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April 20, 2009

Mr. Herbert M. Meade and Ms. Ellen Jackson
Maryland Department of the Environment
Oil Control Program, Suite 620
1800 Washington Boulevard
Baltimore, Maryland 21230

RE: SVE In-fill Well Installation and Pilot Test Summary Report
Inactive Exxon Service Station #28077
14258 Jarrettsville Pike
Phoenix, Baltimore County, Maryland
Facility I.D. No. 12342
Case No. 2006-0303-BA2

Dear Mr. Meade and Ms. Jackson:

This letter report is submitted by Kleinfelder East, Inc. (Kleinfelder), for ExxonMobil Environmental Services Company (ExxonMobil) on behalf of Exxon Mobil Corporation, to summarize soil vapor extraction test (SVE test) well installation status and the results of the recent soil vapor extraction (SVE) pilot test completed at the above-referenced site. Installation and pilot test activities were performed in accordance with the scope of work outlined in an email submitted to the Maryland Department of the Environment (MDE) dated November 20, 2008. The MDE approved the proposal in an email dated December 11, 2008.

Background

In February 2008, Kleinfelder installed two replacement recovery wells (MW-16R and MW-27R) approximately ten feet from the original recovery wells (MW-16 and MW-27) and adjacent to the former underground storage tank (UST) field. Locations of the aforementioned wells are presented in **Figure 1**. MW-16R and MW-27R were installed to a depth of 60 feet below grade, which is approximately 20 feet deeper than MW-16 and MW-27. Following installation and connection of MW-16R and MW-27R, total petroleum hydrocarbon (TPH) concentrations in the recovered vapor stream originating from the former UST area increased.

To evaluate the potential for further increased recovery rates of petroleum constituents in the vicinity of the former UST field, Kleinfelder proposed a SVE pilot test to be performed on three newly installed wells. The three pilot test wells SVE-1, SVE-2, and SVE-3 were proposed for installation in the area of the former tank field. Pilot test objectives included identifying potential enhancements to current remediation system operations.

Soil Vapor Extraction Well Installation and Sampling

On January 19 to 23, 2009, Kleinfelder supervised the installation of SVE wells SVE-1 through SVE-3 utilizing an air rotary drill rig. Borings SVE-1 and SVE-3 were first cleared using an air knife/vacuum excavation to a depth of five feet below ground surface. Boring SVE-2 was first cleared using an air knife/vacuum excavation to a depth of eight feet below ground surface. SVE well locations were selected based on discussions with the MDE in the field prior to drilling. The locations of SVE-1 though SVE-3 are presented in **Figure 1**. The SVE wells SVE-1 and SVE-3 were installed to total depths of 69 feet below grade, and were constructed of 45 feet of 6-inch diameter, 0.020 slot, schedule 40 polyvinyl chloride (PVC) screen and 24 feet of 6-inch diameter schedule 40 PVC casing to grade. SVE well SVE-2 was installed to a total depth of 70.75 feet and was constructed of 45 feet of 6-inch diameter, 0.020 slot, schedule 40 PVC screen with 25.75 feet of 6-inch diameter schedule 40 PVC casing below grade.

The annular spaces for all three wells were filled with #2 sand filter pack to approximately 5 feet above the top of screen and sealed with approximately 22 feet of bentonite slurry grout to surface. The SVE well boring logs/construction diagrams are included in **Appendix A**. A well construction table including the newly installed wells is presented as **Table 1**.

The borehole for SVE-1 was drilled through approximately ten feet of crushed stone backfill material installed within the former UST field area following UST removal activities. Saprolite (weathered bedrock) was first encountered at approximately ten feet below ground surface and was primarily schist. Gneiss bedrock was then encountered at a depth of approximately thirty two feet below grade. Silty clay and silty sand were encountered in the borehole for SVE-2 during drilling until weathered bedrock was reached at a depth of approximately 21 feet below ground surface. Bedrock encountered in SVE-2 was primarily schist until approximately 25 feet below ground surface where gneiss was encountered. The borehole for SVE-3 was drilled through approximately twelve feet of crushed stone backfill material installed within the former UST field area following UST removal activities. Saprolite was first encountered at approximately twelve feet bgs and was primarily schist. Gneiss bedrock was then encountered at a depth of approximately thirty one feet below grade. Lithology was determined from cuttings collected from the SVE test wells and cores collected from SVE-1 and SVE-2. The lithology is presented in the boring/construction logs included in **Appendix A**. Initial elevations and global positioning system (GPS) locations for the wells were collected on March 5, 2009 relative to existing site monitoring wells with known positions and elevations. Elevations are listed on boring logs included in **Appendix A**.

Cuttings were collected from the SVE test wells at two to five foot intervals in SVE-1 and SVE-2 to depths of approximately fifty feet below ground surface. Cutting samples were collected at approximately ten foot intervals for SVE-3. The samples were field screened for volatile organic compounds (VOCs) with a photo-ionization detector (PID) The PID was calibrated using an isobutylene standard calibration gas prior to screening activities. PID readings and corresponding depths are displayed in **Appendix A**.

Soil and bedrock cuttings generated during well installation activities were stockpiled on-site. Two composite samples were collected from the stockpile. Soil samples were analyzed for benzene, toluene, ethyl-benzene, and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) in accordance with Environmental Protection Agency (EPA) Method 8260. The Accutest Laboratories Technical Report is included in **Appendix B**. The samples displayed no detectable analytes and were used for on-site regrading and reseeding activities.

The SVE wells were developed approximately one week after installation on January 27, 2009, and groundwater samples were collected the following day, January 28, 2009. Samples were analyzed for full-suite VOCs including fuel oxygenates by EPA Method 8260 and Total Petroleum Hydrocarbons, Gasoline Range Organics and Diesel Range Organics (TPH-GRO and DRO) by EPA Method 8015B to establish baseline conditions. SVE well groundwater analytical data is presented in **Table 2** and the Accutest Laboratories Technical Report is included in **Appendix C**.

Soil Vapor Extraction Pilot Test Operations

For soil vapor extraction pilot test activities, the three SVE test wells were individually connected to an existing SVE unit (MLE DPE Claw) consisting of one trailer-mounted 20 horsepower Busch positive displacement blower and a moisture separator tank with necessary controls and failsafes. The unit is capable of operating at varying speeds with a variable frequency drive (VFD). One 1,400-pound vapor granular activated carbon (VGAC) vessel was used for SVE offgas treatment. The SVE trailer was connected to the wells individually via temporary, aboveground hoses and fittings. Groundwater recovery from onsite remediation wells continued during pilot test activities and localized soil vapor extraction systems (MLE DPE Claw and ESD Tri-Lobe) were shutdown during the step pilot test to conduct vapor extraction solely from the SVE test wells. On February 4, 2009, baseline water levels were measured in each well and surrounding monitoring wells. After collecting baseline data, the SVE system was started up on SVE-1. The unit was operated on each well individually for approximately two hours to monitor vacuum, air flow, and influent PID concentrations at the SVE blower. In addition, vacuum influence at surrounding monitoring wells was monitored. Each well operated for an hour under two conditions: the typical vacuum of the current SVE units onsite, which is approximately 11 inches of Mercury ("Hg), and maximum speed for the SVE blower (VFD set at 100%). The step test progressed from lower to higher vacuum for the three SVE test wells. Operating data for the step tests is presented in **Table 3**.

Vacuum influence data collected from surrounding monitoring wells is presented in **Table 4**. Vacuum readings listed at a time of 0 minutes are the initial readings under vacuum conditions. Soil vapor samples were collected from each SVE well with Tedlar airbags from the blower effluent during SVE activities. The results are presented in **Table 5** and the airbag Accutest Laboratory Technical Report is included in **Appendix D**.

In order to evaluate the effect of groundwater recovery from the SVE test wells on vapor phase hydrocarbon recovery, a second phase of pilot testing was conducted on February 16, 2009. Pilot test activities were performed with an active submersible pump in the SVE test wells, while simultaneously operating the SVE blower on the SVE test wells to recover soil vapors. Each unit was connected for one hour to the SVE unit set to maximum VFD speed. One QED Environmental pneumatic pump (AP-4 Long AutoPump®) was temporarily installed in the well and pumped for one hour during SVE activities. The bottom loading pump was set with the intake located at approximately one foot above the bottom of each well. Recovered groundwater was directed to the on-site groundwater treatment system via temporary, aboveground hoses and fittings. The SVE blower was connected as described previously. Operating data for the SVE pilot test with pumping, including estimated groundwater recovery, is presented in **Table 6**. Soil vapor samples were collected with Tedlar airbags from the blower effluent during pilot test activities. The results are presented in **Table 7** and the Accutest Laboratory Technical Report is included in **Appendix D**.

Groundwater samples were collected from the SVE test wells approximately one week following the final pilot test activities. SVE well groundwater analytical data is presented in **Table 8** and the Accutest Laboratories Technical Report is included in **Appendix C**.

Soil Vapor Extraction Pilot Test Results

Normalized vacuum influence was determined by dividing the vacuum influence from the monitoring points by the interstitial vacuum at the operating SVE test wells. Normalized vacuum response is presented for the three step tests conducted on February 4 and 5, 2009 in **Tables 9** through **11**. Vacuum influence and normalized vacuum influence are depicted on **Figures 2** through **4** for monitoring wells surrounding the SVE test wells. Normalized vacuum influence monitoring wells surrounding SVE-1 ranged from 0.000 (MW-25) to 0.055 (MW-16R). Normalized vacuum influence surrounding SVE-2 ranged from 0.000 (MW-5) to 0.055 (MW-16R). Normalized vacuum influence surrounding SVE-3 ranged from 0.000 (MW-151) to 0.043 (MW-2). Maximum vacuum influence was observed at the surrounding monitoring wells during maximum vacuum recorded at the SVE test well. Following pilot test completion, wellhead vacuum was measured at the SVE test wells on March 18, 2009 to determine if these wells are under vacuum influence of the current remediation system. Vacuum influence was observed at wells SVE-1 and SVE-3 at 0.8 and 0.1 inches of water column ("WC) respectively. Vacuum influence was not observed during current system operations on SVE-2.

Vacuum influence was reviewed based on 1) distance from the active well, 2) direction from active well with regard to foliation, and 3) exposed screen interval overlap. There is not an observable correlation between vacuum influence and these three factors. However, it was noted that the greatest recorded vacuum influence measurements was recorded at MW-16R which was the most recently installed monitoring well and was also recently rehabilitated prior to pilot test activities.

During the step pilot test, air flow rates for SVE-1 and SVE-3 exhibited higher air flow during the second step. SVE-1 air flow recorded into the SVE unit ranged from 122.6 actual cubic feet per minute (acfm) to 251.8 acfm. SVE-3 air flow recorded into the SVE unit ranged from 119.1 acfm to 184.6 acfm. SVE-2 exhibited decreased air flow during the second step. SVE-2 air flow recorded into the SVE unit ranged from 66.3 acfm to 55.9 acfm observed during the second step.

During the step pilot test, the average estimated vapor phase hydrocarbon recovery rate from SVE test well SVE-1 was 0.114 pounds per hour (lb/hr). From SVE test wells SVE-2 and SVE-3, the average estimated vapor phase hydrocarbon recovery rates were 0.026 and 0.031 lb/hr. Hydrocarbon recovery was estimated based on the reported concentrations of TPH as equivalent hexane. As reported to the MDE in the Groundwater Monitoring and Remedial Status Report from the fourth quarter of 2008, average estimated hydrocarbon recovery rate from the DPE Claw, which was used for pilot test activities, was 0.170 lbs/hr.

During pumping conditions on SVE-1, influent hydrocarbon concentrations detected in air bag analytical samples increased slightly, but remained within the same order of magnitude of the non-pumping concentrations. During pumping conditions on SVE-2 and SVE-3, influent hydrocarbon concentrations decreased when compared to non-pumping concentrations, with some concentrations below the detectable limits. During SVE and pumping conditions, groundwater was recovered from the three wells at estimated rates of 0.6, 1.2, and 3.1 gallons per minute for SVE-1, SVE-2, and SVE-3 respectively.

Conclusions and Recommendations

Based on the results presented in this letter report and following approval by the MDE, SVE operations will be continued on SVE-1 and groundwater recovery operations will be continued on SVE-3 for one month to further evaluate hydrocarbon recovery from these areas. The systems will be connected using temporary connections and aboveground hosing. Airbag samples will be collected biweekly and submitted for laboratory analysis from SVE-1. Groundwater samples will be collected biweekly from SVE-3 and submitted for laboratory analysis. Following one month of operations and review of operating data and recovery rates, continued operation at these wells will be evaluated and discussed with the MDE. Please contact us with questions or comments pertaining to the information and recommendations provided. Thank you.

Sincerely,
Kleinfelder East, Inc.

Matthew R. Newman
Project Engineer

for
Leslie D. Schultheis, P.E.
Project Manager

Attachments

Figure 1 – Site Plan
Figure 2 – SVE-1 Pilot Test Data
Figure 3 – SVE-2 Pilot Test Data
Figure 4 – SVE-3 Pilot Test Data
Table 1 – SVE Pilot Test - Well Construction Summary
Table 2 – Summary of Pre-Pilot Test Groundwater Data
Table 3 – Summary of SVE Pilot Test Operating Data
Table 4 – Summary of SVE Pilot Test Data - Monitoring Point Data
Table 5 – Vapor Analytical Data and Estimated Recovery
Table 6 – Summary of SVE Pilot Test with Pumping System Data
Table 7 – Summary of SVE/Pumping Pilot Test Data - Vapor Analytical Data
Table 8 – Summary of Post-Pilot Test Groundwater Data
Table 9 – Summary of SVE-1 Pilot Test Data - Normalized Vacuum Response
Table 10 – Summary of SVE-2 Pilot Test Data - Normalized Vacuum Response
Table 11 – Summary of SVE-3 Pilot Test Data - Normalized Vacuum Response

Appendix A – Boring Logs
Appendix B – Accutest Laboratory Technical Reports – Soil Data
Appendix C – Accutest Laboratory Technical Reports – SVE Test Well Groundwater Data
Appendix D – Accutest Laboratory Technical Reports – SVE Pilot Test Airbag Data

cc: James F. Medlin – ExxonMobil (Kleinfelder file)
Greg Martin – Roux, Inc.
Project File

Figures

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DRAWN BY:	A. Patterson
CHECKED BY:	S. Rochford
FILE NAME:	Fig1 Site Plan 052708.mxd

SITE PLAN
AS OF MARCH 19, 2008

INACTIVE EXXON FACILITY #28077
14258 JARRETTSVILLE PIKE
PHOENIX, MARYLAND
BALTIMORE COUNTY

FIGURE
1

N

MW-18

MW-105

MW-16
Step #1
0.90
0.009

MW-16
Step #2
1.10
0.009

MW-14

MW-27
Step #1
0.10
0.001

MW-27P

MW-16R
Step #1
5.50
0.055

MW-27

MW-27R

MW-27
Step #2
0.20
0.002

MW-16

MW-7

MW-16R

SVE-1

MW-8

MW-13P

MW-16R
Step #2
5.2
0.040

MW-3

SVE-1
Step #1
121.5
147.6

MW-151
Step #1
0.10
0.001

MW-6P

MW-151

14258
JARRETTSVILLE

MW-4A

MW-13

SVE-1
Step #2
131.5
205.1

MW-144

MW-151
Step #2
0.00
0.000

MW-6

MW-3P

MW-25
Step #1
0.00
0.000

MW-10

MW-5

SVE-2

MW-4

MW-139

MW-25

MW-25
Step #2
0.00
0.000

MW-152

SVE-3

MW-11

MW-19

MW-2

Legend

- Monitoring Only
- Dual Phase Extraction (DPE)
- Pneumatic Pump
- Soil Vapor Extraction (SVE)
- SVE/Pneumatic Pump
- SVE/Electric
- Abandoned Well
- Tank Field
- Jersey Wall
- Gate
- Fence Area

Well ID
Step #
Vacuum Influence ("WC)
Normalized Vac. Influence

SVE Well ID
Step #
Avg. Vac ("WC)
Avg. Flow (ACFM)

"WC = inches of water column
ACFM = actual cubic feet per minute

0 7.5 15 30
Feet

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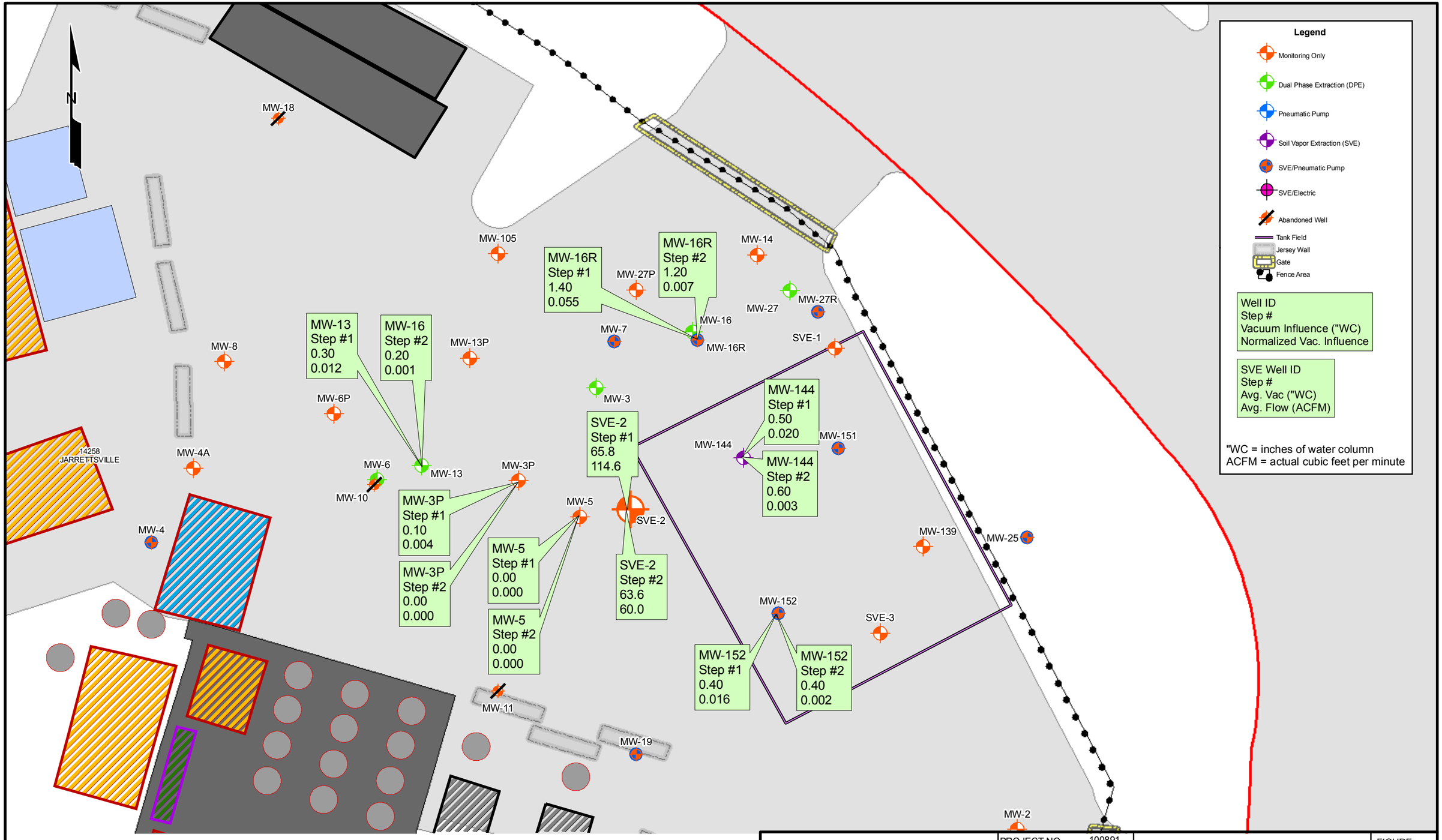
SVE-1 Pilot Test Data

Inactive Exxon Facility # 28077
14258 Jarrettsville Pike
Phoenix, Baltimore County, Maryland

FIGURE
2



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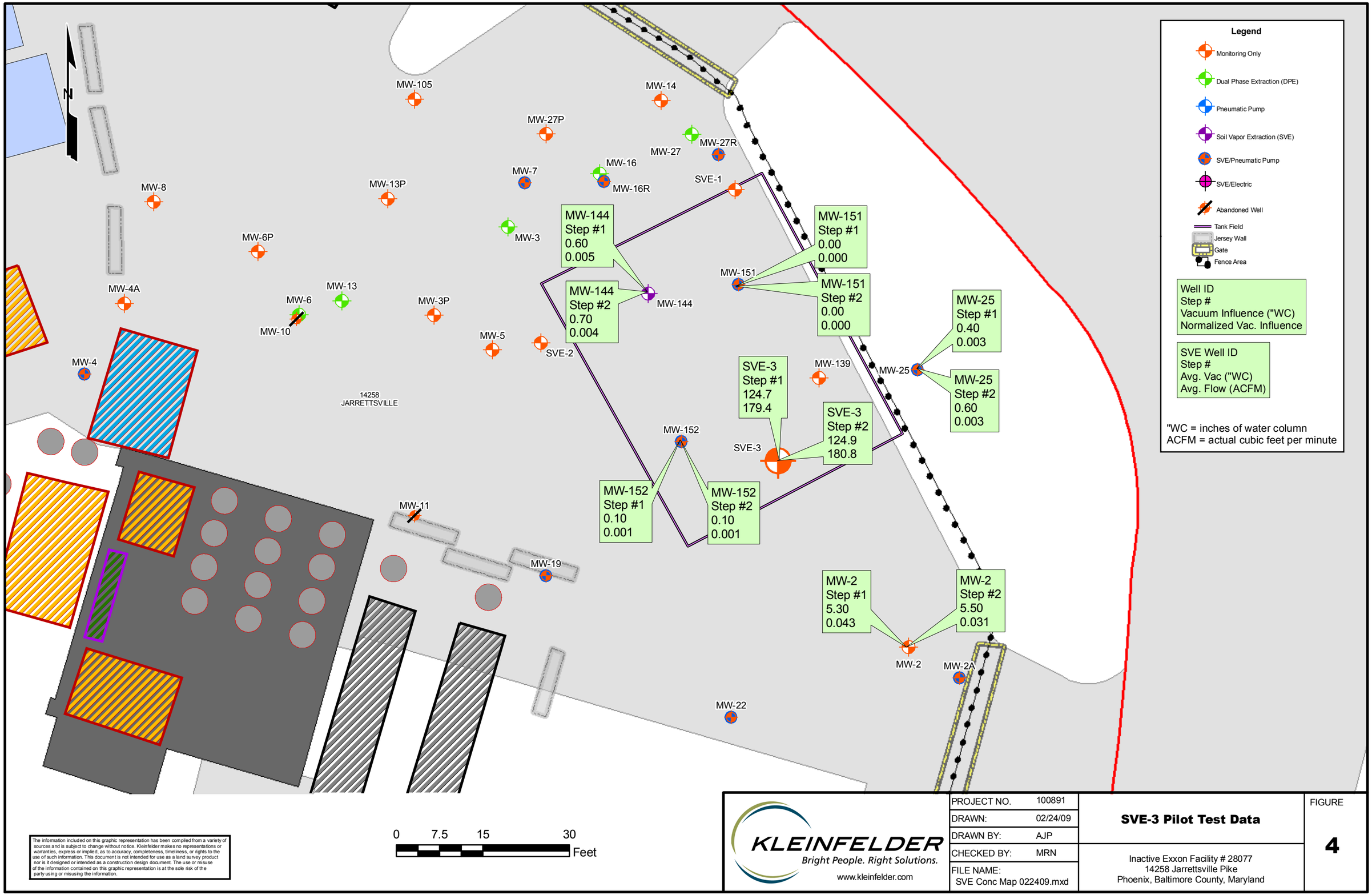
SVE-2 Pilot Test Data

Inactive Exxon Facility # 28077
14258 Jarrettsville Pike
Phoenix, Baltimore County, Maryland

FIGURE
3



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FILE NAME:	SVE Conc Map 022409.mxd

SVE-3 Pilot Test Data

Inactive Exxon Facility # 28077
14258 Jarrettsville Pike
Phoenix, Baltimore County, Maryland

FIGURE
4

Tables

Table 1

SVE Pilot Test - Well Construction Summary

Inactive Exxon Facility # 28077

14258 Jarrettsville Pike

Phoenix, MD

Well ID	Borehole Diameter (inch)	Well Diameter (inch)	Riser/ Casing Length (feet)	Screen Length/ Open Interval (feet)	Total Borehole Depth (feet)	Screen Interval (feet below TOC)	TOC Elevation
SVE-01	10	6	24	45	69	24-69	592.38
SVE-02	10	6	25	45	70.75	24.75-70.75	589.44
SVE-03	10	6	24	45	69	24-69	589.38
MW-2	6	2	20	30	50	20-50	588.28
MW-3P	6	2	30	20	50	30-50	590.09
MW-5	10	6	20	25	45	20-45	589.74
MW-13	8	4	25	10	35	25-35	589.30
MW-16	8	4	20	18	38	20-38	591.99
MW-16R	10	6	45	15	60	45-60	591.89
MW-25	10	6	25	30	55	25-55	592.34
MW-27	10	6	27	16	43	27-43	592.89
MW-144	8	6	25	35	62.5	25-60	593.11
MW-151	8	4	35	25	60	35-60	594.74
MW-152	8	4	35	25	60	35-60	591.94

Table 2

Summary of Pre-Pilot Test Groundwater Data

Inactive Exxon Facility # 28077
14258 Jarrettsville Pike
Phoenix, MD
January 28, 2009

	Sample ID: SVE001 Concentration (µg/L)	Sample ID: SVE002 Concentration (µg/L)	Sample ID: SVE003 Concentration (µg/L)
Benzene	8.70	191	4.0
Toluene	ND (20)	3,410	27.5
Ethylbenzene	ND (20)	71	2.4
Xylenes (total)	10.0	1,120	10.8
total BTEX	18.7	4,792	44.7
MTBE	13,600	282	182

Notes:
BTEX - sum of benzene, toulene, ethylbenzene, xylenes
µg/L - micrograms per liter
MTBE - Methyl tert-butyl ether

Table 3
Summary of SVE Pilot Test Operating Data

Inactive Exxon Facility #28077
14258 Jarrettsville Pike
Phoenix, MD
February 4, 2009 - February 5, 2009

	Elapsed Time (min)	SVE1				
		Interstitial Vacuum ("WC)	VOC Concentration (ppm_v)	Velocity (ft/min)	Flow Rate (scfm)	Flow Rate (acfm)
	Static depth to water measured at 47.6 feet below top of casing					
SVE STEP 1	0	129.9	45.1	1489.7	129.3	130.0
	15	131.1	49.3	1405.0	122.2	122.6
	30	125.5	--	--	--	--
	45	99.6	27.1	1625.0	133.1	141.8
SVE STEP 2	60	158.4	24.3	1696.0	155.0	148.0
	75	152.3	19.4	2885.0	260.9	251.8
	90	149.9	19.6	2070.0	186.4	180.6
	105	148.7	18.8	2350.0	211.1	205.1
	120	128.8	15.3	2750.0	238.2	240.0

	Elapsed Time (min)	SVE2				
		Interstitial Vacuum ("WC)	VOC Concentration (ppm_v)	Velocity (ft/min)	Flow Rate (scfm)	Flow Rate (acfm)
Static	Static depth to water measured at 42.8 feet below top of casing					
SVE STEP 1	0	206.8	9.0	760.0	75.4	66.3
	15	48.5	9.0	720.0	53.0	62.8
	30	22.6	8.9	755.0	52.4	65.9
	45	26.0	10.0	710.0	49.7	62.0
	60	25.3	10.5	700.0	48.9	61.1
SVE STEP 2	75	42.0	10.1	640.0	46.5	55.9
	90	57.8	11.1	665.0	50.0	58.0
	105	179.6	11.2	725.0	68.8	63.3
	120	179.1	11.3	720.0	68.2	62.8

	Elapsed Time (min)	SVE3				
		Interstitial Vacuum ("WC)	VOC Concentration (ppm_v)	Velocity (ft/min)	Flow Rate (scfm)	Flow Rate (acfm)
Static	Static depth to water measured at 42.0 feet below top of casing					
SVE STEP 1	0	124.4	3.7	1490.0	128.0	130.0
	15	125.5	3.0	1480.0	127.4	129.2
	30	125.0	3.1	1450.0	124.7	126.5
	45	124.3	3.0	1370.0	117.7	119.6
	60	124.1	2.9	1365.0	117.2	119.1
SVE STEP 2	75	180.6	3.0	2060.0	195.7	179.8
	90	179.8	3.2	2081.0	197.4	181.6
	105	178.9	2.7	2115.0	200.3	184.6
	120	178.3	2.9	2030.0	192.1	177.2

Note:
SVE - soil vapor extraction
VOC- soil vapor samples measured with a photoionization detector (PID) calibrated to read total volatile organic compounds (VOCs) as benzene.
"WC - inches of water column
ppmv -parts per million by volume
ft/min - feet per minute
scfm - standard cubic feet per minute
lb/day - pound per day
acfm - actual cubic feet per minute
-- Not measured

Table 4

Summary of SVE Pilot Test Data - Monitoring Point Data - SVE-1

Inactive Exxon Facility # 28077
14258 Jarrettsville Pike
Phoenix, MD
February 4, 2009 - February 5, 2009

	Elapsed Time	Monitoring Point ID: MW-151	Monitoring Point ID: MW-27	Monitoring Point ID: MW-16
	(min)	11.8 ft to SVE1	17.5 ft to SVE1	24.2 ft to SVE1
		Static DTW 56.70' below top of casing	Static DTW 38.21' below top of casing	Static DTW 36.49' below top of casing
		Vacuum ("WC)	Vacuum ("WC)	Vacuum ("WC)
	Static	0.00	0.00	0.00
SVE STEP 1	0	7.00	0.10	0.20
	15	0.00	0.00	0.10
	30	0.00	0.00	0.10
	45	0.10	0.10	0.90
SVE STEP 2	60	0.00	0.10	1.20
	75	0.00	0.20	1.50
	90	0.00	0.20	1.20
	105	0.00	0.20	1.00
	120	0.00	0.20	1.10

	Elapsed Time	Monitoring Point ID: MW-16R	Monitoring Point ID: MW-25
	(min)	18.9 ft to SVE1	43.7 ft to SVE1
		Static DTW 57.40' below top of casing	Static DTW 48.39' below top of casing
		Vacuum ("WC)	Vacuum ("WC)
	Static	0.00	0.00
SVE STEP 1	0	7.30	0.00
	15	5.70	0.00
	30	5.30	0.00
	45	5.50	0.00
SVE STEP 2	60	6.90	0.00
	45	6.40	0.00
	90	6.20	0.00
	105	5.20	0.00
	120	5.20	0.00

Note:
SVE - soil vapor extraction
Elapsed Time - time from beginning of pilot tests in minutes
"WC - inches of water column
DTW - depth to water
-- not measured

Table 4

Summary of SVE Pilot Test Data - Monitoring Point Data - SVE-2

Inactive Exxon Facility # 28077
14258 Jarrettsville Pike
Phoenix, MD
February 4, 2009 - February 5, 2009

	Elapsed Time	Monitoring Point ID: MW-144	Monitoring Point ID: MW-3P	Monitoring Point ID: MW-5
	(min)	21.8 ft to SVE2	19.6 ft to SVE2	8.2 ft to SVE2
		Static DTW 43.21' below top of casing	Static DTW 43.62' below top of casing	Static DTW 42.21' below top of casing
		Vacuum ("WC)	Vacuum ("WC)	Vacuum ("WC)
	Static	0.00	0.00	0.00
SVE STEP 1	0	0.60	0.00	0.00
	15	0.60	1.00	0.00
	30	0.60	0.20	0.10
	45	0.50	0.00	0.00
	60	0.50	0.10	0.00
SVE STEP 2	75	0.50	0.10	0.10
	90	0.50	0.00	0.00
	105	0.60	0.10	0.00
	120	0.60	0.00	0.00

	Elapsed Time	Monitoring Point ID: MW-13	Monitoring Point ID: MW-152	Monitoring Point ID: MW-16R
	(min)	35.7 ft to SVE2	29.1 ft to SVE2	31.8 ft to SVE2
		Static DTW 37.85' below top of casing	Static DTW 57.61' below top of casing	Static DTW 57.40' below top of casing
		Vacuum ("WC)	Vacuum ("WC)	Vacuum ("WC)
	Static	0.00	0.00	0.00
SVE STEP 1	0	0.30	0.40	1.30
	15	0.30	0.40	1.30
	30	0.30	0.40	1.30
	45	0.30	0.30	1.30
	60	0.30	0.40	1.40
SVE STEP 2	45	0.40	0.20	1.20
	90	0.20	0.30	1.20
	105	0.30	0.40	1.20
	120	0.20	0.40	1.20

Note:
SVE - soil vapor extraction
Elapsed Time - time from beginning of pilot tests in minutes
"WC - inches of water column
DTW - depth to water
-- not measured

Table 4

Summary of SVE Pilot Test Data - Monitoring Point Data - SVE-3

Inactive Exxon Facility # 28077
14258 Jarrettsville Pike
Phoenix, MD
February 4, 2009 - February 5, 2009

	Elapsed Time	Monitoring Point ID: MW-151	Monitoring Point ID: MW-152	Monitoring Point ID: MW-25
	(min)	36.2 ft to SVE3	18.2 ft to SVE3	33.6 ft to SVE3
		Static DTW 56.10' below top of casing	Static DTW 57.61' below top of casing	Static DTW 48.39' below top of casing
		Vacuum ("WC)	Vacuum ("WC)	Vacuum ("WC)
	Static	0.00	0.00	0.00
SVE STEP 1	0	0.00	0.10	0.10
	15	0.10	0.20	0.30
	30	0.00	0.20	0.40
	45	0.00	0.10	0.30
	60	0.00	0.10	0.40
SVE STEP 2	75	0.00	0.20	0.60
	90	0.10	0.20	0.60
	105	0.00	0.10	0.70
	120	0.00	0.10	0.60

	Elapsed Time	Monitoring Point ID: MW-2	Monitoring Point ID: MW-144
	(min)	35.3 ft to SVE3	34.9 ft to SVE3
		Static DTW 40.01' below top of casing	Static DTW 43.08' below top of casing
		Vacuum ("WC)	Vacuum ("WC)
	Static	0.00	0.00
SVE STEP 1	0	5.20	0.50
	15	5.40	0.70
	30	5.40	0.70
	45	5.20	0.50
	60	5.30	0.60
SVE STEP 2	75	5.50	0.80
	90	5.50	0.70
	105	5.40	0.70
	120	5.50	0.70

Note:
SVE - soil vapor extraction
Elapsed Time - time from beginning of pilot tests in minutes
"WC - inches of water column
DTW - depth to water
-- not measured

Table 5

Summary of SVE Pilot Test Data - Vapor Analytical Data and Estimated Recovery

Inactive Exxon Facility # 28077
14258 Jarrettsville Pike
Phoenix, MD
February 4, 2009 - February 5, 2009

	Sample ID: SVE001 Flowrate: 238.20 cfm		Sample ID: SVE002 Flowrate: 68.22 cfm		Sample ID: SVE003 Flowrate: 192.08 cfm	
	Concentration (mg/m^3)	Estimated Recovery (lb/hr)	Concentration (mg/m^3)	Estimated Recovery (lb/hr)	Concentration (mg/m^3)	Estimated Recovery (lb/hr)
Benzene	0.22	1.96E-04	0.32	8.18E-05	ND (0.16)	N/A
Toluene	1.2	1.07E-03	2.0	5.11E-04	0.53	3.81E-04
Ethylbenzene	0.33	2.94E-04	0.65	1.66E-04	ND (0.22)	N/A
Xylenes (total)	2.1	1.87E-03	3.0	7.67E-04	0.69	4.96E-04
total BTEX	3.9	3.44E-03	6.0	1.53E-03	1.2	8.78E-04
TPH (as hexane)	128	1.14E-01	101.0	2.58E-02	42.6	3.06E-02
TPH (C1-C4)	24	2.18E-02	10	2.63E-03	5.0	3.60E-03
TPH (C5-C10)	116	1.03E-01	ND (18)	N/A	41.9	3.01E-02

Notes:
BTEX - benzene, toulene, ethylbenzene, xylenes
VOCs - volatile organic compounds
mg/m^3 - milligrams per cubic meter
Samples collected at maximum vacuum for each well, recovery based on flowrate at maximum vacuum
ND (##) - Not detectable at detection limits (##)

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Table 6
Summary of SVE Pilot Test with Pumping Operating Data

Inactive Exxon Facility # 28077
14258 Jarrettsville Pike
Phoenix, MD
February 16, 2009

SVE001

Startup Time: 11:26

Elapsed Time (min)	VOC (ppm)
0	20.3
15	19.0
30	18.9
45	18.1
60	15.7

Total Water Pumped	
Counter Change	*Estimated Recovered Groundwater*** (gallons)*
54	35.1
Depth to Groundwater*	
Initial	*Final*
46.78	66.00

SVE002

Startup Time: 13:48

Elapsed Time (min)	VOC (ppm)
0	6.4
15	8.2
30	0.9
45	5.2
60	2.0

Total Water Pumped	
Counter Change	*Estimated Recovered Groundwater (gallons)*
113	73.45
Depth to Groundwater**	
Initial	*Final*
43.92	66.11

SVE003

Startup Time: 12:45

Elapsed Time (min)	VOC (ppm)
0	0.0
15	0.0
30	2.9
45	1.4
60	1.0

Total Water Pumped	
Counter Change	*Estimated Recovered Groundwater (gallons)*
286	185.9
Depth to Groundwater**	
Initial	*Final*
41.88	62.21

* GW levels collected from top of fitting
** GW levels collected from top of casing
*** Groundwater estimated based on factory conversion factor of 0.65 per pump cycle

Table 7

Summary of SVE/Pumping Pilot Test Data - Vapor Analytical Data

Inactive Exxon Facility # 28077
14258 Jarrettsville Pike
Phoenix, MD
February 16, 2009

	Sample ID: SVE001 Concentrations (mg/m^3)	Sample ID: SVE002 Concentrations (mg/m^3)	Sample ID: SVE003 Concentrations (mg/m^3)
Benzene	0.42	ND (0.16)	ND (0.16)
Toluene	1.5	0.45	ND (0.19)
Ethylbenzene	0.43	ND (0.22)	ND (0.22)
Xylenes (total)	3.1	0.43	ND (0.43)
total BTEX	5.5	0.88	N/A
TPH (as hexane)	136	18	ND (18)
TPH (C1-C4)	19.6	10.3	72.6
TPH (C5-C10)	115	ND (18)	ND (18)

Notes:
BTEX - benzene, toulene, ethylbenzene, xylenes
mg/m^3 - milligrams per cubic meter

Table 8

Summary of Post-Pilot Test Groundwater Data

Inactive Exxon Facility # 28077
14258 Jarrettsville Pike
Phoenix, MD
February 26, 2009

	Sample ID: SVE001 Concentrations (µg/L)	Sample ID: SVE002 Concentrations (µg/L)	Sample ID: SVE003 Concentrations (µg/L)
Benzene	10.6	3.3	1.4
Toluene	1.0	1.8	ND (1.0)
Ethylbenzene	ND (1.0)	0.45	ND (1.0)
Xylenes (total)	12.6	6.0	0.99
total BTEX	24.2	11.6	2.4
MTBE	14,100	292	306

Notes:
BTEX - benzene, toulene, ethylbenzene, xylenes
VOCs - volatile organic compounds
µg/L - micrograms per liter
MTBE - Methyl tert-butyl ether
Sample collected following SVE pilot test activities

Table 9

Summary of SVE-1 Pilot Test Data - Normalized Vacuum Response

Inactive Exxon Facility #28077
14258 Jarrettsville Pike
Phoenix, MD
February 4, 2009 - February 5, 2009

RADIUS OF INFLUENCE (ROI) DATA:

Step #1					
Vacuum at SVE-1:	100	"WC	Time (min):	45	
	MW-151	MW-27	MW-16	MW-16R	MW-25
Distance From Extraction Well (Feet)	11.75	17.50	24.20	18.90	43.70
Vacuum Influence ("WC)	0.10	0.10	0.90	5.50	0.00
Normalized Vacuum Influence	0.001	0.001	0.009	0.055	0.000

Step #2					
Vacuum at SVE-1:	129	"WC	Time (min):	120	
	MW-151	MW-27	MW-16	MW-16R	MW-25
Distance From Extraction Well (Feet)	11.75	17.50	24.20	18.90	43.70
Vacuum Influence ("WC)	0.00	0.20	1.10	5.20	0.00
Normalized Vacuum Influence	0.000	0.002	0.009	0.040	0.000

Note:
SVE - soil vapor extraction
"WC - inches of water column
min - minutes
Normalized vacuum influence is determined by dividing the vacuum influence by the interstitial vacuum at the extraction well.

Table 10

Summary of SVE-2 Pilot Test Data - Normalized Vacuum Response

Inactive Exxon Facility #28077
14258 Jarrettsville Pike
Phoenix, MD
February 4, 2009 - February 5, 2009

RADIUS OF INFLUENCE (ROI) DATA:

Step #1						
Vacuum at SVE-2:	25	"WC	Time (min):	60		
	MW-5	MW-3P	MW-144	MW-152	MW-16R	MW-13
Distance From Extraction Well (Feet)	8.20	19.60	21.78	29.10	31.80	35.70
Vacuum Influence ("WC)	0.00	0.10	0.50	0.40	1.40	0.30
Normalized Vacuum Influence	0.000	0.004	0.020	0.016	0.055	0.012

Step #2						
Vacuum at SVE-2:	179	"WC	Time (min):	120		
	MW-5	MW-3P	MW-144	MW-152	MW-16R	MW-13
Distance From Extraction Well (Feet)	8.20	19.60	21.78	29.10	31.80	35.70
Vacuum Influence ("WC)	0.00	0.00	0.60	0.40	1.20	0.20
Normalized Vacuum Influence	0.000	0.000	0.003	0.002	0.007	0.001

Note:
SVE - soil vapor extraction
"WC - inches of water column
min - minutes
Normalized vacuum influence is determined by dividing the vacuum influence by the interstitial vacuum at the extraction well.

Table 11

Summary of SVE-3 Pilot Test Data - Normalized Vacuum Response

Inactive Exxon Facility #28077
14258 Jarrettsville Pike
Phoenix, MD
February 4, 2009 - February 5, 2009

RADIUS OF INFLUENCE (ROI) DATA:

Step #1					
Vacuum at SVE-3:	124	"WC	Time (min):	60	
	MW-152	MW-25	MW-144	MW-2	MW-151
Distance From Extraction Well (Feet)	18.20	33.60	34.90	35.30	36.20
Vacuum Influence ("WC)	0.10	0.40	0.60	5.30	0.00
Normalized Vacuum Influence	0.001	0.003	0.005	0.043	0.000

Step #2					
Vacuum at SVE-3:	178	"WC	Time (min):	120	
	MW-152	MW-25	MW-144	MW-2	MW-151
Distance From Extraction Well (Feet)	18.20	33.60	34.90	35.30	36.20
Vacuum Influence ("WC)	0.10	0.60	0.70	5.50	0.00
Normalized Vacuum Influence	0.001	0.003	0.004	0.031	0.000

Note:
SVE - soil vapor extraction
"WC - inches of water column
min - minutes
Normalized vacuum influence is determined by dividing the vacuum influence by the interstitial vacuum at the extraction well.

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Appendix A – Boring Logs

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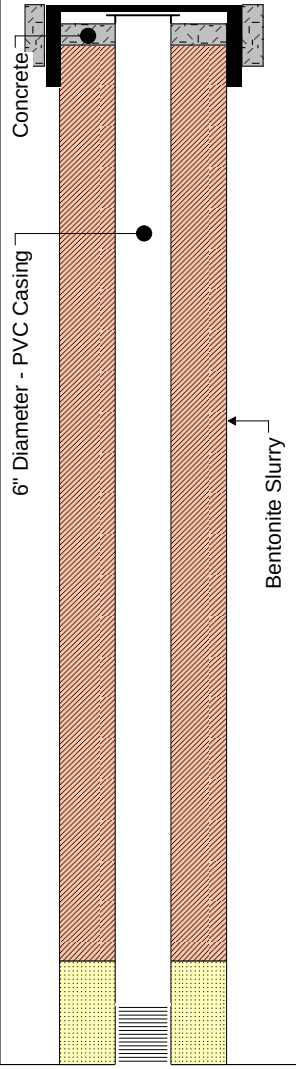
DRILLING LOG

Well No. SVE-1

Project Name:	*Inactive Exxon Facility # 28077*	*Start Date:*	*01-21-09*	*Logged By:*	*AW*
Site Location:	*14258 Jarrettsvile Pike, Phoenix, MD*	*End Date:*	*01-23-09*	*Permit No.:*	*BA-95-2793*
Project No:	*100891*	*Total Hole Depth:*	*69 feet*	*Checked By:*	*MRN, JRH*
Client:	*ExxonMobil*	*Hole Diameter:*	*12" to 31', 10" to 69'*	*Notes:*	*Air Knifed to 5'; 1992 CMTe used for coring (31-54' bgs); Weathered bedrock at 10'*
Drilling Company:	*Eichelbergers*	*Depth to Bedrock:*	*26 feet*		
Driller:	*T. Toland, J. Malecki*	*Well Diameter:*	*6 inches*		
Drill Rig Type:	*2004 Schramm Model T450WS*	*Water Level (Initial):*	*NA*		
Drilling Method:	*Air Rotary-HSA*	*Screen Length:*	*45 feet*		
Sampling Method:	*Cuttings-Coring*	*TOC Elevation:*	*592.38*		

Depth (feet)	Graphic Log	Soil/Geologic Description	RQD %	PID Headspace (ppm)	Well Completion Details	Depth (feet)
0.0		GROUND SURFACE				0.0
		AC Asphalt				
		AF Crushed stone backfill				
5.0				0		5.0
10.0		**BR** SCHIST, brown, saprolitic, dry				10.0
15.0						15.0
				0		
20.0						20.0
25.0						25.0



PID - Photoionization Detector
ppm - Parts per million
NA - Not Applicable
* Sample submitted for laboratory analysis

- Water Level Initial Measurement
- Water Level Subsequent Measurement

Sample ID:
HA - Hand Auger Sample
S - Split Spoon Sample
GS - Grab Sample
C - Macrocore Sleeve

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DRILLING LOG

Well No. SVE-1

Project Name:	*Inactive Exxon Facility # 28077*	*Start Date:*	*01-21-09*	*Logged By:*	*AW*
Site Location:	*14258 Jarrettsvile Pike, Phoenix, MD*	*End Date:*	*01-23-09*	*Permit No.:*	*BA-95-2793*
Project No:	*100891*	*Total Hole Depth:*	*69 feet*	*Checked By:*	*MRN, JRH*
Client:	*ExxonMobil*	*Hole Diameter:*	*12" to 31', 10" to 69'*	*Notes:*	*Air Knifed to 5'; 1992 CMTe used for coring (31-54' bgs); Weathered bedrock at 10'*
Drilling Company:	*Eichelbergers*	*Depth to Bedrock:*	*26 feet*		
Driller:	*T. Toland, J. Malecki*	*Well Diameter:*	*6 inches*		
Drill Rig Type:	*2004 Schramm Model T450WS*	*Water Level (Initial):*	*NA*		
Drilling Method:	*Air Rotary-HSA*	*Screen Length:*	*45 feet*		
Sampling Method:	*Cuttings-Coring*	*TOC Elevation:*	*592.38*		

Depth (feet)	Graphic Log	Soil/Geologic Description	RQD %	PID Headspace (ppm)	Well Completion Details	Depth (feet)
30.0		**BR** SCHIST, brown, dry, odor noted		0	#2 Silca Sand	30.0
		BR GNEISS, gray, dry	46	0	6" Diameter - 0.020" Slotted PVC Screen	
35.0		**BR** SCHIST, brown, moist to wet (fracture zone noted)		0		35.0
				0		
40.0		**BR** GNEISS, gray, dry		0		40.0
		BR SCHIST, brown, moist to wet (fracture zone noted)				
		BR GNEISS, gray, dry	73			
45.0				93.1		45.0
				3.7		
50.0		**BR** GNEISS, dark gray, wet				50.0

PID - Photoionization Detector
ppm - Parts per million
NA - Not Applicable
* Sample submitted for laboratory analysis

- Water Level Initial Measurement
- Water Level Subsequent Measurement

Sample ID:
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DRILLING LOG

Well No. SVE-1

Project Name:	*Inactive Exxon Facility # 28077*	*Start Date:*	*01-21-09*	*Logged By:*	*AW*
Site Location:	*14258 Jarrettsvile Pike, Phoenix, MD*	*End Date:*	*01-23-09*	*Permit No.:*	*BA-95-2793*
Project No:	*100891*	*Total Hole Depth:*	*69 feet*	*Checked By:*	*MRN, JRH*
Client:	*ExxonMobil*	*Hole Diameter:*	*12" to 31', 10" to 69'*	*Notes:*	*Air Knifed to 5'; 1992 CMTe used for coring (31-54' bgs); Weathered bedrock at 10'*
Drilling Company:	*Eichelbergers*	*Depth to Bedrock:*	*26 feet*		
Driller:	*T. Toland, J. Malecki*	*Well Diameter:*	*6 inches*		
Drill Rig Type:	*2004 Schramm Model T450WS*	*Water Level (Initial):*	*NA*		
Drilling Method:	*Air Rotary-HSA*	*Screen Length:*	*45 feet*		
Sampling Method:	*Cuttings-Coring*	*TOC Elevation:*	*592.38*		

Depth (feet)	Graphic Log	Soil/Geologic Description	RQD %	PID Headspace (ppm)	Well Completion Details	Depth (feet)
55.0			33			55.0
60.0						60.0
65.0		Terminated at 69.0 feet				65.0
70.0						70.0
75.0						75.0

PID - Photoionization Detector
ppm - Parts per million
NA - Not Applicable
* Sample submitted for laboratory analysis

- Water Level Initial Measurement
- Water Level Subsequent Measurement

Sample ID:
HA - Hand Auger Sample
S - Split Spoon Sample
GS - Grab Sample
C - Macrocore Sleeve

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DRILLING LOG

Well No. SVE-2

Project Name:	*Inactive Exxon Facility # 28077*	*Start Date:*	*01-22-09*	*Logged By:*	*AW*
Site Location:	*14258 Jarrettsville Pike, Phoenix, MD*	*End Date:*	*01-23-09*	*Permit No.:*	*BA-95-2794*
Project No:	*100891*	*Total Hole Depth:*	*70.75'*	*Checked By:*	*MRN*
Client:	*ExxonMobil*	*Hole Diameter:*	*12"-23', 10"-70.75'*	*Notes:*	*Air Knifed to 8'; 1992 CMTe used for coring (32-54' bgs); Weathered bedrock at 21'*
Drilling Company:	*Eichelbergers*	*Depth to Bedrock:*	*23.5 feet*		
Driller:	*T. Toland, J. Malecki*	*Well Diameter:*	*6 inches*		
Drill Rig Type:	*2004 Schramm Model T450WS*	*Water Level (Initial):*	*NA*		
Drilling Method:	*Air Rotary-HSA*	*Screen Length:*	*45 feet*		
Sampling Method:	*Cuttings-Coring*	*TOC Elevation:*	*589.44*		

Depth (feet)	Graphic Log	Soil/Geologic Description	RQD %	PID Headspace (ppm)	Well Completion Details	Depth (feet)
0.0		GROUND SURFACE				0.0
		AC Asphalt		0	Concrete	
		CL Silty CLAY, reddish-brown, medium plasticity, firm, moist				
5.0		**CL** Silty CLAY, reddish-brown, medium plasticity, firm, moist Trace pebbles, dry to moist		0	6" Diameter - PVC Casing	5.0
10.0		**MH** Silty SAND with trace clay, brown, micaceous, dry to moist		0	Bentonite Slurry	10.0
15.0		**MH** Silty SAND with trace gravel, brown, micaceous, moist				15.0
20.0		**BR** SCHIST, brown, saprolitic, dry		0		20.0
25.0		**BR** SCHIST, brown, dry, competent		0		25.0

PID - Photoionization Detector
ppm - Parts per million
NA - Not Applicable
* Sample submitted for laboratory analysis

- Water Level Initial Measurement
- Water Level Subsequent Measurement

Sample ID:
HA - Hand Auger Sample
S - Split Spoon Sample
GS - Grab Sample
C - Macrocore Sleeve

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DRILLING LOG

Well No. SVE-2

Project Name:	*Inactive Exxon Facility # 28077*	*Start Date:*	*01-22-09*	*Logged By:*	*AW*
Site Location:	*14258 Jarrettsville Pike, Phoenix, MD*	*End Date:*	*01-23-09*	*Permit No.:*	*BA-95-2794*
Project No:	*100891*	*Total Hole Depth:*	*70.75'*	*Checked By:*	*MRN*
Client:	*ExxonMobil*	*Hole Diameter:*	*12"-23', 10"-70.75'*	*Notes:*	*Air Knifed to 8'; 1992 CMTe used for coring (32-54' bgs); Weathered bedrock at 21'*
Drilling Company:	*Eichelbergers*	*Depth to Bedrock:*	*23.5 feet*		
Driller:	*T. Toland, J. Malecki*	*Well Diameter:*	*6 inches*		
Drill Rig Type:	*2004 Schramm Model T450WS*	*Water Level (Initial):*	*NA*		
Drilling Method:	*Air Rotary-HSA*	*Screen Length:*	*45 feet*		
Sampling Method:	*Cuttings-Coring*	*TOC Elevation:*	*589.44*		

Depth (feet)	Graphic Log	Soil/Geologic Description	RQD %	PID Headspace (ppm)	Well Completion Details	Depth (feet)
30.0		**BR** GNEISS, gray, dry; 3 inch quartz vein at 32 feet		0	#2 Silca Sand	30.0
35.0			70	0.8 18.0 7.3	6" Diameter - 0.020" Slotted PVC Screen	35.0
		BR SCHIST, brown, saprolitic, wet, petro odor				
		BR GNEISS, gray, dry		2.4 2.1		
40.0						40.0
			45	0.0		
45.0		**BR** SCHIST, brown, wet				45.0
		BR Quartz vein, dry				
50.0		**BR** GNEISS, gray, dry				50.0

PID - Photoionization Detector
ppm - Parts per million
NA - Not Applicable
* Sample submitted for laboratory analysis

- Water Level Initial Measurement
- Water Level Subsequent Measurement

Sample ID:
HA - Hand Auger Sample
S - Split Spoon Sample
GS - Grab Sample
C - Macrocore Sleeve

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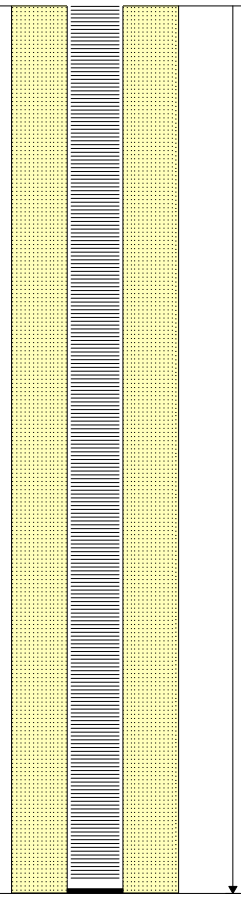
DRILLING LOG

Well No. SVE-2

Project Name:	*Inactive Exxon Facility # 28077*	*Start Date:*	*01-22-09*	*Logged By:*	*AW*
Site Location:	*14258 Jarrettsville Pike, Phoenix, MD*	*End Date:*	*01-23-09*	*Permit No.:*	*BA-95-2794*
Project No:	*100891*	*Total Hole Depth:*	*70.75'*	*Checked By:*	*MRN*
Client:	*ExxonMobil*	*Hole Diameter:*	*12"-23', 10"-70.75'*	*Notes:*	*Air Knifed to 8'; 1992 CMTe used for coring (32-54' bgs); Weathered bedrock at 21'*
Drilling Company:	*Eichelbergers*	*Depth to Bedrock:*	*23.5 feet*		
Driller:	*T. Toland, J. Malecki*	*Well Diameter:*	*6 inches*		
Drill Rig Type:	*2004 Schramm Model T450WS*	*Water Level (Initial):*	*NA*		
Drilling Method:	*Air Rotary-HSA*	*Screen Length:*	*45 feet*		
Sampling Method:	*Cuttings-Coring*	*TOC Elevation:*	*589.44*		

Depth (feet)	Graphic Log	Soil/Geologic Description	RQD %	PID Headspace (ppm)	Well Completion Details	Depth (feet)
55.0			30			55.0
60.0						60.0
65.0						65.0
70.0		Terminated at 70.75 feet				70.0
75.0						75.0



PID - Photoionization Detector
ppm - Parts per million
NA - Not Applicable
* Sample submitted for laboratory analysis

- Water Level Initial Measurement
- Water Level Subsequent Measurement

Sample ID:
HA - Hand Auger Sample
S - Split Spoon Sample
GS - Grab Sample
C - Macrocore Sleeve

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DRILLING LOG

Well No. SVE-3

Project Name:	***Inactive Exxon Facility # 28077***	***Start Date:***	***01-19-09***	***Logged By:***	***AW***
Site Location:	***14258 Jarrettsville Pike, Phoenix, MD***	***End Date:***	***01-21-09***	***Permit No.:***	***BA-95-2793***
Project No:	***100891***	***Total Hole Depth:***	***69 feet***	***Checked By:***	***MRN, JRH***
Client:	***ExxonMobil***	***Hole Diameter:***	***12" to 19', 10" to 69'***	***Notes:***	***Weathered bedrock at 12'***
Drilling Company:	***Eichelbergers***	***Depth to Bedrock:***	***19 feet***		***Air knifed to 5'***
Driller:	***T. Toland***	***Well Diameter:***	***6 inches***		
Drill Rig Type:	***2004 Schramm Model T450WS***	***Water Level (Initial):***	***63 feet***		
Drilling Method:	***Air Rotary***	***Screen Length:***	***45 feet***		
Sampling Method:	***Cuttings***	***TOC Elevation:***	***589.38***		

Depth (feet)	Graphic Log	Soil/Geologic Description	RQD %	PID Headspace (ppm)	Well Completion Details	Depth (feet)
0.0		GROUND SURFACE				0.0
		AC Asphalt			Cement	
		AF Crushed stone backfill, dry		0	6" Diameter - PVC Casing	
5.0						5.0
10.0					Bentonite Slurry	10.0
		BR Saprolite (weathered bedrock), dry		0		
15.0						15.0
		BR SCHIST, brown, dry, competent				
20.0						20.0
25.0				0		25.0

PID - Photoionization Detector
ppm - Parts per million
NA - Not Applicable
* Sample submitted for laboratory analysis

- Water Level Initial Measurement
- Water Level Subsequent Measurement

Sample ID:
HA - Hand Auger Sample
S - Split Spoon Sample
GS - Grab Sample
C - Macrocore Sleeve

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road, Suite I
Hanover, MD 21076
(410) 850-0404

DRILLING LOG

Well No. SVE-3

Project Name:	***Inactive Exxon Facility # 28077***	***Start Date:***	***01-19-09***	***Logged By:***	***AW***
Site Location:	***14258 Jarrettsville Pike, Phoenix, MD***	***End Date:***	***01-21-09***	***Permit No.:***	***BA-95-2793***
Project No:	***100891***	***Total Hole Depth:***	***69 feet***	***Checked By:***	***MRN, JRH***
Client:	***ExxonMobil***	***Hole Diameter:***	***12" to 19', 10" to 69'***	***Notes:***	***Weathered bedrock at 12'***
Drilling Company:	***Eichelbergers***	***Depth to Bedrock:***	***19 feet***		***Air knifed to 5'***
Driller:	***T. Toland***	***Well Diameter:***	***6 inches***		
Drill Rig Type:	***2004 Schramm Model T450WS***	***Water Level (Initial):***	***63 feet***		
Drilling Method:	***Air Rotary***	***Screen Length:***	***45 feet***		
Sampling Method:	***Cuttings***	***TOC Elevation:***	***589.38***		

Depth (feet)	Graphic Log	Soil/Geologic Description	RQD %	PID Headspace (ppm)	Well Completion Details	Depth (feet)
30.0					#2 Silca Sand	30.0
		BR GNEISS, gray, dry			6" Diameter - 0.020" Slotted PVC Screen	
35.0						35.0
40.0						40.0
45.0				0		45.0
50.0						50.0

PID - Photoionization Detector
ppm - Parts per million
NA - Not Applicable
* Sample submitted for laboratory analysis

- Water Level Initial Measurement
- Water Level Subsequent Measurement

Sample ID:
HA - Hand Auger Sample
S - Split Spoon Sample
GS - Grab Sample
C - Macrocore Sleeve

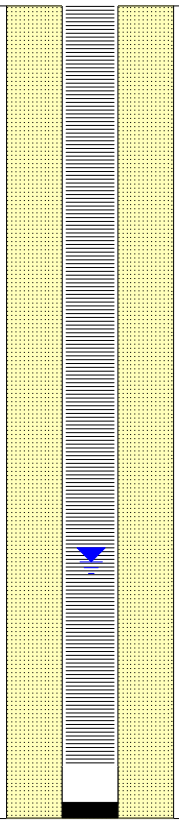
KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road, Suite I
Hanover, MD 21076
(410) 850-0404

DRILLING LOG

Well No. SVE-3

Project Name:	*Inactive Exxon Facility # 28077*	*Start Date:*	*01-19-09*	*Logged By:*	*AW*
Site Location:	*14258 Jarrettsville Pike, Phoenix, MD*	*End Date:*	*01-21-09*	*Permit No.:*	*BA-95-2793*
Project No:	*100891*	*Total Hole Depth:*	*69 feet*	*Checked By:*	*MRN, JRH*
Client:	*ExxonMobil*	*Hole Diameter:*	*12" to 19', 10" to 69'*	*Notes:*	*Weathered bedrock at 12'*
Drilling Company:	*Eichelbergers*	*Depth to Bedrock:*	*19 feet*		*Air knifed to 5'*
Driller:	*T. Toland*	*Well Diameter:*	*6 inches*		
Drill Rig Type:	*2004 Schramm Model T450WS*	*Water Level (Initial):*	*63 feet*		
Drilling Method:	*Air Rotary*	*Screen Length:*	*45 feet*		
Sampling Method:	*Cuttings*	*TOC Elevation:*	*589.38*		

Depth (feet)	Graphic Log	Soil/Geologic Description	RQD %	PID Headspace (ppm)	Well Completion Details	Depth (feet)
55.0						55.0
60.0		**BR** GNEISS, dark gray, moist		0		60.0
65.0		**BR** GNEISS, dark gray, wet Terminated at 69.0 feet		0		65.0
70.0						70.0
75.0						75.0

PID - Photoionization Detector
ppm - Parts per million
NA - Not Applicable
* Sample submitted for laboratory analysis

- Water Level Initial Measurement
- Water Level Subsequent Measurement

Sample ID:
HA - Hand Auger Sample
S - Split Spoon Sample
GS - Grab Sample
C - Macrocore Sleeve

Appendix B – Accutest Laboratory Technical Reports – Soil Data

New Jersey ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

03/17/09

Technical Report for

ExxonMobil Corporation

GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

PO#4510774144 WBS#08

Accutest Job Number: JA12483

Sampling Date: 02/18/09

Report to:

Kleinfelder

mnewman@kleinfelder.com

ATTN: Matthew Newman

Total number of pages in report: **9**

ACCUTEST LABORATORIES 50 YEARS 1956-2006

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP Ops, Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

Sections: 1 2 3

Table of Contents

Sample Summary

ExxonMobil Corporation

Job No: JA12483

GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD
Project No: PO#4510774144 WBS#08

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JA12483-1	02/18/09	10:30	MRN	02/19/09	SO	Soil	SVE_STOCKPILE001
JA12483-2	02/18/09	10:40	MRN	02/19/09	SO	Soil	SVE_STOCKPILE002

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Results

Report of Analysis

Accutest LabLink@492258 14:52 17-Mar-2009

Report of Analysis

Client Sample ID:	SVE_STOCKPILE001		
Lab Sample ID:	JA12483-1	**Date Sampled:**	02/18/09
Matrix:	SO - Soil	**Date Received:**	02/19/09
Method:	SW846 8260B	**Percent Solids:**	89.9
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y85146.D	1	02/20/09	HJK	n/a	n/a	VY3540
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

Purgeable BTEX,MTBE,TBA,DIPE,TAME,ETBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0012	0.00044	mg/kg	
108-88-3	Toluene	ND	0.0012	0.00041	mg/kg	
100-41-4	Ethylbenzene	ND	0.0012	0.00050	mg/kg	
1330-20-7	Xylene (total)	ND	0.0025	0.00037	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0012	0.00044	mg/kg	
75-65-0	Tert Butyl Alcohol	ND	0.031	0.021	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.0062	0.00045	mg/kg	
994-05-8	tert-Amyl Methyl Ether	ND	0.0062	0.0011	mg/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	0.0062	0.00041	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		67-125%
17060-07-0	1,2-Dichloroethane-D4	123%		64-131%
2037-26-5	Toluene-D8	91%		73-124%
460-00-4	4-Bromofluorobenzene	93%		61-136%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@492258 14:52 17-Mar-2009

Report of Analysis

Client Sample ID:	SVE_STOCKPILE002		
Lab Sample ID:	JA12483-2	**Date Sampled:**	02/18/09
Matrix:	SO - Soil	**Date Received:**	02/19/09
Method:	SW846 8260B	**Percent Solids:**	91.8
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y85147.D	1	02/20/09	HJK	n/a	n/a	VY3540
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

Purgeable BTEX,MTBE,TBA,DIPE,TAME,ETBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0012	0.00043	mg/kg	
108-88-3	Toluene	ND	0.0012	0.00040	mg/kg	
100-41-4	Ethylbenzene	ND	0.0012	0.00049	mg/kg	
1330-20-7	Xylene (total)	ND	0.0024	0.00036	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.0012	0.00043	mg/kg	
75-65-0	Tert Butyl Alcohol	ND	0.030	0.020	mg/kg	
108-20-3	Di-Isopropyl ether	ND	0.0061	0.00044	mg/kg	
994-05-8	tert-Amyl Methyl Ether	ND	0.0061	0.0011	mg/kg	
637-92-3	tert-Butyl Ethyl Ether	ND	0.0061	0.00040	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		67-125%
17060-07-0	1,2-Dichloroethane-D4	123%		64-131%
2037-26-5	Toluene-D8	91%		73-124%
460-00-4	4-Bromofluorobenzene	94%		61-136%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST.

50

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3479

Accutest Job #: JA12483

Client Information

ExxonMobil - Regional Laboratory Program (MD)

Consultants Name: Kleinfelder
Address: 1340 Charwood Road, Suite 1
City: Hanover State: MD Zip: 21076
Project Contact: Mark Schaaf, Kristina Braun
Sampler's Name:
Phone #: 410-850-0404 Fax #: 410-850-0049
PE#

Facility Information

Project Name: Exxon-Phoenix
Street: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: James F. Medlin
ExxonMobil Phone #: 843-238-0865
Location ID#: 28077 WBS#:
PO#:

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	None	8260 (BTEX and 5-Oxy ONLY)
1	SVE_STOCKPILE001	2/18/2009	1030	MRN	Soil	3					X	X
2	SVE_STOCKPILE002	2/18/2009	1040	MRN	Soil	3					X	X

Turnaround Information

- [X] Std. 10 Day Turnaround
- [ ] 8 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency T/A is for FAX or Lablink Data

Approved By:

Data Deliverable Information

- [X] Commercial "A"
- [ ] Commercial "B"
- [ ] Full Deliverables
- [ ] Other
- [ ] FULL CLP
- [ ] State Forms
- [ ] Disk Deliverable Format

Commercial "A" = Results Only

Accutest Log-in Information

Comments: 24 hr TAT

OSV1 WC5

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	2-19-09 1445			2-19-09 1830	
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3			
Relinquished by Sampler:	Date Time:	Received By:	Seal #	Preserve where applicable	On Ice / Temp.
5		5	N/A.	☐	☐ 2-4c

A-

JA12483: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA12483 **Client:** **Immediate Client Services Action Required:** No

Date / Time Received: 2/19/2009 **Delivery Method:** **Client Service Action Required at Login:** No

Project: **No. Coolers:** 1 **Airbill #'s:**

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservatio	Y	or	N
1. Trip Blank present / cooler:	☑		☐
2. Trip Blank listed on COC:	☑		☐
3. Samples preserved properly:	☑		☐
4. VOCs headspace free:	☐		☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N
1. Analysis requested is clear:	☑		☐
2. Bottles received for unspecified tests	☐		☑
3. Sufficient volume recvd for analysis:	☑		☐
4. Compositing instructions clear:	☐		☐
5. Filtering instructions clear:	☐		☐

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA12483: Chain of Custody
Page 2 of 2

Appendix C – Accutest Laboratory Technical Reports – SVE Test Well Groundwater Data

New Jersey ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

03/04/09

Technical Report for

ExxonMobil Corporation

GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

PO#4510774144 WBS#08

Accutest Job Number: JA12981

Sampling Date: 02/26/09

Report to:

Kleinfelder

mnewman@kleinfelder.com

ATTN: Matthew Newman

Total number of pages in report: **16**

ACCUTEST LABORATORIES 50 YEARS 1956-2006

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP Ops, Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

Sections: 1 2 3

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Sample Summary

ExxonMobil Corporation

Job No: JA12981

GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD
Project No: PO#4510774144 WBS#08

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JA12981-1	02/26/09	10:00	MRN	02/26/09	DW	Drinking Water	SVE001
JA12981-2	02/26/09	10:29	MRN	02/26/09	DW	Drinking Water	SVE002
JA12981-3	02/26/09	10:53	MRN	02/26/09	DW	Drinking Water	SVE003

Sample Results

Report of Analysis

Accutest LabLink@490136 13:40 04-Mar-2009

Report of Analysis

Client Sample ID: SVE001
Lab Sample ID: JA12981-1 **Date Sampled:** 02/26/09
Matrix: DW - Drinking Water **Date Received:** 02/26/09
Method: SW846 8260B **Percent Solids:** n/a
Project: GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C55425.D	1	02/28/09	NMC	n/a	n/a	V2C2502
Run #2	2C55439.D	100	03/02/09	NMC	n/a	n/a	V2C2503

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
67-64-1	Acetone	ND		10	2.1	ug/l	
71-43-2	Benzene	10.6	5.0	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND		5.0	0.18	ug/l	
74-97-5	Bromochloromethane	ND		5.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND		1.0	0.14	ug/l	
75-25-2	Bromoform	ND		4.0	0.18	ug/l	
74-83-9	Bromomethane	ND		2.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND		10	2.3	ug/l	
104-51-8	n-Butylbenzene	ND		5.0	0.61	ug/l	
135-98-8	sec-Butylbenzene	ND		5.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND		5.0	0.15	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.0	0.18	ug/l	
108-90-7	Chlorobenzene	ND	100	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND		1.0	0.22	ug/l	
67-66-3	Chloroform	ND		1.0	0.16	ug/l	
74-87-3	Chloromethane	ND		1.0	0.29	ug/l	
95-49-8	o-Chlorotoluene	ND		5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND		5.0	0.34	ug/l	
108-20-3	Di-Isopropyl ether	26.4		5.0	0.12	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.20	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND		1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.050	2.0	0.18	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	600	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.26	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	75	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND		5.0	0.88	ug/l	
75-34-3	1,1-Dichloroethane	ND		1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	7.0	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	70	1.0	0.25	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	100	1.0	0.16	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	0.18	ug/l	

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SVE001
Lab Sample ID: JA12981-1 **Date Sampled:** 02/26/09
Matrix: DW - Drinking Water **Date Received:** 02/26/09
Method: SW846 8260B **Percent Solids:** n/a
Project: GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND		5.0	0.20	ug/l	
594-20-7	2,2-Dichloropropane	ND		5.0	0.19	ug/l	
563-58-6	1,1-Dichloropropene	ND		5.0	0.23	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.18	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.15	ug/l	
100-41-4	Ethylbenzene	ND	700	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND		5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND		2.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND		5.0	0.25	ug/l	
1634-04-4	Methyl Tert Butyl Ether	14100 [a]		100	16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND		5.0	0.18	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	0.16	ug/l	
91-20-3	Naphthalene	ND		5.0	1.2	ug/l	
103-65-1	n-Propylbenzene	ND		5.0	0.18	ug/l	
100-42-5	Styrene	ND	100	5.0	0.17	ug/l	
75-65-0	Tert Butyl Alcohol	480		25	1.7	ug/l	
994-05-8	tert-Amyl Methyl Ether	649 [a]		500	77	ug/l	
637-92-3	tert-Butyl Ethyl Ether	81.2		5.0	0.26	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	1.0	0.29	ug/l	
108-88-3	Toluene	1.0	1000	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	1.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	70	5.0	1.3	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	200	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	5.0	1.0	0.18	ug/l	
75-69-4	Trichlorofluoromethane	ND		5.0	0.25	ug/l	
96-18-4	1,2,3-Trichloropropane	ND		5.0	1.3	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5		5.0	0.22	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.58	ug/l	
75-01-4	Vinyl chloride	ND	2.0	1.0	0.21	ug/l	
	m,p-Xylene	6.2		1.0	0.39	ug/l	
95-47-6	o-Xylene	6.4		1.0	0.39	ug/l	
1330-20-7	Xylene (total)	12.6	10000	1.0	0.39	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	96%	72-120%

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE001		
Lab Sample ID:	JA12981-1	**Date Sampled:**	02/26/09
Matrix:	DW - Drinking Water	**Date Received:**	02/26/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

MD VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%	97%	59-137%
2037-26-5	Toluene-D8	105%	103%	73-116%
460-00-4	4-Bromofluorobenzene	102%	103%	69-126%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@490136 13:40 04-Mar-2009

Report of Analysis

Client Sample ID: SVE002
Lab Sample ID: JA12981-2 **Date Sampled:** 02/26/09
Matrix: DW - Drinking Water **Date Received:** 02/26/09
Method: SW846 8260B **Percent Solids:** n/a
Project: GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C55426.D	1	02/28/09	NMC	n/a	n/a	V2C2502
Run #2	2C55440.D	5	03/02/09	NMC	n/a	n/a	V2C2503

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
67-64-1	Acetone	ND		10	2.1	ug/l	
71-43-2	Benzene	3.3	5.0	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND		5.0	0.18	ug/l	
74-97-5	Bromochloromethane	ND		5.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND		1.0	0.14	ug/l	
75-25-2	Bromoform	ND		4.0	0.18	ug/l	
74-83-9	Bromomethane	ND		2.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND		10	2.3	ug/l	
104-51-8	n-Butylbenzene	ND		5.0	0.61	ug/l	
135-98-8	sec-Butylbenzene	ND		5.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND		5.0	0.15	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.0	0.18	ug/l	
108-90-7	Chlorobenzene	ND	100	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND		1.0	0.22	ug/l	
67-66-3	Chloroform	ND		1.0	0.16	ug/l	
74-87-3	Chloromethane	ND		1.0	0.29	ug/l	
95-49-8	o-Chlorotoluene	ND		5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND		5.0	0.34	ug/l	
108-20-3	Di-Isopropyl ether	0.94		5.0	0.12	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.20	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND		1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.050	2.0	0.18	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	600	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.26	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	75	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND		5.0	0.88	ug/l	
75-34-3	1,1-Dichloroethane	ND		1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	7.0	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	70	1.0	0.25	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	100	1.0	0.16	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	0.18	ug/l	

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@490136 13:40 04-Mar-2009

Report of Analysis

Client Sample ID: SVE002
Lab Sample ID: JA12981-2 **Date Sampled:** 02/26/09
Matrix: DW - Drinking Water **Date Received:** 02/26/09
Method: SW846 8260B **Percent Solids:** n/a
Project: GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND		5.0	0.20	ug/l	
594-20-7	2,2-Dichloropropane	ND		5.0	0.19	ug/l	
563-58-6	1,1-Dichloropropene	ND		5.0	0.23	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.18	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.15	ug/l	
100-41-4	Ethylbenzene	0.45	700	1.0	0.27	ug/l	J
87-68-3	Hexachlorobutadiene	ND		5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND		2.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND		5.0	0.25	ug/l	
1634-04-4	Methyl Tert Butyl Ether	292 [a]		5.0	0.82	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND		5.0	0.18	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	0.16	ug/l	
91-20-3	Naphthalene	ND		5.0	1.2	ug/l	
103-65-1	n-Propylbenzene	ND		5.0	0.18	ug/l	
100-42-5	Styrene	ND	100	5.0	0.17	ug/l	
75-65-0	Tert Butyl Alcohol	ND		25	1.7	ug/l	
994-05-8	tert-Amyl Methyl Ether	33.3		5.0	0.77	ug/l	
637-92-3	tert-Butyl Ethyl Ether	2.5		5.0	0.26	ug/l	J
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	1.0	0.29	ug/l	
108-88-3	Toluene	1.8	1000	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	1.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	70	5.0	1.3	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	200	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	5.0	1.0	0.18	ug/l	
75-69-4	Trichlorofluoromethane	ND		5.0	0.25	ug/l	
96-18-4	1,2,3-Trichloropropane	ND		5.0	1.3	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.58	ug/l	
75-01-4	Vinyl chloride	ND	2.0	1.0	0.21	ug/l	
	m,p-Xylene	4.3		1.0	0.39	ug/l	
95-47-6	o-Xylene	1.7		1.0	0.39	ug/l	
1330-20-7	Xylene (total)	6.0	10000	1.0	0.39	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	98%	72-120%

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE002		
Lab Sample ID:	JA12981-2	**Date Sampled:**	02/26/09
Matrix:	DW - Drinking Water	**Date Received:**	02/26/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

MD VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%	98%	59-137%
2037-26-5	Toluene-D8	105%	103%	73-116%
460-00-4	4-Bromofluorobenzene	105%	103%	69-126%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@490136 13:40 04-Mar-2009

Report of Analysis

Client Sample ID: SVE003
Lab Sample ID: JA12981-3 **Date Sampled:** 02/26/09
Matrix: DW - Drinking Water **Date Received:** 02/26/09
Method: SW846 8260B **Percent Solids:** n/a
Project: GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C55427.D	1	02/28/09	NMC	n/a	n/a	V2C2502
Run #2	2C55441.D	5	03/02/09	NMC	n/a	n/a	V2C2503

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
67-64-1	Acetone	ND		10	2.1	ug/l	
71-43-2	Benzene	1.4	5.0	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND		5.0	0.18	ug/l	
74-97-5	Bromochloromethane	ND		5.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND		1.0	0.14	ug/l	
75-25-2	Bromoform	ND		4.0	0.18	ug/l	
74-83-9	Bromomethane	ND		2.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND		10	2.3	ug/l	
104-51-8	n-Butylbenzene	ND		5.0	0.61	ug/l	
135-98-8	sec-Butylbenzene	ND		5.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND		5.0	0.15	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.0	0.18	ug/l	
108-90-7	Chlorobenzene	ND	100	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND		1.0	0.22	ug/l	
67-66-3	Chloroform	ND		1.0	0.16	ug/l	
74-87-3	Chloromethane	ND		1.0	0.29	ug/l	
95-49-8	o-Chlorotoluene	ND		5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND		5.0	0.34	ug/l	
108-20-3	Di-Isopropyl ether	0.76		5.0	0.12	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.20	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND		1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	0.050	2.0	0.18	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	600	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.26	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	75	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND		5.0	0.88	ug/l	
75-34-3	1,1-Dichloroethane	ND		1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	7.0	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	70	1.0	0.25	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	100	1.0	0.16	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.0	0.18	ug/l	

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@490136 13:40 04-Mar-2009

Report of Analysis

Client Sample ID: SVE003
Lab Sample ID: JA12981-3 **Date Sampled:** 02/26/09
Matrix: DW - Drinking Water **Date Received:** 02/26/09
Method: SW846 8260B **Percent Solids:** n/a
Project: GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND		5.0	0.20	ug/l	
594-20-7	2,2-Dichloropropane	ND		5.0	0.19	ug/l	
563-58-6	1,1-Dichloropropene	ND		5.0	0.23	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.18	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.15	ug/l	
100-41-4	Ethylbenzene	ND	700	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND		5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	ND		2.0	0.19	ug/l	
99-87-6	p-Isopropyltoluene	ND		5.0	0.25	ug/l	
1634-04-4	Methyl Tert Butyl Ether	306 [a]		5.0	0.82	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND		5.0	0.18	ug/l	
75-09-2	Methylene chloride	ND	5.0	2.0	0.16	ug/l	
91-20-3	Naphthalene	ND		5.0	1.2	ug/l	
103-65-1	n-Propylbenzene	ND		5.0	0.18	ug/l	
100-42-5	Styrene	ND	100	5.0	0.17	ug/l	
75-65-0	Tert Butyl Alcohol	ND		25	1.7	ug/l	
994-05-8	tert-Amyl Methyl Ether	13.0		5.0	0.77	ug/l	
637-92-3	tert-Butyl Ethyl Ether	2.7		5.0	0.26	ug/l	J
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	ND	5.0	1.0	0.29	ug/l	
108-88-3	Toluene	ND	1000	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND		5.0	1.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	70	5.0	1.3	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	200	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	5.0	1.0	0.18	ug/l	
75-69-4	Trichlorofluoromethane	ND		5.0	0.25	ug/l	
96-18-4	1,2,3-Trichloropropane	ND		5.0	1.3	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	0.22	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.58	ug/l	
75-01-4	Vinyl chloride	ND	2.0	1.0	0.21	ug/l	
	m,p-Xylene	ND		1.0	0.39	ug/l	
95-47-6	o-Xylene	0.62		1.0	0.39	ug/l	J
1330-20-7	Xylene (total)	0.99	10000	1.0	0.39	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	97%	72-120%

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE003		
Lab Sample ID:	JA12981-3	**Date Sampled:**	02/26/09
Matrix:	DW - Drinking Water	**Date Received:**	02/26/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

MD VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%	99%	59-137%
2037-26-5	Toluene-D8	104%	104%	73-116%
460-00-4	4-Bromofluorobenzene	105%	103%	69-126%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST

DW

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3479

Accutest Job #: JA12981

Client Information

ExxonMobil - Regional Laboratory Program (MD)

Insultants Name: Kleinfelder
Address: 1340 Charwood Road, Suite 1
City: Hanover State: MD Zip: 21076
Project Contact: Mark Schaaf, Kristina Braun
Sampler's Name:
Phone #: 410-850-0404 Fax #: 410-850-0049
PE#

Facility Information

Project Name: Exxon-Phoenix
Street: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: James F. Medlin
ExxonMobil Phone #: 843-238-0865
Location ID#: 28077 WBS#:
PO#:

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Preservation HCl	Preservation NaOH	Preservation HNO3	Preservation H2SO4	Preservation None	FULL VOC BY 8260
1	SVE001	2/26/2009	1000	MRN	DW	3	X					X
2	SVE002	2/26/2009	1039	MRN	DW	3	X					X
3	SVE003	2/26/2009	1053	MRN	DW	3	X					X

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Turnaround Information

- [ ] Std. 10 Day Turnaround
- [ ] 8 Day *RUSH*
- [ ] 5 Day RUSH
- [x] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Approved By:

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- [x] Commercial "A"
- [ ] Commercial "B"
- [ ] Full Deliverables
- [ ] Other
- [ ] FULL CLP
- [ ] State Forms
- [ ] Disk Deliverable Format____

Commercial "A" = Results Only

Accutest Log-in Information

Comments

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	2/26/09 1437	1			
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3			
Relinquished by Sampler:	Date Time:	Received By:	Seal #	Preserve where applicable ☐	On Ice ☐ Temp. 2.2°C
5		5			

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4DM

JA12981: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA12981 **Client:** **Immediate Client Services Action Required:** No

Date / Time Received: 2/26/2009 **Delivery Method:** **Client Service Action Required at Login:** No

Project: **No. Coolers:** 1 **Airbill #'s:**

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservatio	Y	or	N
1. Trip Blank present / cooler:	☑		☐
2. Trip Blank listed on COC:	☑		☐
3. Samples preserved properly:	☑		☐
4. VOCs headspace free:	☐		☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N
1. Analysis requested is clear:	☑		☐
2. Bottles received for unspecified tests	☐		☑
3. Sufficient volume recvd for analysis:	☑		☐
4. Compositing instructions clear:	☐		☐
5. Filtering instructions clear:	☐		☐

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA12981: Chain of Custody
Page 2 of 2

New Jersey ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

02/20/09

Technical Report for

ExxonMobil Corporation

GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

PO#4510774144 WBS#08

Accutest Job Number: JA10879

Sampling Date: 01/28/09

Report to:

Kleinfelder

mnewman@kleinfelder.com

ATTN: Matthew Newman

Total number of pages in report: **16**

ACCUTEST LABORATORIES 50 YEARS 1956-2006

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP Ops, Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Sample Summary

ExxonMobil Corporation

Job No: JA10879

GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD
Project No: PO#4510774144 WBS#08

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JA10879-1	01/28/09	13:00	FK	01/29/09	AQ	Ground Water	SVE001
JA10879-2	01/28/09	13:30	FK	01/29/09	AQ	Ground Water	SVE002
JA10879-3	01/28/09	14:00	FK	01/29/09	AQ	Ground Water	SVE003

Sample Results

Report of Analysis

Accutest LabLink@488532 13:57 20-Feb-2009

Report of Analysis

Client Sample ID: SVE001
Lab Sample ID: JA10879-1 **Date Sampled:** 01/28/09
Matrix: AQ - Ground Water **Date Received:** 01/29/09
Method: SW846 8260B **Percent Solids:** n/a
Project: GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X88211.D	20	02/02/09	YXC	n/a	n/a	VX3679
Run #2	X88212.D	100	02/02/09	YXC	n/a	n/a	VX3679

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	43	ug/l	
71-43-2	Benzene	8.7	20	5.2	ug/l	J
108-86-1	Bromobenzene	ND	100	3.6	ug/l	
74-97-5	Bromochloromethane	ND	100	4.8	ug/l	
75-27-4	Bromodichloromethane	ND	20	2.8	ug/l	
75-25-2	Bromoform	ND	80	3.7	ug/l	
74-83-9	Bromomethane	ND	40	6.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	200	46	ug/l	
104-51-8	n-Butylbenzene	ND	100	12	ug/l	
135-98-8	sec-Butylbenzene	ND	100	5.4	ug/l	
98-06-6	tert-Butylbenzene	ND	100	2.9	ug/l	
56-23-5	Carbon tetrachloride	ND	20	3.5	ug/l	
108-90-7	Chlorobenzene	ND	20	3.8	ug/l	
75-00-3	Chloroethane	ND	20	4.4	ug/l	
67-66-3	Chloroform	ND	20	3.2	ug/l	
74-87-3	Chloromethane	ND	20	5.8	ug/l	
95-49-8	o-Chlorotoluene	ND	100	11	ug/l	
106-43-4	p-Chlorotoluene	ND	100	6.7	ug/l	
108-20-3	Di-Isopropyl ether	20.7	100	2.4	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	200	26	ug/l	
124-48-1	Dibromochloromethane	ND	20	3.2	ug/l	
106-93-4	1,2-Dibromoethane	ND	40	3.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	3.6	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	5.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	4.4	ug/l	
75-71-8	Dichlorodifluoromethane	ND	100	18	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	4.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	7.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	20	5.8	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	20	4.9	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	20	3.2	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	3.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@488532 13:57 20-Feb-2009

Report of Analysis

Client Sample ID:	SVE001		
Lab Sample ID:	JA10879-1	**Date Sampled:**	01/28/09
Matrix:	AQ - Ground Water	**Date Received:**	01/29/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	100	3.9	ug/l	
594-20-7	2,2-Dichloropropane	ND	100	3.8	ug/l	
563-58-6	1,1-Dichloropropene	ND	100	4.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	3.6	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	3.0	ug/l	
100-41-4	Ethylbenzene	ND	20	5.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	100	4.6	ug/l	
98-82-8	Isopropylbenzene	ND	40	3.7	ug/l	
99-87-6	p-Isopropyltoluene	ND	100	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	13600 [a]	100	16	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	100	27	ug/l	
74-95-3	Methylene bromide	ND	100	3.5	ug/l	
75-09-2	Methylene chloride	ND	40	3.2	ug/l	
91-20-3	Naphthalene	ND	100	23	ug/l	
103-65-1	n-Propylbenzene	ND	100	3.6	ug/l	
100-42-5	Styrene	ND	100	3.4	ug/l	
75-65-0	Tert Butyl Alcohol	ND	500	34	ug/l	
994-05-8	tert-Amyl Methyl Ether	791	100	15	ug/l	
637-92-3	tert-Butyl Ethyl Ether	67.0	100	5.1	ug/l	J
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	2.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	2.7	ug/l	
127-18-4	Tetrachloroethene	ND	20	5.9	ug/l	
108-88-3	Toluene	ND	20	3.1	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	100	24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	100	25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	4.8	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	3.3	ug/l	
79-01-6	Trichloroethene	ND	20	3.7	ug/l	
75-69-4	Trichlorofluoromethane	ND	100	4.9	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	100	26	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	100	4.4	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	100	12	ug/l	
75-01-4	Vinyl chloride	ND	20	4.1	ug/l	
	m,p-Xylene	ND	20	7.7	ug/l	
95-47-6	o-Xylene	10	20	7.7	ug/l	J
1330-20-7	Xylene (total)	10	20	7.7	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	100%	72-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE001		
Lab Sample ID:	JA10879-1	**Date Sampled:**	01/28/09
Matrix:	AQ - Ground Water	**Date Received:**	01/29/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

MD VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%	95%	59-137%
2037-26-5	Toluene-D8	113%	109%	73-116%
460-00-4	4-Bromofluorobenzene	96%	95%	69-126%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@488532 13:57 20-Feb-2009

Report of Analysis

Client Sample ID: SVE002
Lab Sample ID: JA10879-2 **Date Sampled:** 01/28/09
Matrix: AQ - Ground Water **Date Received:** 01/29/09
Method: SW846 8260B **Percent Solids:** n/a
Project: GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X88213.D	20	02/02/09	YXC	n/a	n/a	VX3679
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	43	ug/l	
71-43-2	Benzene	191	20	5.2	ug/l	
108-86-1	Bromobenzene	ND	100	3.6	ug/l	
74-97-5	Bromochloromethane	ND	100	4.8	ug/l	
75-27-4	Bromodichloromethane	ND	20	2.8	ug/l	
75-25-2	Bromoform	ND	80	3.7	ug/l	
74-83-9	Bromomethane	ND	40	6.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	200	46	ug/l	
104-51-8	n-Butylbenzene	ND	100	12	ug/l	
135-98-8	sec-Butylbenzene	ND	100	5.4	ug/l	
98-06-6	tert-Butylbenzene	ND	100	2.9	ug/l	
56-23-5	Carbon tetrachloride	ND	20	3.5	ug/l	
108-90-7	Chlorobenzene	ND	20	3.8	ug/l	
75-00-3	Chloroethane	ND	20	4.4	ug/l	
67-66-3	Chloroform	ND	20	3.2	ug/l	
74-87-3	Chloromethane	ND	20	5.8	ug/l	
95-49-8	o-Chlorotoluene	ND	100	11	ug/l	
106-43-4	p-Chlorotoluene	ND	100	6.7	ug/l	
108-20-3	Di-Isopropyl ether	ND	100	2.4	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	200	26	ug/l	
124-48-1	Dibromochloromethane	ND	20	3.2	ug/l	
106-93-4	1,2-Dibromoethane	ND	40	3.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	3.6	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	5.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	4.4	ug/l	
75-71-8	Dichlorodifluoromethane	ND	100	18	ug/l	
75-34-3	1,1-Dichloroethane	ND	20	4.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	7.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	20	5.8	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	20	4.9	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	20	3.2	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	3.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@488532 13:57 20-Feb-2009

Report of Analysis

Client Sample ID:	SVE002		
Lab Sample ID:	JA10879-2	**Date Sampled:**	01/28/09
Matrix:	AQ - Ground Water	**Date Received:**	01/29/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	100	3.9	ug/l	
594-20-7	2,2-Dichloropropane	ND	100	3.8	ug/l	
563-58-6	1,1-Dichloropropene	ND	100	4.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	3.6	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	3.0	ug/l	
100-41-4	Ethylbenzene	71.0	20	5.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	100	4.6	ug/l	
98-82-8	Isopropylbenzene	4.4	40	3.7	ug/l	J
99-87-6	p-Isopropyltoluene	ND	100	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	282	20	3.3	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	100	27	ug/l	
74-95-3	Methylene bromide	ND	100	3.5	ug/l	
75-09-2	Methylene chloride	ND	40	3.2	ug/l	
91-20-3	Naphthalene	25.5	100	23	ug/l	J
103-65-1	n-Propylbenzene	ND	100	3.6	ug/l	
100-42-5	Styrene	34.8	100	3.4	ug/l	J
75-65-0	Tert Butyl Alcohol	ND	500	34	ug/l	
994-05-8	tert-Amyl Methyl Ether	94.6	100	15	ug/l	J
637-92-3	tert-Butyl Ethyl Ether	ND	100	5.1	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	2.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	2.7	ug/l	
127-18-4	Tetrachloroethene	ND	20	5.9	ug/l	
108-88-3	Toluene	3410	20	3.1	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	100	24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	100	25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	4.8	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	3.3	ug/l	
79-01-6	Trichloroethene	ND	20	3.7	ug/l	
75-69-4	Trichlorofluoromethane	ND	100	4.9	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	100	26	ug/l	
95-63-6	1,2,4-Trimethylbenzene	92.0	100	4.4	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	39.3	100	12	ug/l	J
75-01-4	Vinyl chloride	ND	20	4.1	ug/l	
	m,p-Xylene	684	20	7.7	ug/l	
95-47-6	o-Xylene	436	20	7.7	ug/l	
1330-20-7	Xylene (total)	1120	20	7.7	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		72-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE002		
Lab Sample ID:	JA10879-2	**Date Sampled:**	01/28/09
Matrix:	AQ - Ground Water	**Date Received:**	01/29/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

MD VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		59-137%
2037-26-5	Toluene-D8	109%		73-116%
460-00-4	4-Bromofluorobenzene	96%		69-126%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@488532 13:57 20-Feb-2009

Report of Analysis

Client Sample ID: SVE003
Lab Sample ID: JA10879-3
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

Date Sampled: 01/28/09
Date Received: 01/29/09
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X88210.D	1	02/02/09	YXC	n/a	n/a	VX3679
Run #2	X88216.D	2.5	02/02/09	YXC	n/a	n/a	VX3679

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.1	ug/l	
71-43-2	Benzene	4.0	1.0	0.26	ug/l	
108-86-1	Bromobenzene	ND	5.0	0.18	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.24	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.14	ug/l	
75-25-2	Bromoform	ND	4.0	0.18	ug/l	
74-83-9	Bromomethane	ND	2.0	0.32	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.3	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.61	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.27	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.15	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.18	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.19	ug/l	
75-00-3	Chloroethane	ND	1.0	0.22	ug/l	
67-66-3	Chloroform	ND	1.0	0.16	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.55	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.34	ug/l	
108-20-3	Di-Isopropyl ether	0.44	5.0	0.12	ug/l	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.16	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.18	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.26	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.22	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.88	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.24	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.29	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.16	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.18	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@488532 13:57 20-Feb-2009

Report of Analysis

Client Sample ID:	SVE003		
Lab Sample ID:	JA10879-3	**Date Sampled:**	01/28/09
Matrix:	AQ - Ground Water	**Date Received:**	01/29/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

MD VOA Full List + Oxygenates

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	5.0	0.20	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	0.19	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	0.23	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.18	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.15	ug/l	
100-41-4	Ethylbenzene	2.4	1.0	0.27	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.23	ug/l	
98-82-8	Isopropylbenzene	0.20	2.0	0.19	ug/l	J
99-87-6	p-Isopropyltoluene	ND	5.0	0.25	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.3	ug/l	
74-95-3	Methylene bromide	ND	5.0	0.18	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.16	ug/l	
91-20-3	Naphthalene	ND	5.0	1.2	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.18	ug/l	
100-42-5	Styrene	ND	5.0	0.17	ug/l	
75-65-0	Tert Butyl Alcohol	ND	25	1.7	ug/l	
994-05-8	tert-Amyl Methyl Ether	11.4	5.0	0.77	ug/l	
637-92-3	tert-Butyl Ethyl Ether	1.7	5.0	0.26	ug/l	J
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.13	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.29	ug/l	
108-88-3	Toluene	27.5	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	1.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.3	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.18	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.25	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.3	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.0	5.0	0.22	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	0.66	5.0	0.58	ug/l	J
75-01-4	Vinyl chloride	ND	1.0	0.21	ug/l	
	m,p-Xylene	6.2	1.0	0.39	ug/l	
95-47-6	o-Xylene	4.7	1.0	0.39	ug/l	
1330-20-7	Xylene (total)	10.8	1.0	0.39	ug/l	
1634-04-4	Methyl Tert Butyl Ether	182 [a]	2.5	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	99%	72-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SVE003		
Lab Sample ID:	JA10879-3	**Date Sampled:**	01/28/09
Matrix:	AQ - Ground Water	**Date Received:**	01/29/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

MD VOA Full List + Oxygenates

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	92%	92%	59-137%
2037-26-5	Toluene-D8	111%	108%	73-116%
460-00-4	4-Bromofluorobenzene	96%	94%	69-126%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories
2235 Route 130 Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

Accutest Job #: JA 10879

Client Information | **Facility Information**

EXXONMOBIL CORPORATION - Regional Laboratory Program (MD, DE, DC)

Consultants Company Name: Kleinfelder	Project Name: Exxon Phoenix
Address: 1340 Charwood Rd	Street: 19258 Jarrettsville Pike
City: Hanover State: MD Zip: 21076	City: Phoenix State: MD
Project Contact: Mark Schaaf	ExxonMobil Contact: Frank Medlin
Sampler's Name: Fran Kelly	ExxonMobil Contact's Phone #:
Phone #: 410-850-0404 Ext. Fax #: 0049	Location ID#: 28077 WBS#:
AFE #:	PO#: Line#

Analytical Information

Naphthalene ☐ | MTBE ☐ | 8260 BTEX ☐ | MTBE ☐ | 524 BTEX ☐ | 624 BTEX ☐ | TPH-GRO 8015B | TPH-DRO 8015B | Lead 6010 ☐ 200.9 ☐ Total ☐ Dissolved ☐ | Air - VTO3BTEX TPHF ☐ | TO14: BTEX ☐ FULL ☐ | ExxonMobil Grass Roots ☐ | Soil Disposal Criteria ☐ Oil ☐ | 8260 Full VOC's

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Preservation: HCL	NaOH	HNO3	H2SO4	None	NaHSO4	MEOH	Encore	8260 Full VOC's
-1	SVE001	1/28/09	1300	FK	GW	3	X								XX
-2	SVE002	1/28/09	1330	FK	GW	3	X								XX
-3	SVE003	1/28/09	1400	FK	GW	3	X								X

Turnaround Time (Business days)

- [X] Std. 10 Business Days — Approved By:/Date
- [ ] 8 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day EMERGENCY

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- [X] Commercial "A"
- [ ] Commercial "B"
- [ ] Full Deliverables
- [ ] Other
- [ ] FULL CLP
- [ ] State Forms
- [ ] Disk Deliverable Format _____

Commercial "A" = Results only

Comments / Remarks

499X

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler	Date/Time	Received by	Relinquished by	Date Time	Received by
1	F. Kelly	1/29/09 1444	1	2	1-29-09 1805	2
3			3	4		4
5			5	Seal #	Preserved where applicable ☐	On Ice ☐ Temp 20°

JA10879: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA10879 **Client:** **Immediate Client Services Action Required:** No

Date / Time Received: 1/29/2009 **Delivery Method:** **Client Service Action Required at Login:** No

Project: **No. Coolers:** 1 **Airbill #'s:**

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservatio	Y	or	N
1. Trip Blank present / cooler:	☑		☐
2. Trip Blank listed on COC:	☑		☐
3. Samples preserved properly:	☑		☐
4. VOCs headspace free:	☐		☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N
1. Analysis requested is clear:	☑		☐
2. Bottles received for unspecified tests	☐		☑
3. Sufficient volume recvd for analysis:	☑		☐
4. Compositing instructions clear:	☐		☐
5. Filtering instructions clear:	☐		☐

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA10879: Chain of Custody
Page 2 of 2

Appendix D – Accutest Laboratory Technical Reports – SVE Pilot Test Airbag Data

New Jersey ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

03/04/09

Technical Report for

ExxonMobil Corporation

GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

PO#4510774144 WBS#08

Accutest Job Number: JA12276

Sampling Date: 02/16/09

Report to:

Kleinfelder

mnewman@kleinfelder.com

ATTN: Matthew Newman

Total number of pages in report: **10**

ACCUTEST LABORATORIES 50 YEARS 1956-2006

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP Ops, Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

Sections: 1 2 3

Table of Contents

Sample Summary

ExxonMobil Corporation

Job No: JA12276

GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD
Project No: PO#4510774144 WBS#08

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JA12276-1	02/16/09	12:26	MN	02/17/09	AIR	Air	SVE001
JA12276-2	02/16/09	14:48	MN	02/17/09	AIR	Air	SVE002
JA12276-3	02/16/09	13:41	MN	02/17/09	AIR	Air	SVE003

Sample Results

Report of Analysis

Accutest LabLink@490136 13:40 04-Mar-2009

Report of Analysis

Client Sample ID:	SVE001		
Lab Sample ID:	JA12276-1	**Date Sampled:**	02/16/09
Matrix:	AIR - Air	**Date Received:**	02/17/09
Method:	EPA TO-3	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR75595.D	1	02/18/09	TCH	n/a	n/a	GQR3439
Run #2							

	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
71-43-2	78.11	Benzene	0.13	0.050	0.0099	ppmv		0.42	0.16	mg/m3
108-88-3	92.14	Toluene	0.41	0.050	0.0093	ppmv		1.5	0.19	mg/m3
100-41-4	106.2	Ethylbenzene	0.10	0.050	0.011	ppmv		0.43	0.22	mg/m3
1330-20-7	106.2	Xylenes (total)	0.71	0.10	0.0059	ppmv		3.1	0.43	mg/m3
	86	TPH as Equiv Hexane	38.7	5.0	0.095	ppmv		136	18	mg/m3
	16	TPH (C1-C4) as Methane	30.0	5.0	0.25	ppmv		19.6	3.3	mg/m3
	86	TPH (C5-C10) as Hexane	32.6	5.0	0.098	ppmv		115	18	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		71-129%
460-00-4	4-Bromofluorobenzene	97%		71-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@490136 13:40 04-Mar-2009

Report of Analysis

Client Sample ID:	SVE002		
Lab Sample ID:	JA12276-2	**Date Sampled:**	02/16/09
Matrix:	AIR - Air	**Date Received:**	02/17/09
Method:	EPA TO-3	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR75597.D	1	02/18/09	TCH	n/a	n/a	GQR3439
Run #2							

	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
71-43-2	78.11	Benzene	ND	0.050	0.0099	ppmv		ND	0.16	mg/m3
108-88-3	92.14	Toluene	0.12	0.050	0.0093	ppmv		0.45	0.19	mg/m3
100-41-4	106.2	Ethylbenzene	ND	0.050	0.011	ppmv		ND	0.22	mg/m3
1330-20-7	106.2	Xylenes (total)	0.10	0.10	0.0059	ppmv		0.43	0.43	mg/m3
	86	TPH as Equiv Hexane	5.1	5.0	0.095	ppmv		18	18	mg/m3
	16	TPH (C1-C4) as Methane	15.8	5.0	0.25	ppmv		10.3	3.3	mg/m3
	86	TPH (C5-C10) as Hexane	ND	5.0	0.098	ppmv		ND	18	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		71-129%
460-00-4	4-Bromofluorobenzene	99%		71-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@490136 13:40 04-Mar-2009

Report of Analysis

Client Sample ID:	SVE003		
Lab Sample ID:	JA12276-3	**Date Sampled:**	02/16/09
Matrix:	AIR - Air	**Date Received:**	02/17/09
Method:	EPA TO-3	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR75598.D	1	02/18/09	TCH	n/a	n/a	GQR3439
Run #2							

	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
71-43-2	78.11	Benzene	ND	0.050	0.0099	ppmv		ND	0.16	mg/m3
108-88-3	92.14	Toluene	ND	0.050	0.0093	ppmv		ND	0.19	mg/m3
100-41-4	106.2	Ethylbenzene	ND	0.050	0.011	ppmv		ND	0.22	mg/m3
1330-20-7	106.2	Xylenes (total)	ND	0.10	0.0059	ppmv		ND	0.43	mg/m3
	86	TPH as Equiv Hexane	ND	5.0	0.095	ppmv		ND	18	mg/m3
	16	TPH (C1-C4) as Methane	111	5.0	0.25	ppmv		72.6	3.3	mg/m3
	86	TPH (C5-C10) as Hexane	ND	5.0	0.098	ppmv		ND	18	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		71-129%
460-00-4	4-Bromofluorobenzene	99%		71-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3479

Accutest Job #: JA12276

Client Information

ExxonMobil - Regional Laboratory Program (MD)

Consultants Name: KLEINFELDER
Address: 1340 Charwood Road Suite 103
City: Hanover, MD State: Zip: 21226
Project Contact: John Cebulka
Phone #: 443-552-9274
Fax #: 410-850-0049
LFE#

Facility Information

Project Name: Exxon-Phoenix
Street: 14258 Jarrettsville Pike
City: Phoenix State: MD
ExxonMobil Manager: Frank Medlin
ExxonMobil Phone #: 843-238-0865
Location ID#: #28077 WBS#:
PO#:

Analytical Information

Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	# of bags	Preservation: HCL	NaOH	HNO3	H2So4	None	BTEX ; TPH TO-3 M
SVE001 - 1	2/16/2009	1226	MN	Vapor	1					X	XXX
SVE002 - 2	2/16/2009	1448	MN	Vapor	1					X	XXX
SVE003 - 3	2/16/2009	1341	MN	Vapor	1					X	XXX

Turnaround Information

- [X] Std. 14 Day Turnaround
- [ ] 7 Day EMERGENCY
- [ ] 4 Day EMERGENCY
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Approved By:

Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

- [X] Commercial "A"
- [ ] Commercial "B"
- [ ] Full Deliverables
- [ ] Other
- [ ] FULL CLP
- [ ] State Forms
- [ ] Disk Deliverable Format

Commercial "A" = Results Only

Accutest Log-in Information

Comments: Tedlar

Sample Custody must be documented below each time samples change possesion, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	2/17/09 1500	1			
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3			
Relinquished by Sampler:	Date Time:	Received By:	Seal #	Preserve where applicable	On Ice / Temp.
5		5			

IR BAG

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA12276 **Client:** **Immediate Client Services Action Required:** No

Date / Time Received: 2/17/2009 **Delivery Method:** **Client Service Action Required at Login:** No

Project: **No. Coolers:** 0 **Airbill #'s:**

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservatio	Y	or	N
1. Trip Blank present / cooler:	☐		☐
2. Trip Blank listed on COC:	☐		☐
3. Samples preserved properly:	☑		☐
4. VOCs headspace free:	☐		☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N
1. Analysis requested is clear:	☑		☐
2. Bottles received for unspecified tests	☐		☑
3. Sufficient volume recvd for analysis:	☑		☐
4. Compositing instructions clear:	☐		☐
5. Filtering instructions clear:	☐		☐

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA12276: Chain of Custody
Page 2 of 2

New Jersey ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

02/20/09

Technical Report for

ExxonMobil Corporation

GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD

PO#4510774144 WBS#08

Accutest Job Number: JA11472

Sampling Date: 02/05/09

Report to:

Kleinfelder

mnewman@kleinfelder.com

ATTN: Matthew Newman

Total number of pages in report: **10**

ACCUTEST LABORATORIES 50 YEARS 1956-2006

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP Ops, Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

Sections: 1 2 3

Table of Contents

Sample Summary

ExxonMobil Corporation

Job No: JA11472

GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD
Project No: PO#4510774144 WBS#08

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JA11472-1	02/05/09	11:10	MN	02/05/09	AIR	Air	SVE001
JA11472-2	02/05/09	11:05	MN	02/05/09	AIR	Air	SVE002
JA11472-3	02/05/09	11:15	MN	02/05/09	AIR	Air	SVE003

Sample Results

Report of Analysis

Accutest LabLink@488515 13:11 20-Feb-2009

Report of Analysis

Client Sample ID:	SVE001		
Lab Sample ID:	JA11472-1	**Date Sampled:**	02/05/09
Matrix:	AIR - Air	**Date Received:**	02/05/09
Method:	EPA TO-3	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR75359.D	1	02/06/09	TCH	n/a	n/a	GQR3429
Run #2							

	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
71-43-2	78.11	Benzene	0.070	0.050	0.0099	ppmv		0.22	0.16	mg/m3
108-88-3	92.14	Toluene	0.32	0.050	0.0093	ppmv		1.2	0.19	mg/m3
100-41-4	106.2	Ethylbenzene	0.076	0.050	0.011	ppmv		0.33	0.22	mg/m3
1330-20-7	106.2	Xylenes (total)	0.48	0.10	0.0059	ppmv		2.1	0.43	mg/m3
	86	TPH as Equiv Hexane	36.3	5.0	0.095	ppmv		128	18	mg/m3
	16	TPH (C1-C4) as Methane	37.3	5.0	0.25	ppmv		24.4	3.3	mg/m3
	86	TPH (C5-C10) as Hexane	32.9	5.0	0.098	ppmv		116	18	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		71-129%
460-00-4	4-Bromofluorobenzene	99%		71-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@488515 13:11 20-Feb-2009

Report of Analysis

Client Sample ID:	SVE002		
Lab Sample ID:	JA11472-2	**Date Sampled:**	02/05/09
Matrix:	AIR - Air	**Date Received:**	02/05/09
Method:	EPA TO-3	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR75360.D	1	02/06/09	TCH	n/a	n/a	GQR3429
Run #2							

	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
71-43-2	78.11	Benzene	0.099	0.050	0.0099	ppmv		0.32	0.16	mg/m3
108-88-3	92.14	Toluene	0.53	0.050	0.0093	ppmv		2.0	0.19	mg/m3
100-41-4	106.2	Ethylbenzene	0.15	0.050	0.011	ppmv		0.65	0.22	mg/m3
1330-20-7	106.2	Xylenes (total)	0.70	0.10	0.0059	ppmv		3.0	0.43	mg/m3
	86	TPH as Equiv Hexane	28.7	5.0	0.095	ppmv		101	18	mg/m3
	16	TPH (C1-C4) as Methane	17.1	5.0	0.25	ppmv		11.2	3.3	mg/m3
	86	TPH (C5-C10) as Hexane	25.7	5.0	0.098	ppmv		90.4	18	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		71-129%
460-00-4	4-Bromofluorobenzene	97%		71-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@488515 13:11 20-Feb-2009

Report of Analysis

Client Sample ID:	SVE003		
Lab Sample ID:	JA11472-3	**Date Sampled:**	02/05/09
Matrix:	AIR - Air	**Date Received:**	02/05/09
Method:	EPA TO-3	**Percent Solids:**	n/a
Project:	GSCMD: S/S 2-8077, 14258 Jarrettsville Pike, Phoenix, MD		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QR75361.D	1	02/06/09	TCH	n/a	n/a	GQR3429
Run #2							

	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	Units
71-43-2	78.11	Benzene	ND	0.050	0.0099	ppmv		ND	0.16	mg/m3
108-88-3	92.14	Toluene	0.14	0.050	0.0093	ppmv		0.53	0.19	mg/m3
100-41-4	106.2	Ethylbenzene	ND	0.050	0.011	ppmv		ND	0.22	mg/m3
1330-20-7	106.2	Xylenes (total)	0.16	0.10	0.0059	ppmv		0.69	0.43	mg/m3
	86	TPH as Equiv Hexane	12.1	5.0	0.095	ppmv		42.6	18	mg/m3
	16	TPH (C1-C4) as Methane	7.6	5.0	0.25	ppmv		5.0	3.3	mg/m3
	86	TPH (C5-C10) as Hexane	11.9	5.0	0.098	ppmv		41.9	18	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		71-129%
460-00-4	4-Bromofluorobenzene	98%		71-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST.

AIR

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3479

Accutest Job # JA11472

Client Information | **Facility Information** | **Analytical Information**

ExxonMobil - Regional Laboratory Program (MD)

Consultants Name: KLEINFELDER	Project Name: Exxon-Phoenix
Address: 1340 Charwood Road Suite 103	Street: 14258 Jarrettsville Pike
City: Hanover, MD State: 21226 Zip	City: Phoenix State: MD
Project Contact: John Cebulka	ExxonMobil Manager: Frank Medlin
Phone #: 443-552-9274	ExxonMobil Phone #: 843-238-0865
Fax #: 410-850-0049	Location ID#: #28077 WBS#:
PE#	PO#

Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bags	Preservation: HCL	NaOH	HNO3	H2SO4	None	BTEX : TPH TO-3M
SVE001 - 1	2/5/2009	1110	MN	Vapor	1					X	XXX
SVE002 - 2	2/5/2009	1105	MN	Vapor	1					X	XXX
SVE003 - 3	2/5/2009	1115	MN	Vapor	1					X	XXX

Turnaround Information

Std. 14 Day Turnaround — Approved By:
7 Day EMERGENCY
4 Day EMERGENCY
3 Day EMERGENCY
2 Day EMERGENCY
1 Day EMERGENCY
Emergency T/A is for FAX or Lablink Data

Data Deliverable Information

[X] Commercial "A"
[ ] Commercial "B"
[ ] Full Deliverables
[ ] Other
[ ] FULL CLP
[ ] State Forms
[ ] Disk Deliverable Format

Commercial "A" = Results Only

Accutest Log-in Information

Comments: Tedlar

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	2/6/09 1430	2	2	2-5-09 1815	3
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3			
Relinquished by Sampler:	Date Time:	Received By:	Seal #	Preserve where applicable	On Ice / Temp.
5		5		☐	☑

JA11472: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA11472 **Client:** **Immediate Client Services Action Required:** No

Date / Time Received: 2/5/2009 **Delivery Method:** **Client Service Action Required at Login:** No

Project: **No. Coolers:** 0 **Airbill #'s:**

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservatio	Y	or	N
1. Trip Blank present / cooler:	☐		☐
2. Trip Blank listed on COC:	☐		☐
3. Samples preserved properly:	☑		☐
4. VOCs headspace free:	☐		☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N
1. Analysis requested is clear:	☑		☐
2. Bottles received for unspecified tests	☐		☑
3. Sufficient volume recvd for analysis:	☑		☐
4. Compositing instructions clear:	☐		☐
5. Filtering instructions clear:	☐		☐

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA11472: Chain of Custody
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