



# MARYLAND DEPARTMENT OF THE ENVIRONMENT

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Martin O'Malley  
Governor

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Anthony G. Brown  
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March 4, 2014

Greater Jacksonville Association  
c/o Mr. David Palmer  
P.O. Box 126  
Phoenix MD 21131

**RE: SITE STATUS LETTER**

**Case No. 2006-0303-BA**

**Former Exxon R/S No. 2-8077**

**14258 Jarrettsville Pike, Phoenix**

**Baltimore County, Maryland**

Dear Mr. Palmer:

As requested, the Maryland Department of the Environment (MDE) is sending this letter to provide the Greater Jacksonville Association (GJA) with an update on the overall groundwater cleanup efforts related to the January 2006 ExxonMobil gasoline release and to provide an update on the well installation work that has occurred since the March 19, 2013 GJA community meeting. Additionally, we look forward to participating in your upcoming community meeting on March 18, 2014.

**Groundwater Cleanup Update**

Currently, there are 298 wells installed at various depths for the purposes of recovery and/or monitoring of groundwater conditions in the study area. Groundwater recovery is being performed from up to 80 of those wells. The groundwater treatment systems are located on two properties: the former Exxon station and the 3418 Sweet Air Road property. To date, over 107 million gallons of groundwater has been treated through these systems and discharged back into the environment to the Green Branch and the Sawmill Branch, which are located southwest and northeast of the site, respectively. All groundwater withdrawals and discharge of treated groundwater are conducted under the provisions of a MDE Water Appropriations Permit and a State and Federal discharge permit. The quality of discharged groundwater is monitored and is in compliance with the discharge permit.

Since the Department's directives in December 2006, ExxonMobil has sampled over 250 drinking water supply wells in the established study area. In October 2013, ExxonMobil installed a carbon system on the drinking water supply well for 3627A Southside Avenue as a precautionary measure due to increasing concentrations of methyl tertiary-butyl ether (MTBE) (the maximum MTBE concentration was 16.5 ppb). Currently, ExxonMobil maintains 14 carbon filtration systems on drinking water supply wells that were installed either due to a documented well impact or as a precautionary measure. All monitored drinking

water supply wells within the study area, including the 14 with carbon treatment systems, have been below action levels for gasoline constituents since December 2011.

The contaminant levels in the groundwater recovered from the treatment zones to the southwest of the station have been below action levels since May 2009. However, the treatment systems continue to recover contaminated groundwater above action levels from the former station property and the treatment zones to the northeast of the station. Routine adjustments to the remediation systems to efficiently recover the remaining contamination are approved by MDE. In addition to groundwater pumping, extraction of soil vapor continues at the former station property. Soil vapor extraction wells to the northeast were approved for shut-down in October 2013 because the system influent concentrations had declined to sustained negligible levels.

### **Well Installation Update**

In July 2013, ExxonMobil began field implementation of the MDE-approved work plan to install additional monitoring wells and to deepen select existing monitoring wells to depths greater than 300 feet. These wells were proposed by ExxonMobil to further characterize/delineate the dissolved petroleum contamination detected in the northeast area (east of Jarrettsville Pike and north of Sweet Air Road), and to fill data gaps in close proximity to where the original release occurred. The work was proposed to continue to ensure that measures taken to date have been effective and to help guide future activity for the cleanup.

Through the end of 2013, ExxonMobil completed the installation/deepening of 11 of the 17 monitoring wells with the remaining wells to be completed in 2014 (see attached figure). Four new "D" monitoring wells were installed and five "C" monitoring wells were deepened to "D" zone target depths (i.e., greater than 300 feet). These nine wells and former potable well MW166C comprise the "Inner Array" and the "Outer Array" in the northeast area. One additional "C" monitoring well (MW73C) was installed in the near northeast area, and one additional "B" monitoring well (MW27B) was installed on the former service station property. The six approved wells yet to be installed will be in the area of the intersection of Jarrettsville Pike and Sweet Air/Paper Mill Road (pending coordination with the State Highway Administration), on the shopping center property at 3320 Paper Mill Road (pending coordination with the property owner and Baltimore County), and on the ExxonMobil property at 14258 Jarrettsville Pike.

To date, the results of the "D" wells (i.e., drilled to depths greater than 300 feet) show a maximum detection of the gasoline constituent MTBE at 80.2 parts per billion (ppb) and a maximum detection of benzene at 2.5 ppb (see attached table). Both detections were from the same well, MW138D. Because of these detections, ExxonMobil has proposed an additional "D" well (MW82D) further down gradient (see attached figure). Additionally, monitoring well MW73C, which was drilled to 300 feet below ground surface, had a maximum MTBE detection of 5,600 ppb and a maximum benzene detection of 100 ppb.

The Department continues its commitment in overseeing cleanup activities and will require the necessary actions to ensure the continued protection of the drinking water resources of this community. Various reports with current data and maps are available by going to the MDE website: <http://bit.ly/oilcontrolsites>.

If you have any questions, please contact me at 410-537-3442 (email: [chris.ralson@maryland.gov](mailto:chris.ralson@maryland.gov)) or the case manager, Ms. Ellen Jackson, at 410-537-3482 (email: [ellen.jackson@maryland.gov](mailto:ellen.jackson@maryland.gov)).

Sincerely,

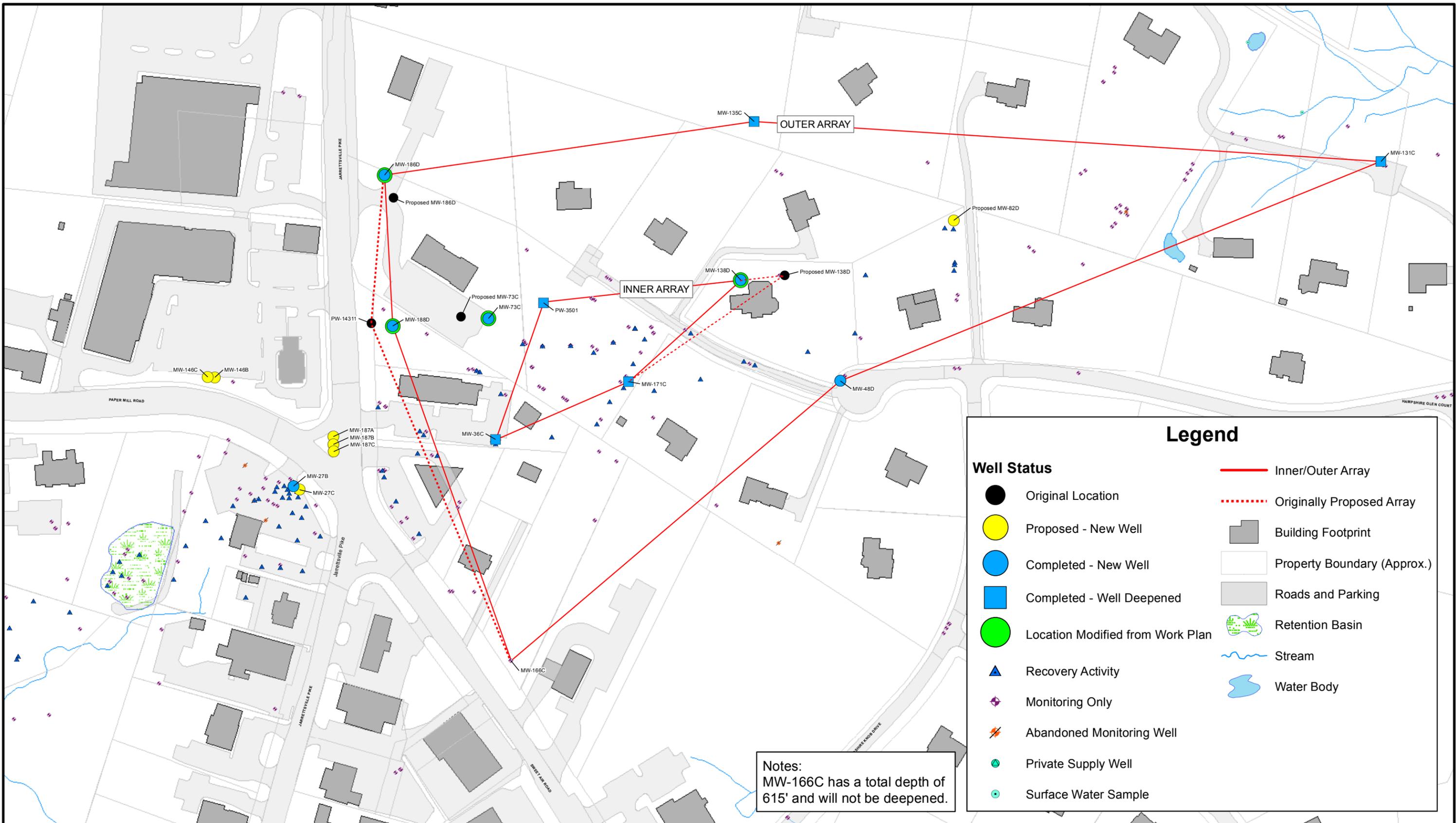


Christopher H. Ralston, Administrator  
Oil Control Program

CHR/nln

Enclosures

cc: Sasha McNeeley, Esquire (Snyder, Weltchek & Snyder)  
Theodore Flerlage, Esquire (Law Offices of Peter Angelos)  
William F.C. Marlow Jr., Esquire (Marlow & Wyatt)  
Donna Petrone, Esquire (ExxonMobil Corp.)  
Carlos Bollar, Esquire (Archer & Greiner, P.C.)  
Mr. Gregory Martin (Roux & Assoc., Inc.)  
Mr. Mark Schaaf (Kleinfelder East, Inc.)  
Mr. Kevin Koepenick (Baltimore County DEPRM)  
Mr. Gregory Keenan (MD SHA)  
Priscilla N. Carroll, Esquire  
Ms. Barbara Brown  
Ms. Ellen Jackson  
Mr. Andrew B. Miller  
Mr. Horacio Tablada



Notes:  
 MW-166C has a total depth of 615' and will not be deepened.

### Legend

<b>Well Status</b>	— Inner/Outer Array
● Original Location	⋯ Originally Proposed Array
● Proposed - New Well	■ Building Footprint
● Completed - New Well	□ Property Boundary (Approx.)
■ Completed - Well Deepened	■ Roads and Parking
● Location Modified from Work Plan	■ Retention Basin
▲ Recovery Activity	~ Stream
◆ Monitoring Only	■ Water Body
⚡ Abandoned Monitoring Well	
● Private Supply Well	
● Surface Water Sample	

0 80 160 320 480 640 Feet

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Cartography By: B. Myers      Date: 03/05/14

### NEW WELL MAP

INACTIVE EXXON FACILITY #28077 14258 JARRETTVILLE PIKE PHOENIX, MARYLAND BALTIMORE COUNTY	Figure <b>1</b>
Project Number: 138681	

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**2013 / 2014 Monitoring Well Installation<sup>1</sup> - Analytical Data Summary**  
 Inactive Exxon Facility #28077  
 14258 Jarrettsville Pike  
 Phoenix, Maryland

Sample Name	Final Total Depth (fbg)	Sample Date	Depth to Water (ft-toc)	Sample Method	Analyzed For	Sample Details	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Next Sampling Event	Date Geophysics Complete
MW-27B	125	7/15/2013	83.23	Purge/grab	Full	Open borehole 60-125 ft-toc. Well installation complete.	51.9	0.97 J	7.7	0.80 J	7.9		10/3/2013
MW-27B	125	7/25/2013	NG	Purge/grab	Target	Open borehole 60-125 ft-toc. Well installation complete.	54.4	1.3	2.4	ND	1.4		
MW-27B	125	8/9/2013	46.37	Purge/grab	Target	Open borehole 60-125 ft-toc. Well installation complete.	59.5	ND	ND	ND	ND		
MW-27B	125	8/23/2013	44.73	Purge/grab	Target	Open borehole 60-125 ft-toc. Well installation complete.	29.3	ND	ND	ND	ND		
MW-27B	125	9/9/2013	44.06	Purge/grab	Target	Open borehole 60-125 ft-toc. Well installation complete.	16.7	ND	ND	ND	ND		
MW-27B	125	10/2/2013	NG	Purge/grab	Target	Open borehole 60-125 ft-toc. Well installation complete.	43.3	ND	ND	ND	ND		
MW-27B	125	10/18/2013	44.26	Purge/grab	Target	Open borehole 60-125 ft-toc. Well installation complete.	4.9	ND	ND	ND	ND		
MW-27B	125	11/15/2013	76.23	Purge/grab	Target	Open borehole 60-125 ft-toc. Well installation complete.	42.5	ND	ND	ND	ND		
MW-27B	125	12/12/2013	39.43	Purge/grab	Target	Open borehole 60-125 ft-toc. Well installation complete.	9.4	ND	0.50 J	ND	ND		
MW-27B	125	1/30/2014	44.41	Purge/grab	Target	Open borehole 60-125 ft-toc. Well installation complete.	8.5	ND	ND	ND	ND		
MW-27B												week of 2/17/14	

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 Phoenix, Maryland

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PW-3501 (AP)	425	7/22/2013	44.55	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		9/27/2013
PW-3501 (BP)	425	7/22/2013	44.56	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	0.92 J	ND	ND	ND	ND		
PW-3501 (AP)	425	8/5/2013	44.85	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
PW-3501 (BP)	425	8/5/2013	44.85	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	1.0	ND	ND	ND	ND		
PW-3501 (AP)	425	8/20/2013	44.85	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
PW-3501 (BP)	425	8/20/2013	44.85	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	0.94 J	ND	ND	ND	ND		
PW-3501 (AP)	425	9/11/2013	46.60	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
PW-3501 (BP)	425	9/11/2013	46.60	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	1.2	ND	ND	ND	ND		
PW-3501 (HS-S)	425	10/7/2013	46.47	HydraSleeve	Target	Well installation complete. Sample collected from above 300'. Packer removed.	0.56 J	ND	ND	ND	1.0		
PW-3501 (HS-D)	425	10/7/2013	46.47	HydraSleeve	Target	Well installation complete. Sample collected from below 300'. Packer removed.	0.76	ND	0.66J	ND	1.6		
PW-3501(HS-S)	425	11/7/2013	46.14	HydraSleeve	Target	Well installation complete. Composite HydraSleeve sampler set at 150'.	ND	ND	ND	ND	ND		
PW-3501(HS-D)	425	11/7/2013	46.14	HydraSleeve	Target	Well installation complete. Composite HydraSleeve sampler set at 350'.	0.54 J	ND	ND	ND	0.58 J		
PW-3501(HS-S)	425	12/27/2013	46.75	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	ND	ND	ND	ND	ND		
PW-3501(HS-D)	425	12/27/2013	46.75	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	ND	ND	ND	ND	ND		
PW-3501(HS-S)	425	1/15/2014	45.77	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	ND	ND	ND	ND	ND		
PW-3501(HS-D)	425	1/15/2014	45.77	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	ND	ND	ND	ND	ND		
PW-3501												Week of 2/10/14	

**2013 / 2014 Monitoring Well Installation<sup>1</sup> - Analytical Data Summary**  
 Inactive Exxon Facility #28077  
 14258 Jarrettsville Pike  
 Phoenix, Maryland

Sample Name	Final Total Depth (fbg)	Sample Date	Depth to Water (ft-toc)	Sample Method	Analyzed For	Sample Details	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Next Sampling Event	Date Geophysics Complete
MW-171C (BP)	415	8/1/2013	362.41	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~250 fbg).	8.0	ND	ND	ND	ND		10/2/2013
MW-171C (AP)	415	9/3/2013	249.30	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~250 fbg).	8.7	ND	ND	ND	ND		
MW-171C (BP)	415	9/3/2013	249.70	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~250 fbg).	8.9	ND	ND	ND	ND		
MW-171C (HS-S)	415	10/8/2013	154.50	HydraSleeve	Target	Well installation complete. Sample collected from above 300'. Packer removed.	11.5	ND	ND	ND	ND		
MW-171C (HS-D)	415	10/7/2013	154.50	HydraSleeve	Target	Well installation complete. Sample collected from below 300'. Packer removed.	10.6	ND	ND	ND	ND		
MW-171C(HS-S)	415	11/12/2013	98.26	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	3.9	ND	ND	ND	ND		
MW-171C(HS-D)	415	11/12/2013	98.26	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	4.3	ND	ND	ND	ND		
MW-171C(HS-S)	415	12/10/2013	79.11	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	2.0	ND	ND	ND	ND		
MW-171C(HS-D)	415	12/10/2013	79.11	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	2.3	ND	ND	ND	ND		
MW-171C(HS-S)	415	1/15/2014	67.16	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	1.7	ND	ND	ND	ND		
MW-171C(HS-D)	415	1/15/2014	67.16	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	1.2	ND	ND	ND	ND		
MW-171C												Week of 2/10/14	

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 Phoenix, Maryland

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MW-135C (AP)	397	8/1/2013	34.01	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		9/30/2013
MW-135C (BP)	397	8/1/2013	114.57	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-135C (AP)	397	9/3/2013	25.82	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-135C (BP)	397	9/3/2013	27.66	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-135C (HS-S)	397	10/7/2013	27.47	HydraSleeve	Target	Well installation complete. Sample collected from above 300'. Packer removed.	ND	ND	0.75 J	ND	ND		
MW-135C (HS-D)	397	10/7/2013	27.47	HydraSleeve	Target	Well installation complete. Sample collected from below 300'. Packer removed.	ND	ND	1.3	ND	ND		
MW-135C(HS-S)	397	11/11/2013	27.39	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	ND	ND	0.91 J	ND	ND		
MW-135C(HS-D)	397	11/11/2013	27.39	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	ND	ND	1.2	ND	ND		
MW-135C(HS-S)	397	12/10/2013	27.05	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	ND	ND	0.59 J	ND	ND		
MW-135C(HS-D)	397	12/10/2013	27.05	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	ND	ND	0.81 J	ND	ND		
MW-135C(HS-S)	397	1/15/2014	24.83	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	ND	ND	0.66 J	ND	ND		
MW-135C(HS-D)	397	1/15/2014	24.83	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	ND	ND	0.60 J	ND	ND		
MW-135C												Week of 2/10/14	

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 Phoenix, Maryland

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MW-188D (DTB-125)	436	8/1/2013	40.50	Grab	Full	Well install and well development not complete. Grab sample collected from bottom of open borehole at ~125 fbg	ND	ND	ND	ND	ND		
MW-188D (DTB-300)	436	8/5/2013	263.25	Grab	Full	Well install and well development not complete. Grab sample collected from bottom of open borehole at ~300 fbg	ND	ND	ND	ND	ND		
MW-188D (BP)	436	8/9/2013	376.62	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	0.74 J	ND	ND	ND	2.0		
MW-188D (AP)	436	8/19/2013	195.87	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	32.6	0.89 J	0.53 J	ND	1.1		
MW-188D (AP)	436	8/26/2013	110.34	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	0.28 J	ND	ND	ND	ND		
MW-188D (BP)	436	8/26/2013	110.75	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	31.2	0.61 J	0.26 J	ND	ND		
MW-188D(HS-S)	436	10/7/2013	NR	HydraSleeve	Target	Well installation complete. Sample collected from above 300'. Packer removed.	29.1	0.59 J	1.1	ND	ND		9/26/2013
MW-188D(HS-D)	436	10/7/2013	NR	HydraSleeve	Target	Well installation complete. Sample collected from below 300'. Packer removed.	42.6	0.30 J	1.1	0.25 J	0.96 J		
MW-188D(AP)	436	11/11/2013	148.61	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	29.9	ND	155	ND	ND		
MW-188D(BP)	436	11/11/2013	168.42	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	23.0	ND	82.2	ND	1.1		
MW-188D(AP)	436	12/9/2013	59.23	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	1.5	ND	10.7	ND	ND		
MW-188D(BP)	436	12/9/2013	61.31	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	23.0	ND	1.9	ND	ND		
MW-188D(AP)	436	1/13/2014	54.36	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	1.6	ND	0.49 J	ND	ND		
MW-188D(BP)	436	1/13/2014	60.34	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	21.6	ND	1.5	ND	ND		
MW-188D												Week of 2/10/14	

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MW-138D (DTB-60)	404	8/8/2013	36.00	Grab	Full	Well install and well development not complete. Grab sample collected from bottom of open borehole at ~60 fbg	ND	ND	ND	ND	ND		9/6/2013
MW-138D (AP)	404	8/12/2013	80.30	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	0.40 J	ND	ND	ND	ND		
MW-138D (BP)	404	8/12/2013	244.26	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	0.43 J	ND	ND	ND	ND		
MW-138D (AP)	404	8/19/2013	54.43	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	0.80 J	ND	ND	ND	ND		
MW-138D (BP)	404	8/19/2013	55.66	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	25.1	1.6	ND	0.27 J	0.76J		
MW-138D (AP)	404	8/26/2013	53.30	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	1.1	ND	ND	ND	ND		
MW-138D (BP)	404	8/26/2013	54.03	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	80.2	2.5	0.56 J	0.54 J	6.5		
MW-138D											N/A (blank FLUTe liner in place)		

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MW-36C (BP)	424	8/19/2013	346.57	Grab	Full	Well installation complete. Sample collected below packer. (Packer set at ~300 fbg).	3.4	0.67 J	0.42 J	ND	ND		10/1/2013
MW-36C (AP)	424	8/23/2013	211.42	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	2.9	0.41 J	ND	ND	ND		
MW-36C (AP)	424	8/26/2013	146.38	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	2.9	0.25 J	ND	ND	ND		
MW-36C (BP)	424	8/26/2013	147.64	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	2.4	0.51 J	0.26 J	ND	ND		
MW-36C (HS-S)	424	10/7/2013	50.75	HydraSleeve	Target	Well installation complete. Sample collected from above 300'. Packer removed.	1.9	ND	ND	ND	ND		
MW-36C (HS-D)	424	10/7/2013	50.75	HydraSleeve	Target	Well installation complete. Sample collected from below 300'. Packer removed.	2.0	ND	ND	ND	ND		
MW-36C(HS-S)	424	11/11/2013	50.30	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	2.5	0.33 J	0.45 J	ND	ND		
MW-36C(HS-D)	424	11/11/2013	50.30	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	2.4	ND	ND	ND	ND		
MW-36C(HS-S)	424	12/9/2013	50.51	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	1.9	ND	ND	ND	ND		
MW-36C(HS-D)	424	12/9/2013	50.51	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	2.0	ND	ND	ND	ND		
MW-36C(HS-S)	424	1/15/2014	49.26	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	1.9	ND	ND	ND	ND		
MW-36C(HS-D)	424	1/15/2014	49.26	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	2.0	ND	ND	ND	ND		
MW-36C												Week of 2/10/14	

**2013 / 2014 Monitoring Well Installation<sup>1</sup> - Analytical Data Summary**  
 Inactive Exxon Facility #28077  
 14258 Jarrettsville Pike  
 Phoenix, Maryland

Sample Name	Final Total Depth (fbg)	Sample Date	Depth to Water (ft-toc)	Sample Method	Analyzed For	Sample Details	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Next Sampling Event	Date Geo-physics Complete
MW-48D (BP)	403	10/7/2013	391.65	Grab	Full	Well installation complete. Sample collected below packer. (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		11/12/2013
MW-48D (AP)	403	10/28/2013	169.75	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-48D (BP)	403	10/28/2013	241.97	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-48D(HS-D)	403	11/26/2013	292.35	HydraSleeve	Target	Well installation complete. Sample collected from below 300'. Packer removed.	ND	ND	ND	ND	ND		
MW-48D(HS-S)	403	12/10/2013	190.33	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	ND	ND	ND	ND	ND		
MW-48D(HS-D)	403	12/10/2013	190.33	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	ND	ND	ND	ND	ND		
MW-48D(HS-S)	403	1/14/2014	63.01	HydraSleeve	Target	Well installation complete. Sample collected from above 300'.	ND	ND	ND	ND	ND		
MW-48D(HS-D)	403	1/14/2014	63.01	HydraSleeve	Target	Well installation complete. Sample collected from below 300'.	ND	ND	ND	ND	ND		
MW-48D												Week of 2/10/14	

**2013 / 2014 Monitoring Well Installation<sup>1</sup> - Analytical Data Summary**  
 Inactive Exxon Facility #28077  
 14258 Jarrettsville Pike  
 Phoenix, Maryland

Sample Name	Final Total Depth (fbg)	Sample Date	Depth to Water (ft-toc)	Sample Method	Analyzed For	Sample Details	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Next Sampling Event	Date Geophysics Complete
MW-131C (AP)	359	10/8/2013	38.98	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		11/5/2013
MW-131C (BP)	359	10/8/2013	15.08	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-131C (AP)	359	10/28/2013	9.28	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-131C (BP)	359	10/28/2013	9.90	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-131C(HS-S)	359	11/12/2013	9.61	HydraSleeve	Target	Well installation complete. Sample collected from above 300'. Packer removed.	ND	ND	0.56 J	ND	ND		
MW-131C(HS-D)	359	11/12/2013	9.61	HydraSleeve	Target	Well installation complete. Sample collected from below 300'. Packer removed.	ND	ND	0.59 J	ND	ND		
MW-131C(HS-S)	359	12/10/2013	9.86	HydraSleeve	Target	Well installation complete. Sample collected from above 300'. Packer removed.	ND	ND	0.64 J	ND	ND		
MW-131C(HS-D)	359	12/10/2013	9.86	HydraSleeve	Target	Well installation complete. Sample collected from below 300'. Packer removed.	ND	ND	0.62 J	ND	ND		
MW-131C(HS-S)	359	1/15/2014	9.44	HydraSleeve	Target	Well installation complete. Sample collected from above 300'. Packer removed.	ND	ND	0.45 J	ND	ND		
MW-131C(HS-D)	359	1/15/2014	9.44	HydraSleeve	Target	Well installation complete. Sample collected from below 300'. Packer removed.	ND	ND	0.50 J	ND	ND		
MW-131C												Week of 2/10/14	

**2013 / 2014 Monitoring Well Installation<sup>1</sup> - Analytical Data Summary**  
 Inactive Exxon Facility #28077  
 14258 Jarrettsville Pike  
 Phoenix, Maryland

Sample Name	Final Total Depth (fbg)	Sample Date	Depth to Water (ft-toc)	Sample Method	Analyzed For	Sample Details	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Next Sampling Event	Date Geophysics Complete
MW-73C(DTW125-A)	-	11/17/2013	115.00	Grab	Full	Well install and well development not complete. Grab sample collected from inside ungrouted casing, bottom of open borehole at ~125 fbg	ND	ND	ND	ND	ND		2/4/2014
MW-73C(DTW125-B)	-	11/17/2013	60.00	Grab	Full	Well install and well development not complete. Grab sample collected from outside ungrouted casing, bottom of open borehole at ~125 fbg	ND	ND	ND	ND	ND		
MW-73C (AP)	300	11/25/2013	230.08	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~250 fbg).	5,070	31.1	124	4.5 J	7.3 J		
MW-73C (BP)	300	11/25/2013	297.01	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~250 fbg).	2,330	ND	10.1	ND	ND		
MW-73C (AP)	300	12/9/2013	141.62	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~250 fbg).	5,430	24.1	ND	ND	ND		
MW-73C (BP)	300	12/9/2013	164.13	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~250 fbg).	4,890	100	47.9	4.8 J	5.6 J		
MW-73C (AP)	300	1/13/2014	87.72	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~250 fbg).	46.7	0.85 J	53.9	0.32 J	0.44 J		
MW-73C (BP)	300	1/13/2014	88.83	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~250 fbg).	4,210	17.1 J	ND	ND	ND		
MW-73C (AP)	300	1/30/2014	85.44	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~250 fbg).	5,600	ND	ND	ND	ND		
MW-73C (BP)	300	1/30/2014	86.35	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~250 fbg).	4,570	ND	ND	ND	ND		
MW-73C												Week of 2/17/14	

**2013 / 2014 Monitoring Well Installation<sup>1</sup> - Analytical Data Summary**  
 Inactive Exxon Facility #28077  
 14258 Jarrettsville Pike  
 Phoenix, Maryland

Sample Name	Final Total Depth (fbg)	Sample Date	Depth to Water (ft-toc)	Sample Method	Analyzed For	Sample Details	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	Next Sampling Event	Date Geophysics Complete
MW-186D(DTB70-I)	-	12/8/2013	37.00	Grab	Full	Well install and well development not complete. Grab sample collected from inside ungrouted casing, bottom of open borehole at ~70 fbg	ND	ND	ND	ND	ND		2/7/2014
MW-186D(DTB70-O)	-	12/8/2013	35.50	Grab	Full	Well install and well development not complete. Grab sample collected from outside ungrouted casing, bottom of open borehole at ~70 fbg	ND	ND	ND	ND	ND		
MW-186D(DTB70-I)	-	12/14/2013	37.65	Grab	Full	Well install and well development not complete. Grab sample collected from inside grouted casing, bottom of open borehole at ~70 fbg	ND	ND	ND	ND	ND		
MW-186D (AP)	428	12/15/2013	130.88	Grab	Full	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-186D (BP)	428	12/15/2013	130.31	Grab	Full	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-186D (AP)	428	1/13/2014	60.59	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-186D (BP)	428	1/13/2014	60.37	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-186D (AP)	428	1/30/2014	54.26	Grab	Target	Well installation complete. Sample collected above packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-186D (BP)	428	1/30/2014	48.77	Grab	Target	Well installation complete. Sample collected below packer (Packer set at ~300 fbg).	ND	ND	ND	ND	ND		
MW-186D												Week of 2/24/14	

Notes:  
 AP = above packer  
 BP = below packer  
 S = Shallow  
 D = Deep  
 HS = HydraSleeve  
 DTB = depth to bottom  
 DTW = depth to water  
 ft-toc = feet below top of casing  
 fbg = feet below grade  
 J = Indicates estimated value.  
 MTBE = Methyl tert-butyl ether  
 NR = Not recorded  
 NA = Not analyzed, well was dry at the time of sampling  
 ND = non-detect  
 MTBE = Methyl tert-butyl ether  
 1 = According to MDE approved "Additional Site Characterization Work Plan" (6/21/2012)