 21, 2015.

The rebound test is designed to continue for 12 months unless the evaluation determines that a restart of the VE/GE system is necessary. Data for the evaluation is obtained by sampling eight select representative wells on a monthly basis for the first 6 months following operation of the VE/GE System and then quarterly for the remainder of the rebound period. Eight wells are utilized for the purposes of this evaluation: 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 A.

Established Baseline

The rebound in the selected wells is assessed for the following fuel constituents: benzene, total BTEX (benzene, toluene, ethylbenzene, and xylenes), and naphthalene. Baseline concentrations for these constituents in each respective well have been established based on results reported from sampling events after the discovery of the release and prior to the start-up of the VE/GE system. The baseline concentrations for the rebound study are listed in Table 1 of Attachment B.

Evaluation Parameters

Laboratory results from each Rebound Evaluation event are compared to the baseline concentrations for benzene, total BTEX, and naphthalene in each well independently. A ratio is generated for each constituent in each well using the most recent laboratory results in relation to the established baseline concentration. The current rebound concentration ratios are listed in Table 1 of Attachment B. For analysis of the data obtained from each Rebound Evaluation sampling event, rebound response for benzene, total BTEX, and naphthalene in each well is classified under one of the following three cases:

- Case A – Little-to-No Rebound, defined as the rebound ratio less than 0.25 (25 percent);
- Case B – Gradual Rebound, defined as the rebound ratio greater than or equal to 0.25 percent but less than 0.75 ; and,
- Case C - Rapid Rebound, defined as the rebound ratio greater than or equal to 0.75 (75 percent).

If a rebound ratio for benzene, total BTEX, or naphthalene is greater than 75 percent (Case C - Rapid Rebound) in the same well during two consecutive sampling events, then the rebound test will be terminated and the VE/GE system will be restarted. Case C threshold concentrations for each constituent of concern in each selected well are included in Table 1 of Attachment B.

In the case that the rebound evaluation criteria is met, the VE/GE system will operate for one month before being shutdown again to begin a new round of the Rebound Evaluation. Sampling results from the third month of the first round of the Rebound Evaluation met the restart criteria for a single constituent in a single well and the VE/GE System was restarted for one month from August 5 through September 4, 2015.

Sampling Events

The VE/GE system was shut down to begin the second round of the Rebound Evaluation on September 4, 2015. AEC performed sampling for the fifth month of the second round of the Rebound Evaluation on January 11th, 2016. Samples were collected using the purge and bail method in accordance with standard operating procedures for groundwater sampling at the Site.

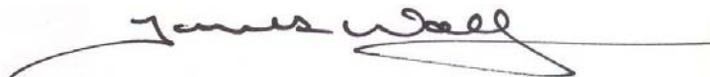
Results

Sampling results indicate that the Case C criteria has not been met for any of the constituents of concern in any of the selected wells. Therefore, the VE/GE system will remain in a stand-by condition. The greatest rebound for any rebound evaluation constituent in any selected well is 0.532 or 53.2% for naphthalene in RW-11. Rebound results for all wells are included in Table 1 of Attachment B. Laboratory analytical results and chain of custody documentation is included as Attachment C.

In addition to benzene, total BTEX, and naphthalene; methyl-tert butyl ether (MTBE) is also included in all laboratory analysis for this Rebound Evaluation at the request of MDE. MTBE was not reported above laboratory detection limits in samples from the selected rebound evaluation wells.

Sincerely,

Advantage Environmental Consultants, LLC

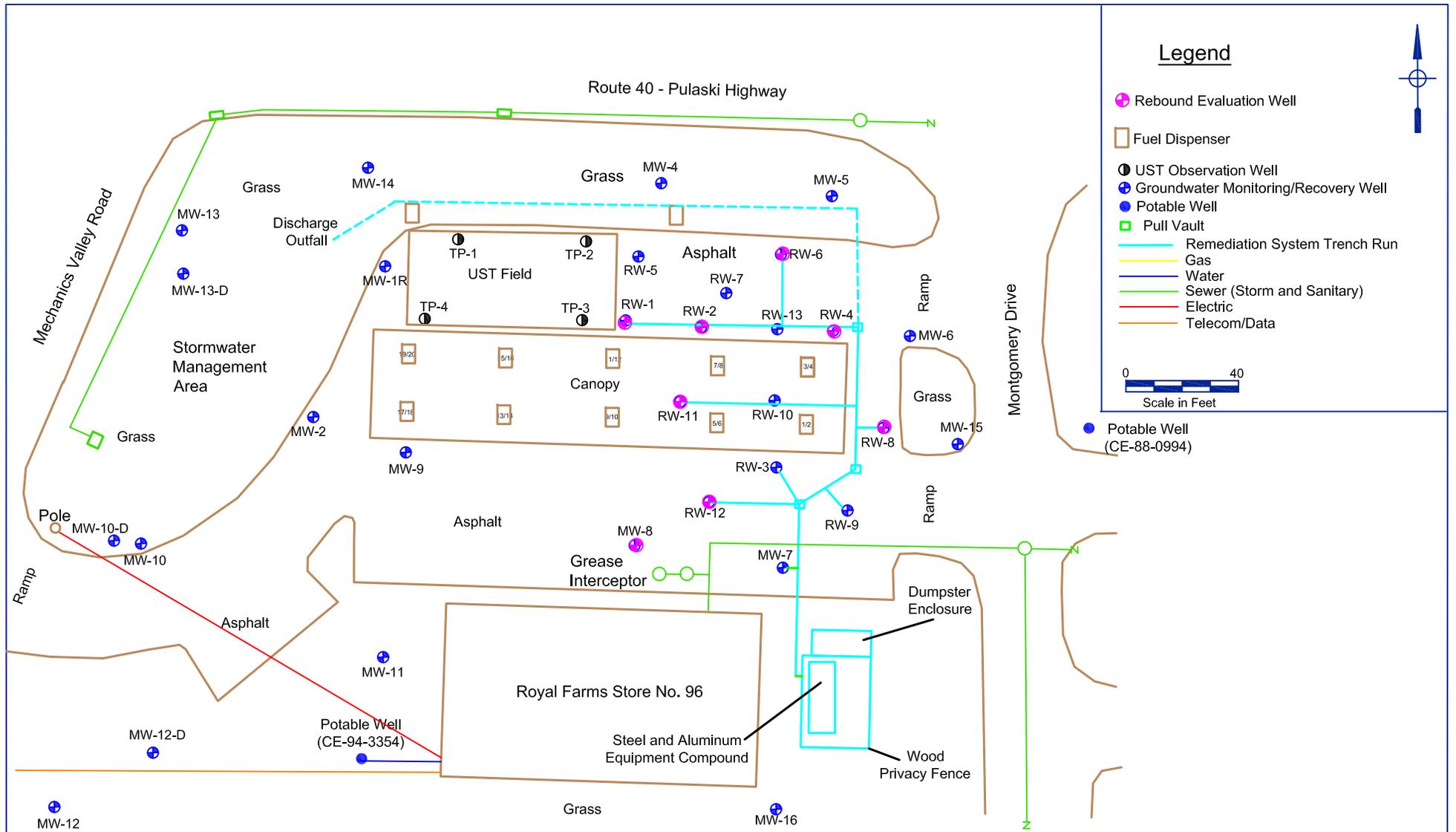


James Wolf
Project Manager

Attachments

cc: T. Ruszin

ATTACHMENT A



Advantage Environmental Consultants, LLC

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

Project No.: 05-056

Task No.: RF96

File: Site Features

Drawn by: JDW

Date: 2-16-2015

Revision No.: 2

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

ATTACHMENT B

Table 1 - Rebound Evaluation Analysis Worksheet
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901

Well ID	Sample Date	Analyte	Pre-Start-up Mean (C ₀):	Case C Threshold	Current Concentration (C)	Rebound Ratio (C/C ₀)	Rebound Condition	Restart Criteria Met?	
MW-8	5/28/2015	Benzene	15	11.3	0.1	0.007	Case A	No	
	6/29/2015		15	11.3	0.1	0.007	Case A	No	
	7/29/2015		15	11.3	0.1	0.007	Case A	No	
	9/8/2015		15	11.3	6.8	0.453	Case B	No	
	10/6/2015		15	11.3	0.1	0.007	Case A	No	
	11/6/2015		15	11.3	0.1	0.007	Case A	No	
	12/9/2015		15	11.3	0.1	0.007	Case A	No	
	1/11/2016		15	11.3	0.1	0.007	Case A	No	
	5/28/2015		Total BTEX	356.8	267.6	0.1	0.000	Case A	No
	6/29/2015			356.8	267.6	0.1	0.000	Case A	No
7/29/2015	356.8	267.6		0.1	0.000	Case A	No		
9/8/2015	356.8	267.6		6.8	0.019	Case A	No		
10/6/2015	356.8	267.6		0.1	0.000	Case A	No		
11/6/2015	356.8	267.6		0.1	0.000	Case A	No		
12/9/2015	356.8	267.6		0.1	0.000	Case A	No		
1/11/2016	356.8	267.6		0.1	0.000	Case A	No		
5/28/2015	Naphthalene	26		19.5	0.1	0.004	Case A	No	
6/29/2015		26		19.5	0.1	0.004	Case A	No	
7/29/2015		26	19.5	0.1	0.004	Case A	No		
9/8/2015		26	19.5	0.1	0.004	Case A	No		
10/6/2015		26	19.5	0.1	0.004	Case A	No		
11/6/2015		26	19.5	0.1	0.004	Case A	No		
12/9/2015		26	19.5	0.1	0.004	Case A	No		
1/11/2016		26	19.5	0.1	0.004	Case A	No		
5/28/2015		MTBE	NA	NA	BDL	NA	NA	NA	
6/29/2015			NA	NA	BDL	NA	NA	NA	
7/29/2015	NA		NA	BDL	NA	NA	NA		
9/8/2015	NA		NA	BDL	NA	NA	NA		
10/6/2015	NA		NA	BDL	NA	NA	NA		
11/6/2015	NA		NA	BDL	NA	NA	NA		
12/9/2015	NA		NA	BDL	NA	NA	NA		
1/11/2016	NA		NA	BDL	NA	NA	NA		
RW-1	5/29/2015		Benzene	959.3	719.5	0.1	0.000	Case A	No
	6/29/2015			15	11.3	0.1	0.007	Case A	No
	7/29/2015	15		11.3	0.1	0.007	Case A	No	
	9/8/2015	15		11.3	0.1	0.007	Case A	No	

Table 1 - Rebound Evaluation Analysis Worksheet
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901

Well ID	Sample Date	Analyte	Pre-Start-up Mean (C ₀):	Case C Threshold	Current Concentration (C)	Rebound Ratio (C/C ₀)	Rebound Condition	Restart Criteria Met?
	10/6/2015		15	11.3	0.1	0.007	Case A	No
	11/6/2015		15	11.3	0.1	0.007	Case A	No
	12/9/2015		15	11.3	0.1	0.007	Case A	No
	1/11/2016		15	11.3	0.1	0.007	Case A	No
	5/29/2015	Total BTEX	205428.3	154071.2	0.1	0.000	Case A	No
	6/29/2015		205428.3	154071.2	0.1	0.000	Case A	No
	7/29/2015		205428.3	154071.2	0.1	0.000	Case A	No
	9/8/2015		205428.3	154071.2	0.1	0.000	Case A	No
	10/6/2015		205428.3	154071.2	0.1	0.000	Case A	No
	11/6/2015		205428.3	154071.2	6.1	0.000	Case A	No
	12/9/2015		205428.3	154071.2	0.1	0.000	Case A	No
	1/11/2016		205428.3	154071.2	0.1	0.000	Case A	No
	5/29/2015	Naphthalene	1351.8	1013.9	0.1	0.000	Case A	No
	6/29/2015		1351.8	1013.9	0.1	0.000	Case A	No
	7/29/2015		1351.8	1013.9	0.1	0.000	Case A	No
	9/8/2015		1351.8	1013.9	0.1	0.000	Case A	No
	10/6/2015		1351.8	1013.9	0.1	0.000	Case A	No
	11/6/2015		1351.8	1013.9	0.1	0.000	Case A	No
	12/9/2015		1351.8	1013.9	0.1	0.000	Case A	No
	1/11/2016		1351.8	1013.9	0.1	0.000	Case A	No
	5/28/2015	MTBE	NA	NA	BDL	NA	NA	NA
	6/29/2015		NA	NA	BDL	NA	NA	NA
	7/29/2015		NA	NA	BDL	NA	NA	NA
	9/8/2015		NA	NA	BDL	NA	NA	NA
	10/6/2015		NA	NA	BDL	NA	NA	NA
	11/6/2015		NA	NA	BDL	NA	NA	NA
	12/9/2015		NA	NA	BDL	NA	NA	NA
	1/11/2016		NA	NA	BDL	NA	NA	NA
RW-2	5/29/2015	Benzene	8731	6548.3	5.4	0.001	Case A	No
	6/29/2015		8731	6548.3	0.1	0.000	Case A	No
	7/29/2015		8731	6548.3	2.5	0.000	Case A	No
	9/8/2015		8731	6548.3	0.1	0.000	Case A	No
	10/6/2015		8731	6548.3	0.1	0.000	Case A	No
	11/6/2015		8731	6548.3	0.1	0.000	Case A	No
	12/9/2015		8731	6548.3	0.1	0.000	Case A	No
	1/11/2016		8731	6548.3	0.1	0.000	Case A	No

**Table 1 - Rebound Evaluation Analysis Worksheet
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901**

Well ID	Sample Date	Analyte	Pre-Start-up Mean (C ₀):	Case C Threshold	Current Concentration (C)	Rebound Ratio (C/C ₀)	Rebound Condition	Restart Criteria Met?
	5/29/2015	Total BTEX	35956	26967.0	41.9	0.001	Case A	No
	6/29/2015		35956	26967.0	116.6	0.003	Case A	No
	7/29/2015		35956	26967.0	53.9	0.001	Case A	No
	9/8/2015		35956	26967.0	0.1	0.000	Case A	No
	10/6/2015		35956	26967.0	0.1	0.000	Case A	No
	11/6/2015		35956	26967.0	0.1	0.000	Case A	No
	12/9/2015		35956	26967.0	0.1	0.000	Case A	No
	1/11/2016		35956	26967.0	0.1	0.000	Case A	No
	5/28/2015	Naphthalene	26	19.5	0.1	0.004	Case A	No
	6/29/2015		26	19.5	0.1	0.004	Case A	No
	7/29/2015		26	19.5	0.1	0.004	Case A	No
	9/8/2015		26	19.5	0.1	0.004	Case A	No
	10/6/2015		26	19.5	0.1	0.004	Case A	No
	11/6/2015		26	19.5	0.1	0.004	Case A	No
	12/9/2015		26	19.5	0.1	0.004	Case A	No
	1/11/2016		26	19.5	0.1	0.004	Case A	No
	5/28/2015	MTBE	NA	NA	BDL	NA	NA	NA
	6/29/2015		NA	NA	BDL	NA	NA	NA
	7/29/2015		NA	NA	BDL	NA	NA	NA
	9/8/2015		NA	NA	BDL	NA	NA	NA
	10/6/2015		NA	NA	BDL	NA	NA	NA
	11/6/2015		NA	NA	BDL	NA	NA	NA
	12/9/2015		NA	NA	BDL	NA	NA	NA
	1/11/2016		NA	NA	BDL	NA	NA	NA
RW-4	5/29/2015	Benzene	14250	10687.5	139	0.010	Case A	No
	6/29/2015		14250	10687.5	215	0.015	Case A	No
	7/29/2015		14250	10687.5	203	0.014	Case A	No
	9/8/2015		14250	10687.5	6.4	0.000	Case A	No
	10/6/2015		14250	10687.5	13.1	0.001	Case A	No
	11/6/2015		14250	10687.5	5.1	0.000	Case A	No
	12/9/2015		14250	10687.5	5.9	0.000	Case A	No
	1/11/2016		14250	10687.5	243	0.017	Case A	No
	5/29/2015	Total BTEX	59880	44910.0	2397	0.040	Case A	No
	6/29/2015		59880	44910.0	5661	0.095	Case A	No
	7/29/2015		59880	44910.0	4683	0.078	Case A	No
	9/8/2015		59880	44910.0	187.7	0.003	Case A	No

Table 1 - Rebound Evaluation Analysis Worksheet
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901

Well ID	Sample Date	Analyte	Pre-Start-up Mean (C ₀):	Case C Threshold	Current Concentration (C)	Rebound Ratio (C/C ₀)	Rebound Condition	Restart Criteria Met?
	10/6/2015		59880	44910.0	287	0.005	Case A	No
	11/6/2015		59880	44910.0	54.0	0.001	Case A	No
	12/9/2015		59880	44910.0	59.1	0.001	Case A	No
	1/11/2016		59880	44910.0	3952.0	0.066	Case A	No
	5/29/2015	Naphthalene	1629	1221.8	81.9	0.050	Case A	No
	6/29/2015		1629	1221.8	202	0.124	Case A	No
	7/29/2015		1629	1221.8	388	0.238	Case A	No
	9/8/2015		1629	1221.8	14.9	0.009	Case A	No
	10/6/2015		1629	1221.8	17.3	0.011	Case A	No
	11/6/2015		1629	1221.8	8.6	0.005	Case A	No
	12/9/2015		1629	1221.8	10.1	0.006	Case A	No
	1/11/2016		1629	1221.8	222	0.136	Case A	No
	5/28/2015	MTBE	NA	NA	BDL	NA	NA	NA
	6/29/2015		NA	NA	BDL	NA	NA	NA
	7/29/2015		NA	NA	BDL	NA	NA	NA
	9/8/2015		NA	NA	BDL	NA	NA	NA
	10/6/2015		NA	NA	BDL	NA	NA	NA
	11/6/2015		NA	NA	BDL	NA	NA	NA
	12/9/2015		NA	NA	BDL	NA	NA	NA
	1/11/2016		NA	NA	BDL	NA	NA	NA
RW-6	5/29/2015	Benzene	1378	1033.5	0.1	0.000	Case A	No
	6/29/2015		1378	1033.5	0.1	0.000	Case A	No
	7/29/2015		1378	1033.5	0.1	0.000	Case A	No
	9/8/2015		1378	1033.5	0.1	0.000	Case A	No
	10/6/2015		1378	1033.5	0.1	0.000	Case A	No
	11/6/2015		1378	1033.5	0.1	0.000	Case A	No
	12/9/2015		1378	1033.5	0.1	0.000	Case A	No
	1/11/2016		1378	1033.5	0.1	0.000	Case A	No
	5/29/2015	Total BTEX	7674.6	5756.0	0.1	0.000	Case A	No
	6/29/2015		7674.6	5756.0	0.1	0.000	Case A	No
	7/29/2015		7674.6	5756.0	2.6	0.000	Case A	No
	9/8/2015		7674.6	5756.0	77.2	0.010	Case A	No
	10/6/2015		7674.6	5756.0	0.1	0.000	Case A	No
	11/6/2015		7674.6	5756.0	11.0	0.001	Case A	No
	12/9/2015		7674.6	5756.0	0.1	0.000	Case A	No
	1/11/2016		7674.6	5756.0	0.1	0.000	Case A	No

**Table 1 - Rebound Evaluation Analysis Worksheet
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901**

Well ID	Sample Date	Analyte	Pre-Start-up Mean (C ₀):	Case C Threshold	Current Concentration (C)	Rebound Ratio (C/C ₀)	Rebound Condition	Restart Criteria Met?
	5/29/2015	Naphthalene	400.3	300.2	0.1	0.000	Case A	No
	6/29/2015		400.3	300.2	0.1	0.000	Case A	No
	7/29/2015		400.3	300.2	0.1	0.000	Case A	No
	9/8/2015		400.3	300.2	14.3	0.036	Case A	No
	10/6/2015		400.3	300.2	0.1	0.000	Case A	No
	11/6/2015		400.3	300.2	3.8	0.009	Case A	No
	12/9/2015		400.3	300.2	0.1	0.000	Case A	No
	1/11/2016		400.3	300.2	0.1	0.000	Case A	No
	5/28/2015	MTBE	NA	NA	BDL	NA	NA	NA
	6/29/2015		NA	NA	BDL	NA	NA	NA
	7/29/2015		NA	NA	BDL	NA	NA	NA
	9/8/2015		NA	NA	BDL	NA	NA	NA
	10/6/2015		NA	NA	BDL	NA	NA	NA
	11/6/2015		NA	NA	BDL	NA	NA	NA
	12/9/2015		NA	NA	BDL	NA	NA	NA
	1/11/2016		NA	NA	BDL	NA	NA	NA
RW-8	5/29/2015	Benzene	2460	1845.0	0.1	0.000	Case A	No
	6/29/2015		2460	1845.0	0.1	0.000	Case A	No
	7/29/2015		2460	1845.0	0.1	0.000	Case A	No
	9/8/2015		2460	1845.0	0.1	0.000	Case A	No
	10/6/2015		2460	1845.0	0.1	0.000	Case A	No
	11/6/2015		2460	1845.0	0.1	0.000	Case A	No
	12/9/2015		2460	1845.0	0.1	0.000	Case A	No
	1/11/2016		2460	1845.0	0.1	0.000	Case A	No
	5/29/2015	Total BTEX	10688	8016.0	1174.8	0.110	Case A	No
	6/29/2015		10688	8016.0	683.2	0.064	Case A	No
	7/29/2015		10688	8016.0	592.2	0.055	Case A	No
	9/8/2015		10688	8016.0	0.1	0.000	Case A	No
	10/6/2015		10688	8016.0	0.1	0.000	Case A	No
	11/6/2015		10688	8016.0	56	0.005	Case A	No
	12/9/2015		10688	8016.0	84.3	0.008	Case A	No
	1/11/2016		10688	8016.0	70.4	0.007	Case A	No
	5/29/2015	Naphthalene	100	75.0	19.0	0.190	Case A	No
	6/29/2015		100	75.0	20.4	0.204	Case A	No
	7/29/2015		100	75.0	20.8	0.208	Case A	No
	9/8/2015		100	75.0	0.1	0.001	Case A	No

**Table 1 - Rebound Evaluation Analysis Worksheet
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901**

Well ID	Sample Date	Analyte	Pre-Start-up Mean (C ₀):	Case C Threshold	Current Concentration (C)	Rebound Ratio (C/C ₀)	Rebound Condition	Restart Criteria Met?
	10/6/2015		100	75.0	0.1	0.001	Case A	No
	11/6/2015		100	75.0	2.3	0.023	Case A	No
	12/9/2015		100	75.0	2.7	0.027	Case A	No
	1/11/2016		100	75.0	3.9	0.039	Case A	No
	5/29/2015	MTBE	NA	NA	BDL	NA	NA	NA
	6/29/2015		NA	NA	BDL	NA	NA	NA
	7/29/2015		NA	NA	BDL	NA	NA	NA
	9/8/2015		NA	NA	BDL	NA	NA	NA
	10/6/2015		NA	NA	BDL	NA	NA	NA
	11/6/2015		NA	NA	BDL	NA	NA	NA
	12/9/2015		NA	NA	BDL	NA	NA	NA
	1/11/2016		NA	NA	BDL	NA	NA	NA
RW-11	5/29/2015	Benzene	5065	3798.8	278	0.055	Case A	No
	6/29/2015		5065	3798.8	193	0.038	Case A	No
	7/29/2015		5065	3798.8	265	0.052	Case A	No
	9/8/2015		5065	3798.8	206	0.041	Case A	No
	10/6/2015		5065	3798.8	170	0.034	Case A	No
	11/6/2015		5065	3798.8	134	0.026	Case A	No
	12/9/2015		5065	3798.8	100	0.020	Case A	No
	1/11/2016		5065	3798.8	213	0.042	Case A	No
	5/29/2015	Total BTEX	25170	18877.5	1550	0.062	Case A	No
	6/29/2015		25170	18877.5	4067	0.162	Case A	No
	7/29/2015		25170	18877.5	2609	0.104	Case A	No
	9/8/2015		25170	18877.5	1991	0.079	Case A	No
	10/6/2015		25170	18877.5	2843	0.113	Case A	No
	11/6/2015		25170	18877.5	1225	0.049	Case A	No
	12/9/2015		25170	18877.5	1199	0.048	Case A	No
	1/11/2016		25170	18877.5	2124	0.084	Case A	No
	5/29/2015	Naphthalene	304.5	228.4	158	0.519	Case B	No
	6/29/2015		304.5	228.4	283	0.929	Case C	No
	7/29/2015		304.5	228.4	297	0.975	Case C	YES
	9/8/2015		304.5	228.4	92.6	0.304	Case B	No
	10/6/2015		304.5	228.4	184	0.604	Case B	No
	11/6/2015		304.5	228.4	95.9	0.315	Case B	No
	12/9/2015		304.5	228.4	59.8	0.196	Case A	No
	1/11/2016		304.5	228.4	162	0.532	Case B	No

Table 1 - Rebound Evaluation Analysis Worksheet
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901

Well ID	Sample Date	Analyte	Pre-Start-up Mean (C ₀):	Case C Threshold	Current Concentration (C)	Rebound Ratio (C/C ₀)	Rebound Condition	Restart Criteria Met?
	5/28/2015	MTBE	NA	NA	BDL	NA	NA	NA
	6/29/2015		NA	NA	BDL	NA	NA	NA
	7/29/2015		NA	NA	BDL	NA	NA	NA
	9/8/2015		NA	NA	BDL	NA	NA	NA
	10/6/2015		NA	NA	BDL	NA	NA	NA
	11/6/2015		NA	NA	BDL	NA	NA	NA
	12/9/2015		NA	NA	BDL	NA	NA	NA
	1/11/2016		NA	NA	BDL	NA	NA	NA
RW-12	5/29/2015	Benzene	184	138.0	0.1	0.001	Case A	No
	6/29/2015		184	138.0	0.1	0.001	Case A	No
	7/29/2015		184	138.0	0.1	0.001	Case A	No
	9/8/2015		184	138.0	0.1	0.001	Case A	No
	10/6/2015		184	138.0	0.1	0.001	Case A	No
	11/6/2015		184	138.0	0.1	0.001	Case A	No
	12/9/2015		184	138.0	0.1	0.001	Case A	No
	1/11/2016		184	138.0	0.1	0.001	Case A	No
	5/29/2015	Total BTEX	2045.9	1534.4	0.1	0.000	Case A	No
	6/29/2015		2045.9	1534.4	0.1	0.000	Case A	No
	7/29/2015		2045.9	1534.4	0.1	0.000	Case A	No
	9/8/2015		2045.9	1534.4	0.1	0.000	Case A	No
	10/6/2015		2045.9	1534.4	0.1	0.000	Case A	No
	11/6/2015		2045.9	1534.4	0.1	0.000	Case A	No
	12/9/2015		2045.9	1534.4	0.1	0.000	Case A	No
	1/11/2016		2045.9	1534.4	0.1	0.000	Case A	No
	5/29/2015	Naphthalene	26.3	19.7	0.1	0.004	Case A	No
	6/29/2015		26.3	19.7	0.1	0.004	Case A	No
	7/29/2015		26.3	19.7	0.1	0.004	Case A	No
	9/8/2015		26.3	19.7	0.1	0.004	Case A	No
	10/6/2015		26.3	19.7	0.1	0.004	Case A	No
	11/6/2015		26.3	19.7	0.1	0.004	Case A	No
	12/9/2015		26.3	19.7	0.1	0.004	Case A	No
	1/11/2016		26.3	19.7	0.1	0.004	Case A	No
	5/28/2015	MTBE	NA	NA	BDL	NA	NA	NA
	6/29/2015		NA	NA	BDL	NA	NA	NA
	7/29/2015		NA	NA	BDL	NA	NA	NA
	9/8/2015		NA	NA	BDL	NA	NA	NA

**Table 1 - Rebound Evaluation Analysis Worksheet
Gasoline Fueling Station – Royal Farms #96
500 Mechanics Valley Road, North East, MD 21901**

Well ID	Sample Date	Analyte	Pre-Start-up Mean (C ₀):	Case C Threshold	Current Concentration (C)	Rebound Ratio (C/C ₀)	Rebound Condition	Restart Criteria Met?
	10/6/2015		NA	NA	BDL	NA	NA	NA
	11/6/2015		NA	NA	BDL	NA	NA	NA
	12/9/2015		NA	NA	BDL	NA	NA	NA
	1/11/2016		NA	NA	BDL	NA	NA	NA

VE/GE - Vapor Extraction / Groundwater Extraction

All results in micrograms per liter (µg/L)

VE/GE System restart is necessary if an analyte in a single well meets the Case C criteria during two consecutive sampling events

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

Case B - Gradual Rebound Criteria (Rebound ratio between 0.25 and 0.75)

Case A - Little-to-No Rebound Scenario (Rebound ratio less than or equal to 0.25)

Dotted line indicates a period of VE/GE System operation between the above and below sampling dates.

0.1 - placeholder for a result reported below detection limits for computational purposes

COC - Contaminant of Concern

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

MTBE = Methyl-tert-butyl-ether

NA - MTBE concentrations are monitored, but there is no associated restart criteria

BDL - MTBE result below laboratory detection limits

ATTACHMENT C

Analytical Results

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

Project: RF-096

Project Number: 05-056-RF96

Project Manager: Jeffery Stein

Report Issued: 01/18/16 12:59

Advantage Environmental Consultants, LLC

8610 Baltimore Washington Blvd, Suite 217

Jessup MD, 20794

CLIENT SAMPLE ID:	MW-8	RW-12	RW-2	RW-1	RW-8	RW-6
LAB SAMPLE ID:	6011110-01	6011110-02	6011110-03	6011110-04	6011110-05	6011110-06
SAMPLE DATE:	01/11/16	01/11/16	01/11/16	01/11/16	01/11/16	01/11/16
RECEIVED DATE:	01/11/16	01/11/16	01/11/16	01/11/16	01/11/16	01/11/16
MATRIX	Units	Water	Water	Water	Water	Water

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

Benzene	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	12.0	<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	<2.0	<2.0	<2.0	<2.0
Naphthalene	ug/L	<2.0	<2.0	<2.0	<2.0	3.9 [1]	<2.0
Toluene	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	23.7	<2.0
m- & p-Xylenes	ug/L	<2.0	<2.0	<2.0	<2.0	34.7	<2.0
1,2-Dichloroethane-d4	[surr]	<u>82.6%</u>	<u>84.6%</u>	<u>83.5%</u>	<u>83.6%</u>	<u>82.9%</u>	<u>82.9%</u>
Toluene-d8	[surr]	<u>99.1%</u>	<u>99.8%</u>	<u>99.5%</u>	<u>99.4%</u>	<u>100%</u>	<u>101%</u>
4-Bromofluorobenzene	[surr]	<u>94.6%</u>	<u>97.5%</u>	<u>94.6%</u>	<u>97.4%</u>	<u>100%</u>	<u>96.4%</u>

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

Analytical Results

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

Project: RF-096

Project Number: 05-056-RF96

Project Manager: Jeffery Stein

Report Issued: 01/18/16 12:59

Advantage Environmental Consultants, LLC

8610 Baltimore Washington Blvd, Suite 217

Jessup MD, 20794

CLIENT SAMPLE ID:	RW-4	RW-11
LAB SAMPLE ID:	6011110-07	6011110-08
SAMPLE DATE:	01/11/16	01/11/16
RECEIVED DATE:	01/11/16	01/11/16
MATRIX	Units Water	Water

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

Benzene	ug/L	<u>243</u>	<u>213</u>
Ethylbenzene	ug/L	<u>228</u>	<u>600</u>
4-Isopropyltoluene	ug/L	<40.0	<8.0
Methyl tert-butyl ether (MTBE)	ug/L	<40.0	<8.0
Naphthalene	ug/L	<u>222</u>	<u>162</u>
Toluene	ug/L	<u>1410</u>	<u>391</u>
o-Xylene	ug/L	<u>831</u>	<u>276</u>
m- & p-Xylenes	ug/L	<u>1240</u>	<u>644</u>
1,2-Dichloroethane-d4	[surr]	<u>83.3%</u>	<u>88.6%</u>
Toluene-d8	[surr]	<u>100%</u>	<u>101%</u>
4-Bromofluorobenzene	[surr]	<u>98.6%</u>	<u>100%</u>

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

CHAIN-OF-CUSTODY RECORD

Company Name: AEC		Project Manager: S Stein		Analysis Requested		MSS Lab ID	
Project Name: RF 0916		Project ID: 05-050-RF0916		No. of Containers		6011110-01	
Sampler(s): Kevin Pellegrini		P.O. Number: 05-050-RF0916		Other		Preservative: 1+1 Field pH, Residual Chlorine, QC Request, Trip Blank, Field Blank	
Field Sample ID		Date		Time		MSS Lab ID	
MW-8	11-16	1300	X	3		6011110-01	
RW-12		1316		3			-02
RW-2		1330		3			-03
RW-1		1329		3			-04
RW-8		1344		3			-05
RW-10		1357		3			-06
RW-4		1404		3			-07
RW-11		1413		3			-08
Relinquished by: (Signature) <i>Kevin Pellegrini</i>		Date/Time 11-16 15:32		Received by: (Signature) <i>K. Pellegrini</i>		Date/Time	
(Printed) Kevin Pellegrini				(Printed) K. Pellegrini			
Relinquished by: (Signature)		Date/Time		Received by Lab: (Signature)		Lab Use:	
(Printed)				(Printed)		Temp: 13.4 °C <input checked="" type="checkbox"/> Received on Ice <input type="checkbox"/> Received same day <input type="checkbox"/> Preservation Appropriate	
Delivery Method: <input type="checkbox"/> Courier <input checked="" type="checkbox"/> Client <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> USPS <input type="checkbox"/> Other:		Special Instructions/QC Requirements & Comments: Results to Kpellegrini@aec-enr.com Swift Stein		Turn Around Time: <input checked="" type="checkbox"/> Normal (7 day) <input type="checkbox"/> 5 day <input type="checkbox"/> 4 day <input type="checkbox"/> 3 day <input type="checkbox"/> Rush (2 day) <input type="checkbox"/> Next Day <input type="checkbox"/> Other: <input type="checkbox"/> Specific Due Date: _____		Sample Disposal: <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by lab <input type="checkbox"/> Archive for _____ days	