



VIA ELECTRONIC MAIL

June 15, 2011

Mr. Kurt Kochan
Virginia Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, Virginia, 22193

**RE: Second Quarter 2011 Post Site Characterization Monitoring Report
Fairfax Facility # 26140
9901 Georgetown Pike
Great Falls, Fairfax County, Virginia
PC# 2010-3028**

Dear Mr. Kochan:

Kleinfelder, on behalf of Fairfax Petroleum Realty, LLC (Fairfax), is submitting this Post Site Characterization Monitoring Report (PSCR) for the above-referenced facility. This report includes a summary of groundwater sampling of the monitoring well network.

Please feel free to contact us at (410) 850-0404 should you have questions.

Sincerely,
Kleinfelder East, Inc.

A handwritten signature in black ink that reads "Charlie Low".

Charlie Low
Environmental Scientist

A handwritten signature in blue ink that reads "Brian Barone".

Brian Barone
Project Manager

Attachment

cc: Mr. Tom Wright – Fairfax Petroleum Realty, LLC



**SECOND QUARTER 2011
POST SITE CHARACTERIZATION MONITORING REPORT
Fairfax Petroleum Facility # 26140
9901 Georgetown Pike
Great Falls, Fairfax County, Virginia**

REGULATORY INFORMATION

Regulatory Agency:	Virginia Department of Environmental Quality (VADEQ)
Agency Contact:	Mr. Kurt Kochan
Pollution Complaint No.:	2010-3028
Current Case Status:	Post Site Characterization Monitoring
Reporting Period:	April 1, 2011 through June 30, 2011
Last Report:	First Quarter 2011 Post Site Characterization Monitoring Report, April 2011

GENERAL SITE INFORMATION

Fairfax Petroleum Realty Contact:	Mr. Tom Wright
Consultant Contact:	Mr. Mark C. Steele
Facility Status:	Active branded Exxon retail service station with auto repair facilities.
Area Property Use:	See Area Map (Figure 1)
Monitoring Wells:	MW-1 through MW-3, MW-5, MW-6S, MW-6D, MW-7 through MW-12, and PW-1
Site Geology:	Silts and sands underlain by structured saprolite and schist
Surficial Groundwater Flow Direction:	Southeast

ACTIVITIES COMPLETED THIS PERIOD

May 24, 2011 – Groundwater Gauging/Sampling

Wells Gauged and Sampled:	MW-1 through MW-3, MW-5, MW-6S, MW-6D (3 intervals), MW-7 through MW-11, MW-12 (2 intervals), and PW-1 (3 intervals)
Liquid Phase Hydrocarbon:	None detected
Minimum/Maximum Depth to Water:	21.66 (MW-6S) / 35.87 (PW-1) feet
Hydraulic Gradient:	0.018 ft/ft between MW-5 and MW-11
Groundwater Flow Direction:	Southeast

On May 24, 2011, Kleinfelder personnel completed groundwater sampling activities at the site. Groundwater samples were collected in accordance with the approved Activity Authorization Form (AAF). As requested by the VADEQ in the December 10, 2009 directive letter, monitoring wells MW-6D and PW-1 (the former station potable well) were each sampled at three different intervals (65 feet, 85 feet and 105 feet below grade) and the newly installed MW-12 was sampled at two different intervals (110 and 153 feet below grade) using low-flow technology. The December 10, 2009 VADEQ letter is attached as **Appendix A**. The groundwater sampling intervals at MW-12 were selected based on the approximate depths of apparent fractures in bedrock as identified during drilling activities. During low-flow groundwater sampling activities, water quality data was obtained from the above-mentioned wells. Upon observing stabilized parameters, samples were collected and submitted for laboratory analysis.

Groundwater samples were submitted under chain of custody protocol to Lancaster Laboratories of Lancaster, Pennsylvania for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) using Environmental Protection Agency (EPA) Method 8260B and total petroleum hydrocarbon – gasoline range organics (TPH-GRO) using EPA Method 8015B. Groundwater monitoring and analytical data is summarized in **Table 1** and depicted on **Figure 2**. The Lancaster Laboratory Analytical Report is attached as **Appendix B**.

LIMITATIONS

This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

FIGURES AND TABLE:

- Figure 1: Local Area Map
Figure 2: Hydrocarbon Distribution / Groundwater Contour Map
(May 24, 2011)
- Table 1: Groundwater Monitoring & Analytical Data

APPENDICES:

- Appendix A: VADEQ Directive Letter (December 10, 2009)
Appendix B: Groundwater Laboratory Analysis Report (May 24, 2011)

Prepared By:
Kleinfelder East, Inc.



Charlie Low
Environmental Scientist



Brian Barone
Senior Project Manager

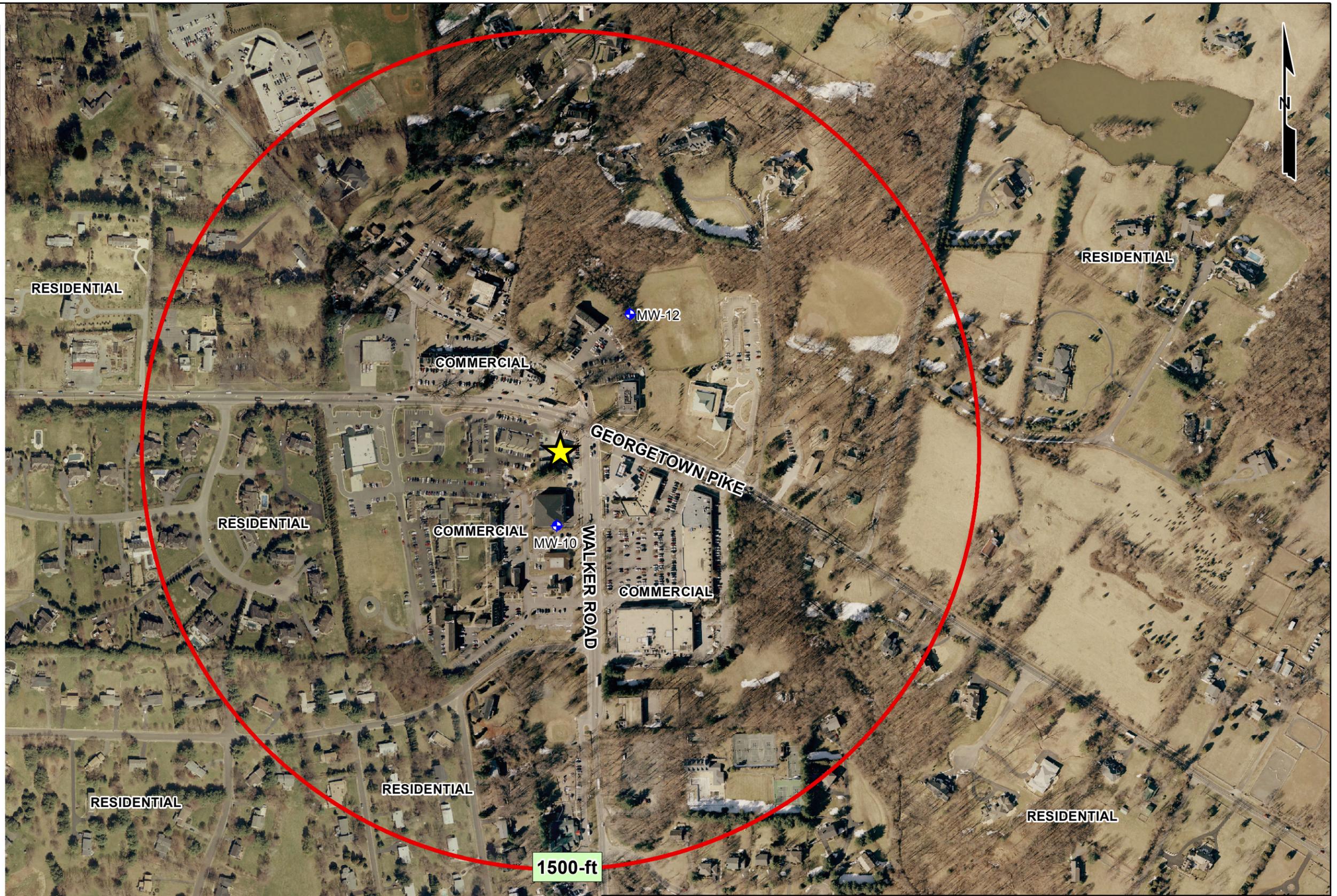
FIGURES

Legend

 Site Location

 Offsite Well

 1500-ft Site Radius



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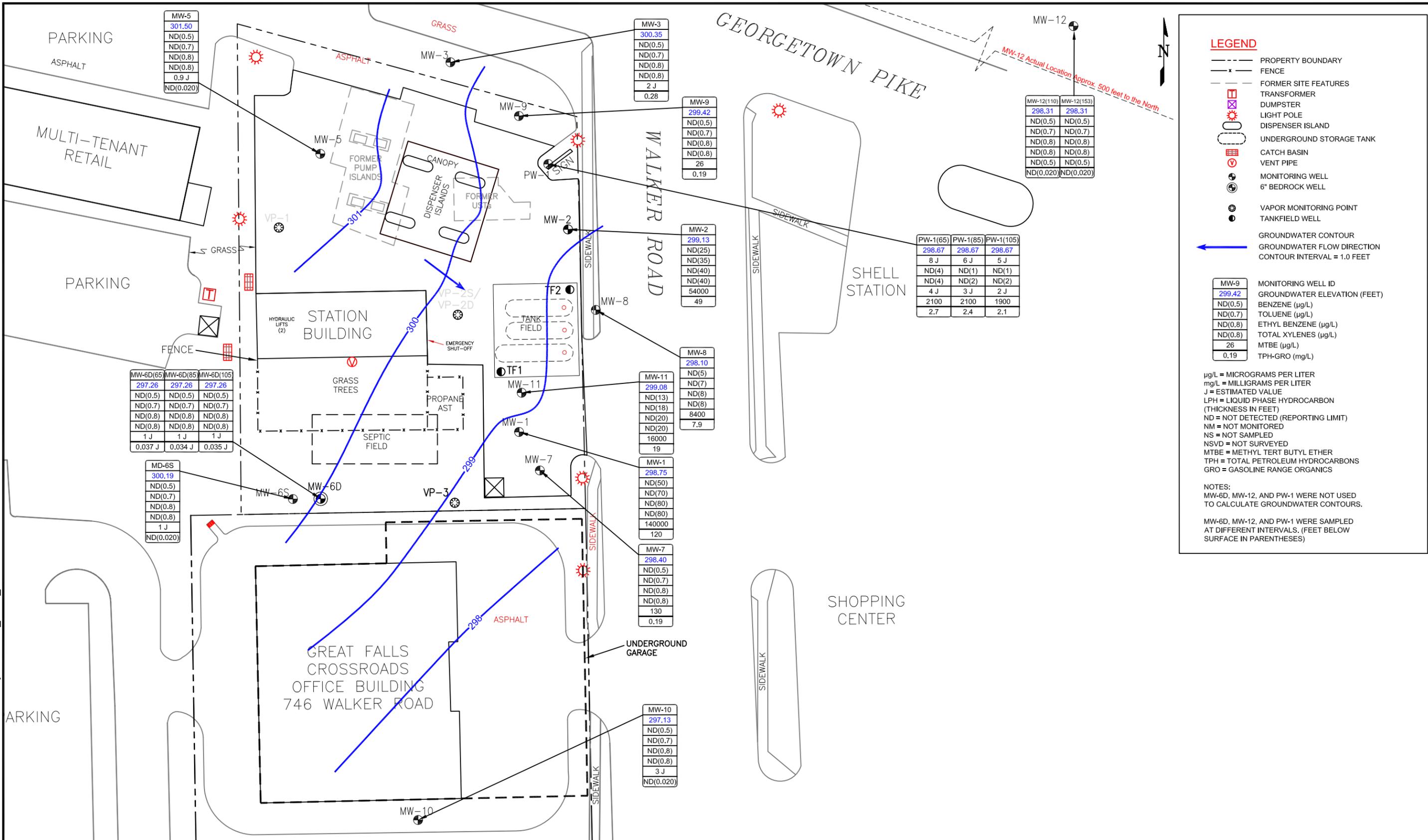
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LOCAL AREA MAP with OFFSITE WELL LOCATIONS
FAIRFAX PETROLEUM REALTY FACILITY # 26140 9901 GEORGETOWN PIKE GREAT FALLS, VIRGINIA

FIGURE
1



LEGEND

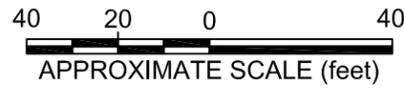
- PROPERTY BOUNDARY
- FENCE
- FORMER SITE FEATURES
- TRANSFORMER
- DUMPSTER
- LIGHT POLE
- DISPENSER ISLAND
- UNDERGROUND STORAGE TANK
- CATCH BASIN
- VENT PIPE
- MONITORING WELL
- 6" BEDROCK WELL
- VAPOR MONITORING POINT
- TANKFIELD WELL
- GROUNDWATER CONTOUR
- GROUNDWATER FLOW DIRECTION
- CONTOUR INTERVAL = 1.0 FEET

MW-9	MW-9
299.42	299.42
ND(0.5)	ND(0.5)
ND(0.7)	ND(0.7)
ND(0.8)	ND(0.8)
ND(0.8)	ND(0.8)
26	26
0.19	0.19

μg/L = MICROGRAMS PER LITER
 mg/L = MILLIGRAMS PER LITER
 J = ESTIMATED VALUE
 LPH = LIQUID PHASE HYDROCARBON (THICKNESS IN FEET)
 ND = NOT DETECTED (REPORTING LIMIT)
 NM = NOT MONITORED
 NS = NOT SAMPLED
 NSVD = NOT SURVEYED
 MTBE = METHYL TERT BUTYL ETHER
 TPH = TOTAL PETROLEUM HYDROCARBONS
 GRO = GASOLINE RANGE ORGANICS

NOTES:
 MW-6D, MW-12, AND PW-1 WERE NOT USED TO CALCULATE GROUNDWATER CONTOURS.
 MW-6D, MW-12, AND PW-1 WERE SAMPLED AT DIFFERENT INTERVALS. (FEET BELOW SURFACE IN PARENTHESES)

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**HYDROCARBON DISTRIBUTION/
GROUNDWATER CONTOUR MAP**
MAY 24, 2011

FAIRFAX PETROLEUM REALTY FACILITY #26140
9901 GEORGETOWN PIKE
GREAT FALLS, VIRGINIA

FIGURE
2

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TABLE

TABLE 1

Groundwater Monitoring & Analytical Data

Fairfax Facility #26140

9901 Georgetown Pike

Great Falls, VA

July 24, 2009 through May 24, 2011

Sample ID	Date	Gauging Data					Analytical Data							
		Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	Methyl Tertiary Butyl Ether (µg/L)	TPH-GRO (mg/L)	
MW-1	7/24/2009	100.00	30.45	ND	ND	69.55	13.3	<1.0	0.53	ND	13.8	193,000	105	
	8/18/2009	328.99	NM	NM	NM	NM	ND (200)	ND (200)	ND (200)	ND (200)	BRL	138,000	65.7	
	10/15/2009	328.99	31.88	ND	ND	297.11	ND (250)	ND (250)	ND (250)	ND (250)	BRL	139,000	125	
	6/22/2010	328.99	28.65	ND	ND	300.34	ND (5)	ND (7)	ND (8)	ND (8)	BRL	13,000	14	
	9/30/2010	328.99	31.11	ND	ND	297.88	ND (50)	ND (70)	ND (80)	110 J	110	240,000	170	
	12/16/2010	328.99	30.93	ND	ND	298.06	ND (100)	ND (140)	ND (160)	ND (160)	BRL	220,000	150	
	2/17/2011	328.99	31.46	ND	ND	297.53	ND (250)	ND (350)	ND (400)	ND (400)	BRL	190,000	170	
05/24/2011	328.99	30.24	ND	ND	298.75	ND(50)	ND(70)	ND(80)	ND(80)	BRL	140,000	120		
MW-2	7/24/2009	102.90	33.19	ND	ND	69.71	70.2	8	1	ND	79.2	107,000	59	
	8/18/2009	332.05	NM	NM	NM	NM	ND (100)	ND (100)	ND (100)	ND (100)	BRL	87,100	53.9	
	10/15/2009	332.05	34.41	ND	ND	297.64	ND (250)	ND (250)	ND (250)	ND (250)	BRL	122,000	117	
	7/1/2010	332.05	31.63	ND	ND	300.42	ND (100)	91.3 J	ND (100)	ND (100)	91.3	52,400	42.7	
	9/30/2010	332.05	32.96	ND	ND	299.09	ND (25)	ND (35)	ND (40)	ND (40)	BRL	37,000	27	
	12/16/2010	332.05	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	
	2/17/2011	332.05	34.15	ND	ND	297.90	ND (100)	ND (140)	ND (160)	ND (160)	BRL	140,000	120	
05/24/2011	332.05	32.92	ND	ND	299.13	ND(25)	ND(35)	ND(40)	ND(40)	BRL	54,000	49		
MW-3	7/24/2009	104.99	33.67	ND	ND	71.32	<0.50	<1.0	<1.0	ND	BRL	5.7	NA	
	10/15/2009	333.98	34.51	ND	ND	299.47	NS	NS	NS	NS	NS	NS	NS	
	7/1/2010	333.98	32.39	ND	ND	301.59	ND (2)	ND (2)	ND (2)	ND (2)	BRL	1.9 J	0.499	
	9/30/2010	333.98	DRY	DRY	DRY	NM	NS	NS	NS	NS	NS	NS	NS	
	12/16/2010	333.98	DRY	DRY	DRY	NM	NS	NS	NS	NS	NS	NS	NS	
	2/17/2011	333.98	DRY	DRY	DRY	NM	NS	NS	NS	NS	NS	NS	NS	
05/24/2011	333.98	33.63	ND	ND	300.35	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	BRL	2 J	0.28		
MW-5	7/24/2009	103.43	30.72	ND	ND	72.71	<0.50	<1.0	<1.0	ND	BRL	1.3	NA	
	8/18/2009	332.35	NM	NM	NM	NM	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	BRL	0.48 J	ND (0.20)	
	10/15/2009	332.35	32.51	ND	ND	299.84	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	BRL	11.4	ND (0.20)	
	6/22/2010	332.35	29.40	ND	ND	302.95	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	ND (0.02)	
	9/30/2010	332.35	32.30	ND	ND	300.05	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	ND (0.02)	
	12/16/2010	332.35	32.12	ND	ND	300.23	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	12	ND (0.02)	
	2/17/2011	332.35	32.31	ND	ND	300.04	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	2 J	ND (0.02)	
	05/24/2011	332.35	30.84	ND	ND	301.51	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	BRL	0.9 J	ND(0.020)	

TABLE 1

Groundwater Monitoring & Analytical Data

Fairfax Facility #26140

9901 Georgetown Pike

Great Falls, VA

July 24, 2009 through May 24, 2011

Sample ID	Date	Gauging Data					Analytical Data						
		Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	Methyl Tertiary Butyl Ether (µg/L)	TPH-GRO (mg/L)
MW-6D (65)	6/22/2010	323.09	26.69	ND	ND	296.40	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	ND (0.02)
	9/30/2010	323.09	26.25	ND	ND	296.84	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	ND (0.02)
	12/16/2010	323.09	25.92	ND	ND	297.17	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	0.024 J
	2/17/2011	323.09	26.14	ND	ND	296.95	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	0.035 J
	05/24/2011	323.09	25.83	ND	ND	297.26	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	BRL	1 J	0.037 J
MW-6D (75)	9/24/2009	323.09	NM	NM	NM	NM	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	BRL	3	NA
	10/15/2009	323.09	26.69	ND	ND	296.40	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	BRL	3	ND (0.20)
MW-6D (85)	6/22/2010	323.09	26.69	ND	ND	296.40	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	0.023 J
	9/30/2010	323.09	26.25	ND	ND	296.84	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	ND (0.02)
	12/16/2010	323.09	25.92	ND	ND	297.17	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	6	0.023 J
	2/17/2011	323.09	26.14	ND	ND	296.95	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	0.033 J
	05/24/2011	323.09	25.83	ND	ND	297.26	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	BRL	1 J	0.034 J
MW-6D (105)	6/22/2010	323.09	26.69	ND	ND	296.40	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	2 J	0.023 J
	9/30/2010	323.09	26.25	ND	ND	296.84	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	0.021 J
	12/16/2010	323.09	25.92	ND	ND	297.17	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	0.021 J
	2/17/2011	323.09	26.14	ND	ND	296.95	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	0.030 J
	05/24/2011	323.09	25.83	ND	ND	297.26	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	BRL	1 J	0.035 J
MW-6D (110)	9/24/2009	323.09	NM	NM	NM	NM	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	BRL	3	NA
	10/15/2009	323.09	26.69	ND	ND	296.40	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	BRL	3	ND (0.20)
MW-6S	9/24/2009	321.85	NM	NM	NM	NM	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	BRL	2.8	NA
	10/15/2009	321.85	23.35	ND	ND	298.50	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	BRL	3.1	ND (0.20)
	6/22/2010	321.85	20.22	ND	ND	301.63	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	2 J	ND (0.02)
	9/30/2010	321.85	23.00	ND	ND	298.85	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	0.9 J	ND (0.02)
	12/16/2010	321.85	22.82	ND	ND	299.03	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	ND (0.02)
	2/17/2011	321.85	23.02	ND	ND	298.83	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	ND (0.02)
	05/24/2011	321.85	21.66	ND	ND	300.19	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	BRL	1 J	ND(0.020)
MW-7	10/15/2009	327.96	31.21	ND	ND	296.75	3.3 J	ND (10)	ND (10)	ND (10)	3.3	4,720	10.5
	6/22/2010	327.96	28.00	ND	ND	299.96	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	87	0.23
	9/30/2010	327.96	30.24	ND	ND	297.72	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	ND (0.5)	ND (0.02)
	12/16/2010	327.96	30.15	ND	ND	297.81	2 J	ND (1)	ND (2)	ND (2)	2	2,100	1.8
	2/17/2011	327.96	30.75	ND	ND	297.21	ND (10)	ND (14)	ND (16)	ND (16)	BRL	9,700	9
	05/24/2011	327.96	29.56	ND	ND	298.40	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	BRL	130	0.19

TABLE 1

Groundwater Monitoring & Analytical Data

Fairfax Facility #26140

9901 Georgetown Pike

Great Falls, VA

July 24, 2009 through May 24, 2011

Sample ID	Date	Gauging Data					Analytical Data							
		Top of Casing Elevation	Depth to Water (feet)	Depth to Hydrocarbon (feet)	Hydrocarbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	Methyl Tertiary Butyl Ether (µg/L)	TPH-GRO (mg/L)	
MW-8	10/15/2009	330.54	34.01	ND	ND	296.53	ND (500)	ND (500)	ND (500)	ND (500)	BRL	226,000	207	
	6/22/2010	330.54	30.91	ND	ND	299.63	ND (5)	ND (7)	ND (8)	ND (8)	BRL	15,000	14	
	9/30/2010	330.54	32.97	ND	ND	297.57	11 J	ND (14)	ND (16)	ND (16)	11	44,000	31	
	12/16/2010	330.54	32.85	ND	ND	297.69	ND (25)	ND (35)	ND (40)	ND (40)	BRL	49,000	32	
	2/17/2011	330.54	33.62	ND	ND	296.92	ND (25)	ND (35)	ND (40)	ND (40)	BRL	41,000	34	
	05/24/2011	330.54	32.44	ND	ND	298.10	ND(5)	ND(7)	ND(8)	ND(8)	BRL	8,400	7.9	
MW-9	10/15/2009	333.46	35.60	ND	ND	297.86	ND (1.0)	ND (1.0)	ND (1.0)	1.1	1.1	64.7	0.43	
	6/22/2010	333.46	32.32	ND	ND	301.14	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	22	0.076	
	9/30/2010	333.46	34.85	ND	ND	298.61	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	52	0.21	
	12/16/2010	333.46	34.73	ND	ND	298.73	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	81	0.21	
	2/17/2011	333.46	35.28	ND	ND	298.18	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	48	0.19	
	05/24/2011	333.46	34.04	ND	ND	299.42	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	BRL	26	0.19	
MW-10	10/15/2009	324.17	28.77	ND	ND	295.40	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	BRL	10.4	ND (0.20)	
	6/22/2010	324.17	25.80	ND	ND	298.37	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	4 J	ND (0.02)	
	9/30/2010	324.17	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	
	12/16/2010	324.17	27.72	ND	ND	296.45	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	10	ND (0.02)	
	2/17/2011	324.17	28.05	ND	ND	296.12	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	7	ND (0.02)	
	05/24/2011	324.17	27.04	ND	ND	297.13	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	BRL	3 J	ND(0.020)	
MW-11	10/16/2009	329.64	NM	NM	NM	NM	16.1	ND (10)	ND (10)	ND (10)	6.6	22.7	38,400	35.6
	6/22/2010	329.64	29.00	ND	ND	300.64	ND (50)	ND (70)	ND (80)	ND (80)	BRL	170,000	150	
	9/30/2010	329.64	31.42	ND	ND	298.22	ND (50)	ND (70)	ND (80)	ND (80)	BRL	130,000	93	
	12/16/2010	329.64	31.22	ND	ND	298.42	ND (25)	ND (35)	ND (40)	ND (40)	BRL	41,000	30	
	2/17/2011	329.64	31.81	ND	ND	297.83	ND (10)	ND (14)	ND (16)	ND (16)	BRL	23,000	15	
	05/24/2011	329.64	30.56	ND	ND	299.08	ND(13)	ND(18)	ND(20)	ND(20)	BRL	16,000	19	
MW-12 (110)	2/18/2011	326.43	30.25	ND	ND	296.18	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	1 J	ND (0.2)	
	05/24/2011	326.43	28.12	ND	ND	298.31	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	BRL	ND(0.5)	ND(0.020)	
MW-12 (153)	2/18/2011	326.43	30.25	ND	ND	296.18	ND (0.5)	ND (0.7)	ND (0.8)	ND (0.8)	BRL	0.6 J	ND (0.2)	
	05/24/2011	326.43	28.12	ND	ND	298.31	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	BRL	ND(0.5)	ND(0.020)	
PW-1	8/17/2009	334.54	NM	NM	NM	NM	0.76	ND (0.50)	ND (0.50)	0.46 J	1.22	1,320	NA	
PW-1 (65)	10/16/2009	334.54	NM	NM	NM	NM	8	ND	ND	8.4	16.4	250	0.00187	
	6/22/2010	334.54	34.47	ND	ND	300.07	8	ND (0.7)	ND (0.8)	7	15	1,600	2.2	
	9/30/2010	334.54	35.69	ND	ND	298.85	9	ND (0.7)	ND (0.8)	5 J	14	1,600	2	
	12/16/2010	334.54	36.51	ND	ND	298.03	6 J	ND (1)	ND (2)	5 J	11	1,700	1.9	
	2/18/2011	334.54	37.44	ND	ND	297.10	9 J	ND (4)	ND (4)	5 J	14	2,000	2.4	
	05/24/2011	334.54	35.87	ND	ND	298.67	8 J	ND(4)	ND(4)	4 J	12	2,100	2.7	

TABLE 1

Groundwater Monitoring & Analytical Data

Fairfax Facility #26140

9901 Georgetown Pike

Great Falls, VA

July 24, 2009 through May 24, 2011

Sample ID	Date	Gauging Data					Analytical Data							
		Top of Casing Elevation	Depth to Water (feet)	Depth to Hydrocarbon (feet)	Hydrocarbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	Methyl Tertiary Butyl Ether (µg/L)	TPH-GRO (mg/L)	
PW-1(85)	6/22/2010	334.54	34.47	ND	ND	300.07	8	ND (0.7)	ND (0.8)	5	13	2,000	2.4	
	9/30/2010	334.54	35.69	ND	ND	298.85	9	ND (0.7)	ND (0.8)	6	15	1,700	2	
	12/16/2010	334.54	36.51	ND	ND	298.03	8	ND (0.7)	ND (0.8)	6	14	1,900	2	
	2/18/2011	334.54	37.44	ND	ND	297.10	2 J	ND (1)	ND (2)	2 J	4	1,700	1.7	
	05/24/2011	334.54	35.87	ND	ND	298.67	6 J	ND(1)	ND(2)	3 J	9	2,100	2.4	
PW-1(105)	10/16/2009	334.54	NM	NM	NM	NM	5.8	ND	ND	4.1	9.9	1,180	0.00371	
	6/22/2010	334.54	34.47	ND	ND	300.07	5 J	ND (1)	ND (2)	3 J	8	2,300	2.6	
	9/30/2010	334.54	35.69	ND	ND	298.85	9	ND (0.7)	ND (0.8)	5	14	1,800	2	
	12/16/2010	334.54	36.51	ND	ND	298.03	8 J	ND (1)	ND (2)	5 J	13	1,700	2.1	
	2/18/2011	334.54	37.44	ND	ND	297.10	4 J	ND (4)	ND (4)	ND (4)	4	1,800	1.9	
	05/24/2011	334.54	35.87	ND	ND	298.67	5 J	ND(1)	ND(2)	2 J	7	1,900	2.1	

Notes:

µg/L - micrograms per liter (parts per billion)

GW - Groundwater

J - Indicates an estimated value

mg/L - milligrams per liter (parts per million)

BTEX - Benzene, Toluene, Ethylbenzene and Total Xylenes

MTBE - Methyl Tertiary Butyl Ether

MW-6D(65) - Value in parenthesis indicates depth interval measured in feet

ND - Not detected

ND(5.0) - Not detected at or above the laboratory reporting limit, laboratory reporting limit included.

NM - Not monitored

NS - Not sampled

TPH-GRO - Total Petroleum Hydrocarbons-Gasoline Range Organics

**APPENDIX A:
VADEQ Directive Letter (December 10, 2009)**



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193

(703) 583-3800 Fax (703) 583-3821

www.deq.virginia.gov

L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

December 10, 2009

Ms. Alexandria McBride
ExxonMobil Environmental Services Company
3225 Gallows Road, Room 8B0420
Fairfax, VA 22037

RE: **PC#2010-3028**; Exxon Station #2-6140
9901 Georgetown Pike, Great Falls, Fairfax County 22066
Site Characterization Report received November 11, 2009

Dear Ms. McBride:

The Virginia Department of Environmental Quality (DEQ) has reviewed the referenced Site Characterization Report (SCR). The report recommends continued sampling of the existing monitoring wells, delineation of the dissolved phase hydrocarbons southeast/east of the site, conducting a remediation feasibility study, and preparation of a Corrective Action Plan (CAP).

This office does not believe sufficient information has been obtained to justify or allow an adequate CAP to be designed. Specifically, information from additional deep monitoring wells and offsite shallow monitoring wells needs to be obtained.

On or before **February 12, 2010**, a Site Characterization Report Addendum should be submitted to this office. The Addendum should include the following:

- Installation of at least three additional shallow ground water monitoring wells on the property located to the southeast/east of Exxon facility to better define the horizontal distribution of dissolved phase hydrocarbons in the shallow aquifer.
- Installation of one bedrock monitoring well to the north/northeast of the former on-site potable well and one to the south/southwest to validate that there has not been off-site movement of MTBE in the lower aquifer. A site drawing with the proposed well locations should be submitted to this office for approval prior to proceeding with installation.

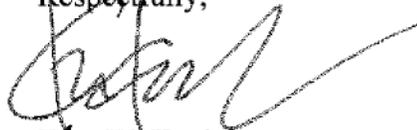
- Perform low flow sampling of the former potable well, MW-6D, and new bedrock wells at the following depths: 60 feet below top of casing (TOC), 85 feet below TOC, and 105 feet below TOC or at intervals in MW-6D and the additional bedrock monitoring wells where potential fractures were/are documented during drilling activities.
- Analysis of ground water samples from all new and existing wells for BTEX/MTBE and TPH-GRO.
- Update risk assessment based upon the results of the newly installed wells, if warranted. And.
- Proposal of additional assessment and/or viable remediation strategies (if necessary).

After this office has reviewed the report, a decision on case closure, additional assessment, or corrective action will be made.

If you wish to access the Virginia Petroleum Storage Tank Fund (VPSTF), the submittal of an Activity Authorization Form (AAF) and/or competitive bids is required. In order to meet the submittal date for the SCR Addendum, an AAF should be submitted as soon as possible.

The Virginia DEQ is very interested in assisting you in any way possible to bring this investigation to closure, effectively and efficiently. If you have any questions or if you need additional guidance, feel free to contact me at **703-583-3825**. Please include the PC file number, referenced above, in all correspondence.

Respectfully,



Kurt W. Kochan
Environmental Geologist

Kk/103028.doc

cc: File
GES via email to ATaylorsoncollins@gesonline.com

APPENDIX B:
Groundwater Laboratory Analysis Report (May 24, 2011)

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

Kleinfelder
30 Porter Road
Littleton MA 01460

June 06, 2011

Project: Fairfax 26140

Submittal Date: 05/25/2011

Group Number: 1248622

PO Number: 08531-117575

State of Sample Origin: VA

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
MW-1 Grab Water	6298355
MW-2 Grab Water	6298356
MW-3 Grab Water	6298357
MW-5 Grab Water	6298358
MW-6S Grab Water	6298359
MW-6D (65 ft) Grab Water	6298360
MW-6D (85 ft) Grab Water	6298361
MW-6D (105 ft) Grab Water	6298362
MW-7 Grab Water	6298363
MW-8 Grab Water	6298364
MW-9 Grab Water	6298365
MW-10 Grab Water	6298366
MW-11 Grab Water	6298367
MW-12 (110) Grab Water	6298368
MW-12 (153) Grab Water	6298369
PW-01 (65ft) Grab Water	6298370
PW-01 (85ft) Grab Water	6298371
PW-01 (105ft) Grab Water	6298372

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC Kleinfelder
COPY TO
ELECTRONIC Kleinfelder
COPY TO

Attn: Mark Steele

Attn: Angela Vogt

Questions? Contact your Client Services Representative
Jessica A Oknefski at (717) 656-2300 Ext. 1815

Respectfully Submitted,



Robin C. Runkle
Senior Specialist



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-1 Grab Water
Fairfax 26140

LLI Sample # WW 6298355
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 09:55 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

16140

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles			ug/l	ug/l	
10903	Benzene	71-43-2	N.D.	50	100
10903	Ethylbenzene	100-41-4	N.D.	80	100
10903	Methyl Tertiary Butyl Ether	1634-04-4	140,000	500	1000
10903	Toluene	108-88-3	N.D.	70	100
10903	Xylene (Total)	1330-20-7	N.D.	80	100
GC Volatiles			mg/l	mg/l	
01635	TPH-GRO water C6-C10	n.a.	120	1.0	50

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/04/2011 00:17	Emily R Styer	100
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/04/2011 00:41	Emily R Styer	1000
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111542AA	06/04/2011 00:17	Emily R Styer	100
01163	GC/MS VOA Water Prep	SW-846 5030B	2	W111542AA	06/04/2011 00:41	Emily R Styer	1000
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	06/01/2011 10:13	Linda C Pape	50
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	06/01/2011 10:13	Linda C Pape	50



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Sample Description: MW-2 Grab Water
Fairfax 26140

LLI Sample # WW 6298356
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 11:20 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

26140

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
10903	Benzene	71-43-2	N.D.	25	50
10903	Ethylbenzene	100-41-4	N.D.	40	50
10903	Methyl Tertiary Butyl Ether	1634-04-4	54,000	250	500
10903	Toluene	108-88-3	N.D.	35	50
10903	Xylene (Total)	1330-20-7	N.D.	40	50
GC Volatiles SW-846 8015B			mg/l	mg/l	
01635	TPH-GRO water C6-C10	n.a.	49	0.20	10

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111571AA	06/06/2011 08:57	Holly Berry	50
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111571AA	06/06/2011 09:21	Holly Berry	500
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111571AA	06/06/2011 08:57	Holly Berry	50
01163	GC/MS VOA Water Prep	SW-846 5030B	2	W111571AA	06/06/2011 09:21	Holly Berry	500
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	06/01/2011 00:25	Linda C Pape	10
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	06/01/2011 00:25	Linda C Pape	10



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-3 Grab Water
Fairfax 26140

LLI Sample # WW 6298357
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 12:10 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

36140

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B ug/l					
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Ethylbenzene	100-41-4	N.D.	0.8	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	2 J	0.5	1
10903	Toluene	108-88-3	N.D.	0.7	1
10903	Xylene (Total)	1330-20-7	N.D.	0.8	1
GC Volatiles SW-846 8015B mg/l					
01635	TPH-GRO water C6-C10	n.a.	0.28	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111571AA	06/06/2011 06:32	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111571AA	06/06/2011 06:32	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	05/31/2011 23:35	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	05/31/2011 23:35	Linda C Pape	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-5 Grab Water
Fairfax 26140

LLI Sample # WW 6298358
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 11:50 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

56140

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Ethylbenzene	100-41-4	N.D.	0.8	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	0.9 J	0.5	1
10903	Toluene	108-88-3	N.D.	0.7	1
10903	Xylene (Total)	1330-20-7	N.D.	0.8	1
GC Volatiles SW-846 8015B			mg/l	mg/l	
01635	TPH-GRO water C6-C10	n.a.	N.D.	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111571AA	06/06/2011 06:56	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111571AA	06/06/2011 06:56	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	05/31/2011 16:54	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	05/31/2011 16:54	Linda C Pape	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-6S Grab Water
Fairfax 26140

LLI Sample # WW 6298359
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 09:15 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

6S140

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Ethylbenzene	100-41-4	N.D.	0.8	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	1 J	0.5	1
10903	Toluene	108-88-3	N.D.	0.7	1
10903	Xylene (Total)	1330-20-7	N.D.	0.8	1
GC Volatiles SW-846 8015B			mg/l	mg/l	
01635	TPH-GRO water C6-C10	n.a.	N.D.	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111571AA	06/06/2011 07:21	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111571AA	06/06/2011 07:21	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	05/31/2011 17:19	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	05/31/2011 17:19	Linda C Pape	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-6D (65 ft) Grab Water
Fairfax 26140

LLI Sample # WW 6298360
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 09:35 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

66540

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B ug/l					
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Ethylbenzene	100-41-4	N.D.	0.8	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	1 J	0.5	1
10903	Toluene	108-88-3	N.D.	0.7	1
10903	Xylene (Total)	1330-20-7	N.D.	0.8	1
GC Volatiles SW-846 8015B mg/l					
01635	TPH-GRO water C6-C10	n.a.	0.037 J	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111571AA	06/06/2011 07:44	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111571AA	06/06/2011 07:44	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	05/31/2011 18:09	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	05/31/2011 18:09	Linda C Pape	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

**Sample Description: MW-6D (85 ft) Grab Water
Fairfax 26140**

**LLI Sample # WW 6298361
LLI Group # 1248622
Account # 12152**

Project Name: Fairfax 26140

Collected: 05/24/2011 09:05 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

68540

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B ug/l					
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Ethylbenzene	100-41-4	N.D.	0.8	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	1 J	0.5	1
10903	Toluene	108-88-3	N.D.	0.7	1
10903	Xylene (Total)	1330-20-7	N.D.	0.8	1
GC Volatiles SW-846 8015B mg/l					
01635	TPH-GRO water C6-C10	n.a.	0.034 J	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/03/2011 20:42	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111542AA	06/03/2011 20:42	Emily R Styer	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	05/31/2011 18:34	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	05/31/2011 18:34	Linda C Pape	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-6D (105 ft) Grab Water
Fairfax 26140

LLI Sample # WW 6298362
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 08:35 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

61054

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B ug/l					
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Ethylbenzene	100-41-4	N.D.	0.8	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	1 J	0.5	1
10903	Toluene	108-88-3	N.D.	0.7	1
10903	Xylene (Total)	1330-20-7	N.D.	0.8	1
GC Volatiles SW-846 8015B mg/l					
01635	TPH-GRO water C6-C10	n.a.	0.035 J	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/03/2011 21:06	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111542AA	06/03/2011 21:06	Emily R Styer	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	05/31/2011 18:59	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	05/31/2011 18:59	Linda C Pape	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

**Sample Description: MW-7 Grab Water
Fairfax 26140**

**LLI Sample # WW 6298363
LLI Group # 1248622
Account # 12152**

Project Name: Fairfax 26140

Collected: 05/24/2011 09:40 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

73140

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Ethylbenzene	100-41-4	N.D.	0.8	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	130	0.5	1
10903	Toluene	108-88-3	N.D.	0.7	1
10903	Xylene (Total)	1330-20-7	N.D.	0.8	1
GC Volatiles SW-846 8015B			mg/l	mg/l	
01635	TPH-GRO water C6-C10	n.a.	0.19	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/03/2011 21:30	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111542AA	06/03/2011 21:30	Emily R Styer	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	05/31/2011 19:49	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	05/31/2011 19:49	Linda C Pape	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-8 Grab Water
Fairfax 26140

LLI Sample # WW 6298364
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 10:50 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

86140

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles			SW-846 8260B	ug/l	
10903	Benzene	71-43-2	N.D.	5	10
10903	Ethylbenzene	100-41-4	N.D.	8	10
10903	Methyl Tertiary Butyl Ether	1634-04-4	8,400	50	100
10903	Toluene	108-88-3	N.D.	7	10
10903	Xylene (Total)	1330-20-7	N.D.	8	10
GC Volatiles			SW-846 8015B	mg/l	
01635	TPH-GRO water C6-C10	n.a.	7.9	0.10	5

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/04/2011 01:05	Emily R Styer	10
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/04/2011 01:29	Emily R Styer	100
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111542AA	06/04/2011 01:05	Emily R Styer	10
01163	GC/MS VOA Water Prep	SW-846 5030B	2	W111542AA	06/04/2011 01:29	Emily R Styer	100
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	06/01/2011 00:49	Linda C Pape	5
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	06/01/2011 00:49	Linda C Pape	5



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-9 Grab Water
Fairfax 26140

LLI Sample # WW 6298365
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 12:30 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

96140

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Ethylbenzene	100-41-4	N.D.	0.8	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	26	0.5	1
10903	Toluene	108-88-3	N.D.	0.7	1
10903	Xylene (Total)	1330-20-7	N.D.	0.8	1
GC Volatiles SW-846 8015B			mg/l	mg/l	
01635	TPH-GRO water C6-C10	n.a.	0.19	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/03/2011 21:54	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111542AA	06/03/2011 21:54	Emily R Styer	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	06/01/2011 00:00	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	06/01/2011 00:00	Linda C Pape	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: MW-10 Grab Water
Fairfax 26140

LLI Sample # WW 6298366
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 08:35 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

10140

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Ethylbenzene	100-41-4	N.D.	0.8	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	3 J	0.5	1
10903	Toluene	108-88-3	N.D.	0.7	1
10903	Xylene (Total)	1330-20-7	N.D.	0.8	1
GC Volatiles SW-846 8015B			mg/l	mg/l	
01635	TPH-GRO water C6-C10	n.a.	N.D.	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/03/2011 22:18	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111542AA	06/03/2011 22:18	Emily R Styer	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	05/31/2011 21:05	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	05/31/2011 21:05	Linda C Pape	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

**Sample Description: MW-11 Grab Water
Fairfax 26140**

**LLI Sample # WW 6298367
LLI Group # 1248622
Account # 12152**

Project Name: Fairfax 26140

Collected: 05/24/2011 10:20 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

11140

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
10903	Benzene	71-43-2	N.D.	13	25
10903	Ethylbenzene	100-41-4	N.D.	20	25
10903	Methyl Tertiary Butyl Ether	1634-04-4	16,000	130	250
10903	Toluene	108-88-3	N.D.	18	25
10903	Xylene (Total)	1330-20-7	N.D.	20	25
GC Volatiles SW-846 8015B			mg/l	mg/l	
01635	TPH-GRO water C6-C10	n.a.	19	0.20	10

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111571AA	06/06/2011 08:09	Holly Berry	25
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111571AA	06/06/2011 08:33	Holly Berry	250
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111571AA	06/06/2011 08:09	Holly Berry	25
01163	GC/MS VOA Water Prep	SW-846 5030B	2	W111571AA	06/06/2011 08:33	Holly Berry	250
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	06/01/2011 09:48	Linda C Pape	10
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	06/01/2011 09:48	Linda C Pape	10



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

**Sample Description: MW-12 (110) Grab Water
Fairfax 26140**

**LLI Sample # WW 6298368
LLI Group # 1248622
Account # 12152**

Project Name: Fairfax 26140

Collected: 05/24/2011 14:15 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

12110

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Ethylbenzene	100-41-4	N.D.	0.8	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10903	Toluene	108-88-3	N.D.	0.7	1
10903	Xylene (Total)	1330-20-7	N.D.	0.8	1
GC Volatiles SW-846 8015B			mg/l	mg/l	
01635	TPH-GRO water C6-C10	n.a.	N.D.	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/03/2011 22:42	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111542AA	06/03/2011 22:42	Emily R Styer	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11151A07A	05/31/2011 21:55	Linda C Pape	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A07A	05/31/2011 21:55	Linda C Pape	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

**Sample Description: MW-12 (153) Grab Water
Fairfax 26140**

**LLI Sample # WW 6298369
LLI Group # 1248622
Account # 12152**

Project Name: Fairfax 26140

Collected: 05/24/2011 13:45 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

12153

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
10903	Benzene	71-43-2	N.D.	0.5	1
10903	Ethylbenzene	100-41-4	N.D.	0.8	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
10903	Toluene	108-88-3	N.D.	0.7	1
10903	Xylene (Total)	1330-20-7	N.D.	0.8	1
GC Volatiles SW-846 8015B			mg/l	mg/l	
01635	TPH-GRO water C6-C10	n.a.	N.D.	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/03/2011 23:06	Emily R Styer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111542AA	06/03/2011 23:06	Emily R Styer	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11152A07A	06/02/2011 11:22	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	11152A07A	06/02/2011 11:22	Carrie E Miller	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: PW-01 (65ft) Grab Water
Fairfax 26140

LLI Sample # WW 6298370
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 11:50 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

P1650

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10903	Benzene	71-43-2	8 J	ug/l 3	5
10903	Ethylbenzene	100-41-4	N.D.	4	5
10903	Methyl Tertiary Butyl Ether	1634-04-4	2,100	25	50
10903	Toluene	108-88-3	N.D.	4	5
10903	Xylene (Total)	1330-20-7	4 J	4	5
GC Volatiles SW-846 8015B					
01635	TPH-GRO water C6-C10	n.a.	2.7	mg/l 0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/03/2011 23:30	Emily R Styer	5
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	W111542AA	06/03/2011 23:54	Emily R Styer	50
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W111542AA	06/03/2011 23:30	Emily R Styer	5
01163	GC/MS VOA Water Prep	SW-846 5030B	2	W111542AA	06/03/2011 23:54	Emily R Styer	50
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11152A07A	06/02/2011 11:47	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	11152A07A	06/02/2011 11:47	Carrie E Miller	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: PW-01 (85ft) Grab Water
Fairfax 26140

LLI Sample # WW 6298371
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 11:20 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

P1850

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B			ug/l	ug/l	
10903	Benzene	71-43-2	6 J	1	2
10903	Ethylbenzene	100-41-4	N.D.	2	2
10903	Methyl Tertiary Butyl Ether	1634-04-4	2,100	10	20
10903	Toluene	108-88-3	N.D.	1	2
10903	Xylene (Total)	1330-20-7	3 J	2	2
GC Volatiles SW-846 8015B			mg/l	mg/l	
01635	TPH-GRO water C6-C10	n.a.	2.4	0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	Y111542AA	06/04/2011 03:44	Frank A Valla, Jr	2
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	Y111542AA	06/04/2011 04:04	Frank A Valla, Jr	20
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y111542AA	06/04/2011 03:44	Frank A Valla, Jr	2
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y111542AA	06/04/2011 04:04	Frank A Valla, Jr	20
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11152A07A	06/02/2011 12:12	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	11152A07A	06/02/2011 12:12	Carrie E Miller	1



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Sample Description: PW-01 (105ft) Grab Water
Fairfax 26140

LLI Sample # WW 6298372
LLI Group # 1248622
Account # 12152

Project Name: Fairfax 26140

Collected: 05/24/2011 10:50 by GM

Kleinfelder

30 Porter Road

Submitted: 05/25/2011 16:30

Littleton MA 01460

Reported: 06/06/2011 19:18

P1105

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles SW-846 8260B					
10903	Benzene	71-43-2	5 J	ug/l 1	2
10903	Ethylbenzene	100-41-4	N.D.	2	2
10903	Methyl Tertiary Butyl Ether	1634-04-4	1,900	10	20
10903	Toluene	108-88-3	N.D.	1	2
10903	Xylene (Total)	1330-20-7	2 J	2	2
GC Volatiles SW-846 8015B					
01635	TPH-GRO water C6-C10	n.a.	2.1	mg/l 0.020	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	Y111542AA	06/04/2011 04:25	Frank A Valla, Jr	2
10903	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	Y111542AA	06/04/2011 04:46	Frank A Valla, Jr	20
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y111542AA	06/04/2011 04:25	Frank A Valla, Jr	2
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y111542AA	06/04/2011 04:46	Frank A Valla, Jr	20
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11152A07A	06/02/2011 12:37	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	11152A07A	06/02/2011 12:37	Carrie E Miller	1

Quality Control Summary

 Client Name: Kleinfelder
 Reported: 06/06/11 at 07:18 PM

Group Number: 1248622

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: W111542AA	Sample number(s): 6298355,6298361-6298366,6298368-6298370							
Benzene	N.D.	0.5	ug/l	104	106	79-120	2	30
Ethylbenzene	N.D.	0.8	ug/l	101	101	79-120	1	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	97	99	76-120	2	30
Toluene	N.D.	0.7	ug/l	104	102	79-120	1	30
Xylene (Total)	N.D.	0.8	ug/l	103	101	80-120	1	30
Batch number: W111571AA	Sample number(s): 6298356-6298360,6298367							
Benzene	N.D.	0.5	ug/l	104	105	79-120	2	30
Ethylbenzene	N.D.	0.8	ug/l	102	102	79-120	0	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	100	100	76-120	1	30
Toluene	N.D.	0.7	ug/l	103	103	79-120	0	30
Xylene (Total)	N.D.	0.8	ug/l	103	105	80-120	2	30
Batch number: Y111542AA	Sample number(s): 6298371-6298372							
Benzene	N.D.	0.5	ug/l	99	99	79-120	0	30
Ethylbenzene	N.D.	0.8	ug/l	93	93	79-120	1	30
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	96	96	76-120	0	30
Toluene	N.D.	0.7	ug/l	93	92	79-120	1	30
Xylene (Total)	N.D.	0.8	ug/l	93	93	80-120	0	30
Batch number: 11151A07A	Sample number(s): 6298355-6298368							
TPH-GRO water C6-C10	N.D.	0.020	mg/l	91	91	75-135	0	30
Batch number: 11152A07A	Sample number(s): 6298369-6298372							
TPH-GRO water C6-C10	N.D.	0.020	mg/l	91		75-135		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
 Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 11152A07A	Sample number(s): 6298369-6298372 UNSPK: P300858								
TPH-GRO water C6-C10	100	100	63-154	0	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

 Client Name: Kleinfelder
 Reported: 06/06/11 at 07:18 PM

Group Number: 1248622

Surrogate Quality Control

 Analysis Name: 8260 Std. Water Master
 Batch number: W111542AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6298355	98	98	99	94
6298361	100	99	98	95
6298362	99	102	98	96
6298363	100	104	98	96
6298364	102	103	99	96
6298365	100	100	99	96
6298366	100	105	98	96
6298368	101	98	100	97
6298369	101	102	98	94
6298370	98	100	100	96
Blank	98	102	98	97
LCS	98	106	102	100
LCSD	98	102	100	99
<hr/>				
Limits:	80-116	77-113	80-113	78-113

 Analysis Name: 8260 Std. Water Master
 Batch number: W111571AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6298356	102	104	98	97
6298357	103	104	100	99
6298358	103	103	100	97
6298359	102	95	98	96
6298360	102	103	99	95
6298367	100	101	98	97
Blank	101	101	100	99
LCS	102	101	101	103
LCSD	101	100	101	105
<hr/>				
Limits:	80-116	77-113	80-113	78-113

 Analysis Name: 8260 Std. Water Master
 Batch number: Y111542AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6298371	106	101	95	91
6298372	106	100	95	91
Blank	107	102	95	91
LCS	108	105	97	96
LCSD	108	104	97	97
<hr/>				
Limits:	80-116	77-113	80-113	78-113

 Analysis Name: TPH-GRO water C6-C10
 Batch number: 11151A07A
 Trifluorotoluene-F

6298355	98
6298356	100
6298357	89
6298358	84

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Kleinfelder
Reported: 06/06/11 at 07:18 PM

Group Number: 1248622

Surrogate Quality Control

6298359	82
6298360	83
6298361	80
6298362	83
6298363	87
6298364	90
6298365	89
6298366	85
6298367	91
6298368	83
Blank	86
LCS	93
LCSD	93

Limits: 63-135

Analysis Name: TPH-GRO water C6-C10
Batch number: 11152A07A
Trifluorotoluene-F

6298369	85
6298370	94
6298371	91
6298372	89
Blank	86
LCS	92
MS	94
MSD	92

Limits: 63-135

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.



Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152

Group #: 1248622 Sample #: 6298355-23

Client: Fairfax Petroleum		Acct. #:		Matrix			Analyses Requested				For Lab Use Only		
Project Name#: 26140/ Great Falls		PWSID #:		Soil			Preservation Codes				FSC:		
Project Address: 9901 Georgetown Pike Great Falls, VA				Potable									
Project Manager: Mark Steele		P.O. #: 08531-117575		NPDES							SCR#:		
Sampler: <i>Greg Moore / Charlie Low</i>		Quote #:									Preservation Codes H-HCl T-Thiosulfate N-HNO3 B-NaOH S-H2SO4 O-Other		
Name of State where samples were collected: Virginia											Temperature of samples upon receipt (if requested)		
Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	BTEX, MTBE 8260	TPH-GRO 8015	Remarks		
MW-1	*5/24/11	8955	X			X		6	X	X	Page 1 of 2		
MW-2		1120	X			X		6	X	X			
MW-3		1210	X			X		6	X	X	Cooler 2 of 2		
MW-5		1150	X			X		6	X	X			
MW-6S		0915	X			X		6	X	X	*Collection date		
MW-6D (65 ft)		0935	X			X		6	X	X	5/24/11 per AV.		
MW-6D (85 ft)		0905	X			X		6	X	X	5/24/11		
MW-6D (105 ft)		0835	X			X		6	X	X			
MW-7		0946	X			X		6	X	X			
MW-8		1050	X			X		6	X	X			
Turnaround Time Requested (TAT) (please circle) Normal <input checked="" type="radio"/> Rush				Relinquished by: <i>Chh</i>			Date: 5/25/11	Time: 0600	Received by: <i>Sample Room</i>		Date:	Time:	
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)				Relinquished by: <i>Sample Room</i>			Date: 5/24/11	Time: 10:00	Received by: <i>Chh</i>		Date: 5/24/11	Time: 10:00	
Date results are needed: _____				Relinquished by: <i>Chh</i>			Date: 5/24/11	Time: 16:30	Received by: <i>Chh</i>		Date:	Time:	
Rush results requested by (please circle): Phone Fax E-mail				Relinquished by: <i>Chh</i>			Date:	Time:	Received by:		Date:	Time:	
Phone #: _____ Fax #: _____				Relinquished by:			Date:	Time:	Received by:		Date:	Time:	
E-mail address: _____				Relinquished by:			Date:	Time:	Received by:		Date:	Time:	
Data Package Options (please circle if required)			SDG Complete? Yes No			Relinquished by:		Date:	Time:	Received by:		Date:	Time:
Type I (validation/NJ reg) TX-TRRP-13			Yes No			Relinquished by:		Date:	Time:	Received by:		Date:	Time:
Type II (Tier II) MA MCP CT RCP						Relinquished by:		Date:	Time:	Received by:		Date:	Time:
Type III (Reduced NJ)			State-specific QC (MS/MSD/Dup)? Yes No			Relinquished by:		Date:	Time:	Received by:		Date:	Time:
Type IV (CLP SOW)			(If yes, indicated QC sample and submit triplicate volume)			Relinquished by:		Date:	Time:	Received by:		Date:	Time:
Type VI (Raw Data Only)			Internal COC required? Yes No			Relinquished by:		Date:	Time:	Received by: <i>Chh</i>		Date: 5/25/11	Time: 16:30

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Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152 (2)

Group #: 1248622 Sample #: 6298255-23

Client: <u>Fairfax Petroleum</u>		Acct. #:		Matrix			Analyses Requested										For Lab Use Only	
Project Name/#: <u>26140/ Great Falls</u>		PWSID #:					Preservation Codes										FSC:	
Project Address: <u>9901 Georgetown Pike Great Falls, VA</u>				Potable NPDES													SCR#:	
Project Manager: <u>Mark Steele</u>		P.O. #: <u>08531-117575</u>																
Sampler: <u>Greg Moore / Charlie Low</u>				Soil			Total # of Containers										Remarks	
Name of State where samples were collected: <u>Virginia</u>		Quote #:																
Date Collected		Time Collected		Grab		Composite		Water		Other		BTEX, MTBE 8260		TPH-GRO 8015		Temperature of samples upon receipt (if requested)		
Sample Identification																		
MW-9		<u>5/24/11</u>		<u>1230</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<u>Page 2 of 2</u>		
MW-10				<u>0835</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				
MW-11				<u>1020</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<u>Cooler 1 of 2</u>		
MW-12 (110)				<u>1416</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				
MW-12 (153)				<u>1345</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				
PW-01 (65ft)				<u>1150</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				
PW-01 (85ft)				<u>1120</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				
PW-01 (105ft)		<input checked="" type="checkbox"/>		<u>1050</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				

Turnaround Time Requested (TAT) (please circle) <u>Normal</u> Rush				Relinquished by: <u>[Signature]</u>		Date: <u>5/24/11</u>		Time: <u>0600</u>		Received by: <u>Simple Room</u>		Date:		Time:	
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)				Relinquished by: <u>Simple Room</u>		Date: <u>5/24/11</u>		Time: <u>11:00</u>		Received by: <u>[Signature]</u>		Date: <u>5/24/11</u>		Time: <u>11:00</u>	
Date results are needed: _____				Relinquished by: <u>[Signature]</u>		Date: <u>5/24/11</u>		Time: <u>16:30</u>		Received by: <u>[Signature]</u>		Date:		Time:	
Rush results requested by (please circle): Phone Fax E-mail				Relinquished by: <u>[Signature]</u>		Date:		Time:		Received by: <u>[Signature]</u>		Date:		Time:	
Phone #: _____ Fax #: _____				Relinquished by: <u>[Signature]</u>		Date:		Time:		Received by: <u>[Signature]</u>		Date:		Time:	
E-mail address: _____				Relinquished by: <u>[Signature]</u>		Date:		Time:		Received by: <u>[Signature]</u>		Date: <u>5/25/11</u>		Time: <u>16:30</u>	
Data Package Options (please circle if required)				SDG Complete?		Type I (validation/NJ reg) TX-TRRP-13		Yes No		Type II (Tier II) MA MCP CT RCP		Type III (Reduced NJ)		State-specific QC (MS/MSD/Dup)? Yes No	
Type IV (CLP SOW)				Internal COC required? Yes No		Type V (Raw Data Only)									

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers	Inorganic Qualifiers
A TIC is a possible aldol-condensation product	B Value is $<$ CRDL, but \geq IDL
B Analyte was also detected in the blank	E Estimated due to interference
C Pesticide result confirmed by GC/MS	M Duplicate injection precision not met
D Compound quantitated on a diluted sample	N Spike sample not within control limits
E Concentration exceeds the calibration range of the instrument	S Method of standard additions (MSA) used for calculation
N Presumptive evidence of a compound (TICs only)	U Compound was not detected
P Concentration difference between primary and confirmation columns $>$ 25%	W Post digestion spike out of control limits
U Compound was not detected	* Duplicate analysis not within control limits
X,Y,Z Defined in case narrative	+ Correlation coefficient for MSA $<$ 0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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