VIA ELECTRONIC MAIL

January 29, 2016

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

RE: Fourth Quarter 2015 CAP Monitoring Report
Inactive Fairfax Facility # 26140
9901 Georgetown Pike
Great Falls, Fairfax County, Virginia
PC# 2010-3028

Dear Mr. Wardle:

Kleinfelder, on behalf of Fairfax Petroleum Realty, LLC (Fairfax), is submitting this Corrective Action Plan (CAP) Monitoring Report for the above-referenced facility. This report outlines the activities completed during the Fourth Quarter 2015 and items requested by the DEQ in the CAP Addendum Approval letter. As presented in the report, the endpoints communicated in the CAP Addendum Approval letter have been attained and Kleinfelder, on behalf of Fairfax, requests DEQ approval to suspend remedial system operations and begin a trial rebound assessment.

Fairfax Petroleum and Kleinfelder appreciate the continued guidance of the DEQ in the successful completion of this project. Please feel free to contact us at (410) 850-0404 should you have questions.

Sincerely,

KLEINFELDER

Paxton Wertz
Geologist

Mark C. Steele
Senior Program Manager

Attachment

cc: Mr. Marshall Yacoe – Fairfax Petroleum Realty, LLC

CAP MONITORING REPORT – FOURTH QUARTER 2015
INACTIVE FAIRFAX FACILITY # 26140
9901 GEORGETOWN PIKE
GREAT FALLS, FAIRFAX COUNTY, VIRGINIA

REGULATORY INFORMATION

Regulatory Agency:	Virginia Department of Environmental Quality (DEQ)
Agency Contact:	Mr. Alexander Wardle
Pollution Complaint No.:	2010-3028
Current Case Status:	Corrective Action Plan (CAP) Implementation
Reporting Period:	October 1 through December 31, 2015
Last Report:	CAP Monitoring Report (CMR), October 30, 2015

GENERAL SITE INFORMATION

Fairfax Petroleum Realty Contact:	Mr. Marshall Yacoe
Consultant Contact:	Mr. Mark C. Steele
Facility Status:	Inactive retail service station with auto repair facilities. The UST system was removed in August 2012.
Area Property Use:	See Local Area Map (**Figure 1**)
Site Well Network:	MW-1 through MW-3, MW-5, MW-6S, MW-6D, MW-7, MW-9 through MW-20D, MW-21I, MW-21S, MW-22, MW-23D, MW-24, W-1 through W-7, PW-1, and RW-1 (**Figure 2** and **Table 1**)
Soil Vapor Monitoring Points	VP-1, VP-2S, VP-2D, and VP-3
Site Geology:	Schist saprolite grading to competent schist bedrock
Groundwater Flow Directions:	Southeast / South

ACTIVITIES COMPLETED THIS PERIOD

CMT Well Development

On October 5, 2015, the lowermost intervals (MW-17D[117], MW-17D[129.75], and MW-17D[147]) of the continuous multichannel tubing (CMT) well were redeveloped via air lift in an effort to obtain representative samples of the groundwater in the aquifer during the Fourth Quarter 2015 groundwater sampling event. The intervals were developed by advancing one quarter-inch outside diameter nylon tubing to the bottom of each interval. Compressed air was then was applied through the tubing, forcing water, sediment, and debris that had collected in the interval to come out through the top of the well.

Monitoring, Bedrock, and CMT Well Gauging and Sampling

Groundwater gauging and sampling was conducted on the Site monitoring well network, including open bedrock wells and the CMT well during the Fourth Quarter 2015. Groundwater gauging was conducted during the sampling event and as an independent activity to monitor groundwater elevations. The gauging data used to generate potentiometric surface maps is included as **Table 2** and depicted on **Figures 3** and **4**. With the exception of the CMT wells and the MW-20D wells, the sampled monitoring wells were purged using the low-flow parameter stabilization sampling methodology with a submersible electric pump and YSI, Inc. (YSI) multi-parameter water quality meter. Because of the narrow diameter of the CMT wells and the nested MW-20D well group, these were purged via three-volume purge methodology. Groundwater samples were submitted under chain of custody protocol to Lancaster Laboratories for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), ethyl tertiary butyl ether (ETBE), and di-isopropyl ether (DIPE) using EPA Method 8260B.

Summaries of groundwater analytical results are presented in **Tables 3** and **4** and are included on **Figures 3** and **4**. A summary of monitoring and natural attenuation parameters collected during sampling is presented in **Table 5**. The Lancaster Laboratories Analysis Reports for the groundwater sampling event are included as **Appendix A**. A summary of the gauging and sampling conducted during the Fourth Quarter 2015 is provided below.

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November 30 through December 29, 2015

Wells Gauged and Sampled:	MW-16D, MW-17D, MW- 20D(73-83), MW-20D(90-100), MW-20D(132-142), MW-21S/I, MW-23D, MW-24, MW-25D, MW-27S/I, PW-1, RW-1and W-1, W-2, W-6, and W-7.
Wells Gauged Only:	MW-1, MW-2, MW-3, MW-5, MW-6S/D, MW-7, MW-9, MW-10, MW-11, MW-12D, MW-13, MW-14, MW-15, MW-18D , MW-19D, MW-22, MW-26D, SVE-2, and W-3 through W-5.
Minimum/Maximum Depth to Water:	3.52 (MW-26D) / 55.30 (MW-16D) feet
Shallow Groundwater Flow Direction:	Radially towards RW-1 and MW-16D; Southeast / South
Shallow Hydraulic Gradient:	0.077 ft/ft between W-1 and RW-1
Deep Groundwater Flow Direction:	Radially towards RW-1 and MW-16D; Southeast / South
Deep Hydraulic Gradient:	0.053 ft/ft between MW-20D(73-83) and RW-1

Groundwater gauging and sampling was conducted from November 30 through December 2, 2015, and December 29, 2015. Groundwater samples were collected from on-site and off-site monitoring wells in accordance with the monitoring schedule presented in the October 2, 2014 CAP Addendum (CAPA) as modified by the DEQ and communicated in the March 2, 2015 CAPA Approval letter; and the approved Activity Authorization Form (AAF) for the reporting period. Monitoring wells MW-1, MW-2, MW-3 MW-7, MW-11, MW-14 and MW-15 were dry during the sampling event and groundwater samples were not collected from these wells. The CMT wells in MW-17D were gauged and sampled on December 29, 2015. Groundwater monitoring and analytical data for the shallow and deep monitoring wells is summarized in **Tables 3** and **4**, respectively. An MTBE isoconcentration map of the analytical results (10 micrograms per liter (µg/L) to 10,000 µg/L) from the shallow wells is included as **Figure 5**. An MTBE isoconcentration map of the analytical results (10 µg/L to 10,000 µg/L) from the deep wells is included as **Figure 6**.

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FOURTH QUARTER 2015 REMEDIAL ACTIVITIES

The groundwater recovery system operated at the Site during the Fourth Quarter 2015. The soil vapor extraction system was shut off during the First Quarter of 2015, and remains inactive. Groundwater recovery system operations and maintenance (O&M) activities were completed during the quarter. Typical groundwater recovery system O&M activities include system performance and permit-required sample collection, maintaining a record of system performance data, equipment inspection and preventative maintenance, and exchanging consumable materials, such as bag filters and filter media, as necessary. A summary of system performance is included below.

Groundwater Recovery System

Percent Run Time Fourth Quarter 2015:	96% (September 29, 2015 through December 29, 2015)
Technique:	Groundwater is extracted from two extraction wells (MW-16D and RW-1) via electric submersible pumps.
Permits:	VPDES Permit # VAG830477
Discharge Monitoring Frequency:	Twice Monthly
Extraction Wells Open:	RW-1 and MW-16D
Average Flow Rate:	7.99 gpm (total)
Estimated MTBE Mass Removal:	Reporting Period (September 29, 2015 through December 29, 2015): 16.99 pounds. Since system start-up (August 28, 2014 through December 29, 2015): 307.11 pounds.

Remediation system groundwater monitoring, performance data, and system operation and maintenance visits are summarized in **Table 6**. Six groundwater recovery system

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effluent samples were collected for laboratory analysis in the reporting period (**Appendix B**). In accordance with the Virginia Pollution Discharge Elimination System (VPDES) permit samples were analyzed for BTEX and MTBE twice monthly, as well as chlorinated VOCs once monthly.

ENDPOINT EVALUATION

The groundwater pump and treatment system has been operating at the Site since August 2014. The numerical and mass flux endpoints determined were attained in the Second Quarter 2015 and were maintained during the Third and Fourth Quarters 2015. The March 2015 *CAPA Approval* (**Appendix D**) letter requires active remediation until the average endpoint concentrations and mass flux objectives have been met for two consecutive quarters, at which point active remediation can end and post remediation monitoring can begin. As such, Kleinfelder, on behalf of Fairfax, requests DEQ approval to cease active remediation and begin a trial rebound assessment to evaluate MTBE concentrations under static conditions (i.e. non-pumping). During this rebound assessment, the remediation system will remain on-site. A detailed discussion of the endpoint attainment is presented below.

The decrease in MTBE concentrations throughout the Site monitoring well network observed during the remedial system operation of 2015 warrants an evaluation of the mass flux at the Site and endpoints as communicated in the March 2, 2015 CAPA approval letter. A decrease in mass flux is observed when comparing the historical average, June 2014 (last sampling event prior to system startup), June 2015, September 2015, and December 2015 mass flux estimates. The transects evaluated in the October 2014 CAPA, July 2015, and October 2015 CAP Monitoring Reports were reevaluated using the December 2015 analytical results. The remaining input parameters (hydraulic gradient, hydraulic conductivity) are unchanged, except at Transect D-D'. As in the Second and Third Quarters 2015 analyses, transect D-D' was modified by the inclusion of a 'virtual' well (MW-23D Rock). This well is used to estimate the flux which may occur between 60 feet below grade (bottom of MW-24) and 90 feet below grade (top of MW-23D). The assumed hydraulic conductivity is 10 percent that of MW-23D, as the rock, based on observations during drilling, is competent and relatively unfractured, consistent with observations made at MW-17D. The assumed gradient is the same as at MW-23D, as is the assumed concentration.

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At Transect E-E', which evaluates potential vertical downward flux from the overburden to the fracture area, monitoring wells MW-1, MW-2, MW-7, MW-11, MW-14, and MW-15 were dry during the last monitoring event; therefore, no new data exists to evaluate Transect E-E' during the Fourth Quarter 2015. The locations of the Transects are included as **Figure 7**. Below is a summary of the decrease in mass flux, presented in grams per day (g/day).

Transect	Historical Average	June 2014	June 2015	September 2015	December 2015	Percent Reduction
A-A'	1160	47.1	13.1	13.5	13.2	72%
B-B'	1160	979	486	577	387	60%
C-C'	1.26	0.01	0.004	0.0	0.0	100%
D-D'	--	0.36	0.0002	0.002	0.005	99%
E-E'	--	0.47	0.07	--	--	85% (through June 2015)

The CAPA Approval letter requires that the MTBE endpoint for bedrock monitoring well MW-23D is 343 µg/L. The reported MTBE concentration of the groundwater samples collected from MW-23D during the March, June, September, and December 2015 sampling events is 200 µg/L, 3 µg/L 53 µg/L, and 120 µg/L respectively, and the endpoint has been attained.

The same letter requires that the mass flux endpoints of 0.0049 grams per day be met for Transect C-C' of the CAPA (**Figure 7**); and 0.01 grams per day in the fractured bedrock Transect D-D'. Since MTBE was below laboratory detection limits in the monitoring wells that define Transect C-C', the mass flux through Transect C-C' is essentially 0.0 grams/day; therefore, this endpoint has been attained. The current mass flux through Transect D-D' is 0.005 grams per day. This level of flux meets the endpoint for this transect. The results of the Mass Flux Toolkit output for Transects A-A', B-B', and D-D' are included as **Appendix C**.

Evaluation of the distribution of MTBE in MW-17D was also performed this quarter. Groundwater samples from six of the seven screened intervals exhibited lower concentrations in September 2015 than in April 2014. The 75-foot, 81-foot, and 87.75-foot intervals exhibited 89.2%, 99.1%, and 82.0% reductions in MTBE concentrations,

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respectively. This is apparently due to the active extraction of water from these depths by the remedial system. The 92-foot interval exhibited an increase of MTBE concentration of approximately 46.0%. The MTBE concentrations at the 117-foot, 129.75-foot, and 147-foot intervals declined by 92.2%, 59.2%, and 56.1%, respectively, over the same time period. The difference in MTBE reduction between the upper three, and lower three, screened intervals may be indicative of active groundwater extraction affecting MW-17D to a depth above 117 feet below grade, with dilution of minimal water volumes below the 117- foot interval. These conditions are consistent with those described in the CAP and CAPA, and documented during packer testing and interval sampling, with hydraulic connection to the overburden demonstrated to depths between 92 and 117 feet below grade, and a lack of hydraulic connection to the overburden below 117 feet below grade. The deeper intervals are in some communication with non-impacted groundwater in the deep bedrock, which serves to dilute the residual MTBE, which was trapped in the borehole at the time of the packer test, as water is purged for sampling.

In February 2015, the potential mass discharge which may occur southward in bedrock at MW-17D was estimated to be 0.0037 grams per day, based on the average MTBE concentration in the three deepest sample intervals in December 2014 (48,000 µg/L). The June 2015 sampling results yield an average concentration in the three deepest sampling intervals of 46,333 µg/L with an estimated potential flux in bedrock at a depth greater than 100 feet below grade of 0.0035 grams per day. Based on the September 2015 sampling results, the average concentration in the three deepest intervals is 33,367 µg/L resulting in an estimated potential flux in bedrock at a depth greater than 100 feet below grade of 0.0025 grams per day. The average concentration the three deepest intervals based on the December 2015 sampling results is 12,267 µg/L resulting in an estimated potential flux in bedrock at a depth greater than 100 feet below grade of 0.0008 g/day.

While the potential mass discharge through the lower three sample intervals of MW-17D has decreased by 79%, the average concentration of the four shallowest sample intervals at MW-17D have decreased 97%. Similarly, at MW-23D, also screened in bedrock, MTBE concentrations have decreased 98.9% (i.e. 11,000 µg/L to 120 µg/L). As previously presented, the volume of water removed during quarterly sampling of these lower intervals is measured in ounces and the concentrations decreases are consistent with the SCM of trapped water in the low permeability bedrock from the artificial hydraulic head created during packer testing in 2013. The MTBE concentrations in these deep intervals will continue to be monitored to support the SCM.

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The endpoints communicated in the *CAPA Approval* letter have been attained. The concentration of MTBE on-site in the overburden has remained below 5,000 µg/L in the monitoring wells sampled for more than two quarters. The mass flux through Transect C-C' is 0 grams per day and is protective of potential downgradient potable wells. The mass flux through Transect D-D' is 0.005 grams per day, and is below the 0.01 grams per day endpoint. The concentration of MTBE in monitoring well MW-23D is 120 µg/L, and is below the 343 µg/L endpoint. As the remedial objectives have been met, Kleinfelder, on behalf of Fairfax, requests DEQ approval to suspend remedial system operations and begin a trial rebound assessment.

POST REMEDIATION MONITORING ACTIVITIES

Following the suspension of active remediation, the trial rebound assessment and post remediation monitoring shall commence. Post remediation monitoring at the Site will include:

- Groundwater sampling of the Site monitoring well network in accordance with the monitoring schedule communicated in the *CAPA Approval* letter;
- Redevelopment of the aged overburden monitoring wells W-1, W-2, W-6, and W-7 on the east side of Walker Road;
- Collection of groundwater samples for laboratory analysis of monitored natural attenuation parameters for the quantification of degradation between transects; and
- An analysis of MTBE concentrations in monitoring well W-1 to assess if further remedial action is warranted.

As communicated in the *CAPA Approval* letter, groundwater sampling of the site monitoring well network will continue at the Site for eight quarters following the approved monitoring schedule. During the eight quarters, the groundwater pump and treatment system will remain at the Site, so that remedial operations may resume should post remedial monitoring indicate that the concentrations of MTBE in groundwater no longer meet the established endpoints.

Groundwater samples were not collected for analysis of monitored natural attenuation parameters during active remediation. Doing so would have resulted in samples that may

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not have been representative of conditions following cessation of remediation. Therefore, groundwater samples will be collected for analysis of these parameters following active remediation. This will allow for the quantification of mass removal through degradation between transects.

The Mann-Kendall test was performed to evaluate the trend of MTBE concentrations at monitoring well W-1. Sampling data that was collected since June 2014 was used for the analysis. The Mann-Kendall test is a non-parametric test for identifying trends in time series data. The test compares the relative magnitudes of sample data rather than the data values themselves (Helsel and Hirsch, 2002). The ProUCL software version 5.0.00 available through the EPA was used to perform the trend analysis, and report the resulting Mann-Kendall statistic *S*. No statistically significant trend was apparent at W-1, although the *S* values were negative. The result indicates that while MTBE concentrations appear to be decreasing, this trend is not statistically significant, and these concentrations may be described as stable. The Mann-Kendall analysis is provided as **Appendix E**.

The Mann-Kendall test will continue to be performed on groundwater sample results from W-1 during post remedial monitoring. Should these tests indicate a trend that is other than stable or decreasing, additional remedial options for the area of W-1 will be assessed.

ACTIVITIES PLANNED FOR NEXT PERIOD (FIRST QUARTER 2016)

Activities planned for the First Quarter 2016 include continued operation and maintenance of the groundwater recovery system and one groundwater sampling event in March 2016 of the site monitoring well network as communicated in the *CAPA Approval* letter. With DEQ approval, the groundwater pump and treatment system will be turned off and the trial rebound assessment will begin. If the remediation system is turned off during the prior to the March 2016 groundwater sampling event, select wells will be redeveloped and monitored natural attenuation parameters will be collected from select monitoring wells in the Site monitoring network.

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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.

Sincerely,

KLEINFELDER

Paxton D. Wertz
Geologist

Nathan Stevens, PG
Senior Hydrogeologist

Mark C. Steele
Senior Program Manager

FIGURES

1 Local Area Map
2 Site Plan
3 Hydrocarbon Distribution / Groundwater Contour Map – Shallow Wells (December 1 and 2, 2015)
4 Hydrocarbon Distribution / Groundwater Contour Map – Deep Wells (December 1 and 2, 2015)
5 MTBE Isoconcentration Map – Shallow Wells (December 1 and 2, 2015)
6 MTBE Isoconcentration Map – Deep Wells (December 1 and 2, 2015)
7 Mass Flux Transect Locations

TABLES

1 Monitoring Well Construction Data
2 Monitoring Well Gauging Data Summary (December 2, 2015)
3 Groundwater Monitoring & Analytical Data – Shallow Wells
4 Groundwater Monitoring & Analytical Data – Deep Wells

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APPENDICES

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FIGURES

0 175 350 700 Feet

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PROJECT NO.	20143589
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LOCAL AREA MAP

INACTIVE FAIRFAX FACILITY # 26140
9901 GEORGETOWN PIKE
GREAT FALLS, VIRGINIA

FIGURE
1

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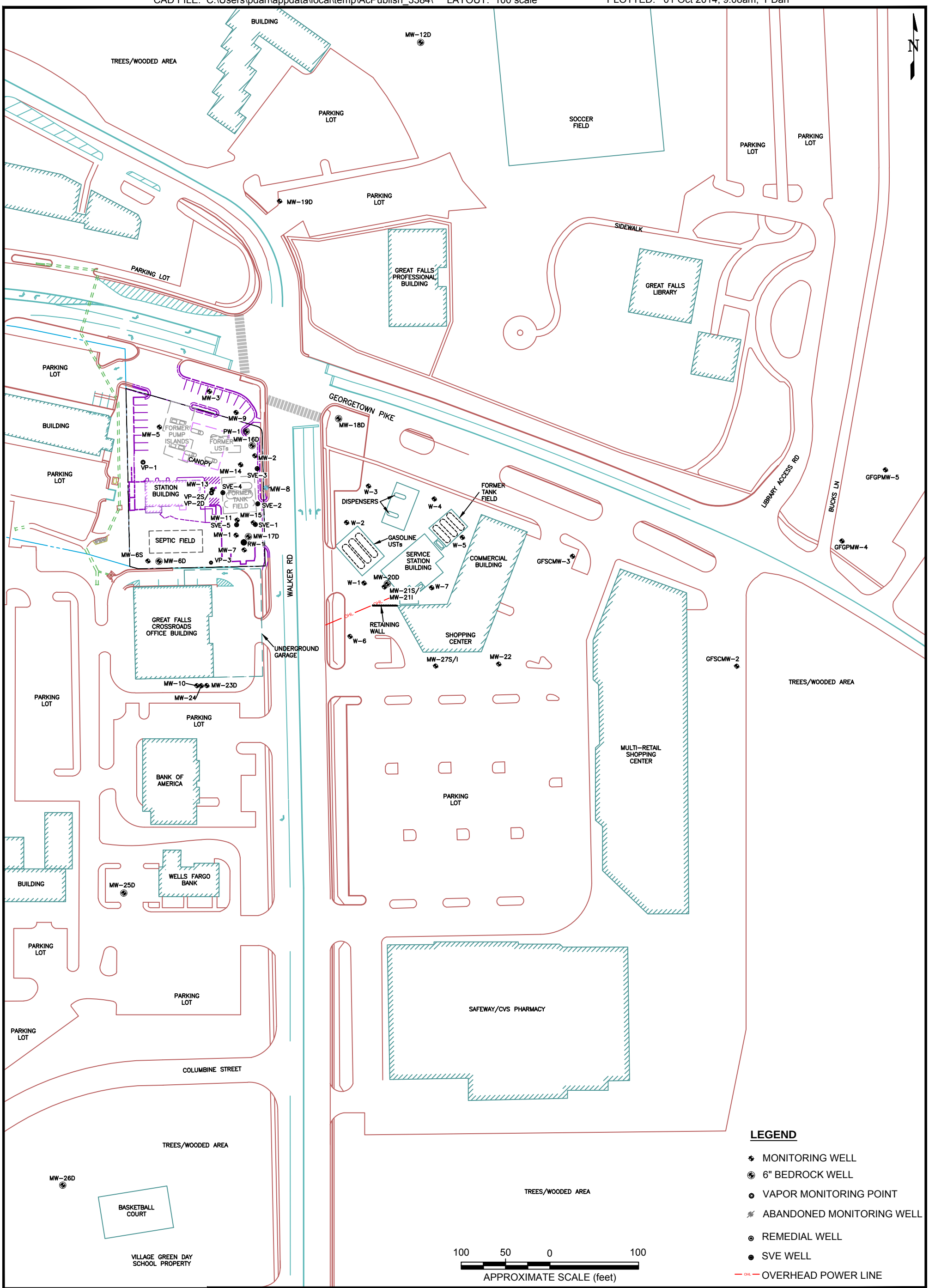

LEGEND

- MONITORING WELL
- 6" BEDROCK WELL
- VAPOR MONITORING POINT
- ABANDONED MONITORING WELL
- REMEDIAL WELL
- SVE WELL
- OHL — OVERHEAD POWER LINE

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SITE PLAN

INACTIVE FAIRFAX FACILITY #26140
9901 GEORGETOWN PIKE
GREAT FALLS, VIRGINIA

FIGURE
2

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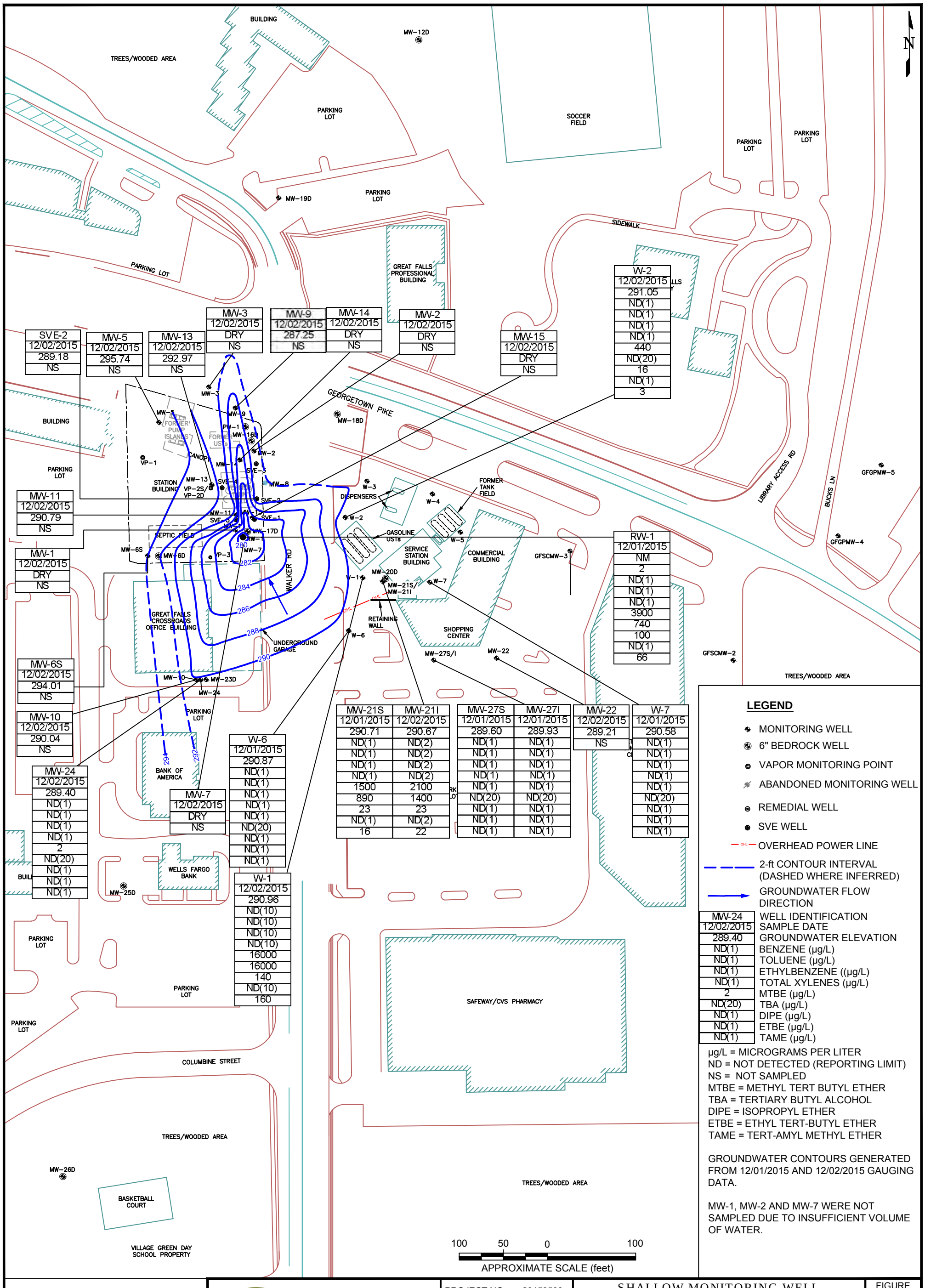

LEGEND

- MONITORING WELL
- 6" BEDROCK WELL
- VAPOR MONITORING POINT
- ABANDONED MONITORING WELL
- REMEDIAL WELL
- SVE WELL
- OVERHEAD POWER LINE
- 2-ft CONTOUR INTERVAL (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

MW-24	WELL IDENTIFICATION
12/02/2015	SAMPLE DATE
289.40	GROUNDWATER ELEVATION
ND(1)	BENZENE (µg/L)
ND(1)	TOLUENE (µg/L)
ND(1)	ETHYLBENZENE ((µg/L)
ND(1)	TOTAL XYLENES (µg/L)
2	MTBE (µg/L)
ND(20)	TBA (µg/L)
ND(1)	DIPE (µg/L)
ND(1)	ETBE (µg/L)
ND(1)	TAME (µg/L)

µg/L = MICROGRAMS PER LITER
ND = NOT DETECTED (REPORTING LIMIT)
NS = NOT SAMPLED
MTBE = METHYL TERT BUTYL ETHER
TBA = TERTIARY BUTYL ALCOHOL
DIPE = ISOPROPYL ETHER
ETBE = ETHYL TERT-BUTYL ETHER
TAME = TERT-AMYL METHYL ETHER

GROUNDWATER CONTOURS GENERATED FROM 12/01/2015 AND 12/02/2015 GAUGING DATA.

MW-1, MW-2 AND MW-7 WERE NOT SAMPLED DUE TO INSUFFICIENT VOLUME OF WATER.

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SHALLOW MONITORING WELL GROUNDWATER CONTOUR / HYDROCARBON DISTRIBUTION MAP DECEMBER 1 AND 2, 2015

INACTIVE FAIRFAX FACILITY #26140
9901 GEORGETOWN PIKE
GREAT FALLS, VIRGINIA

FIGURE
3

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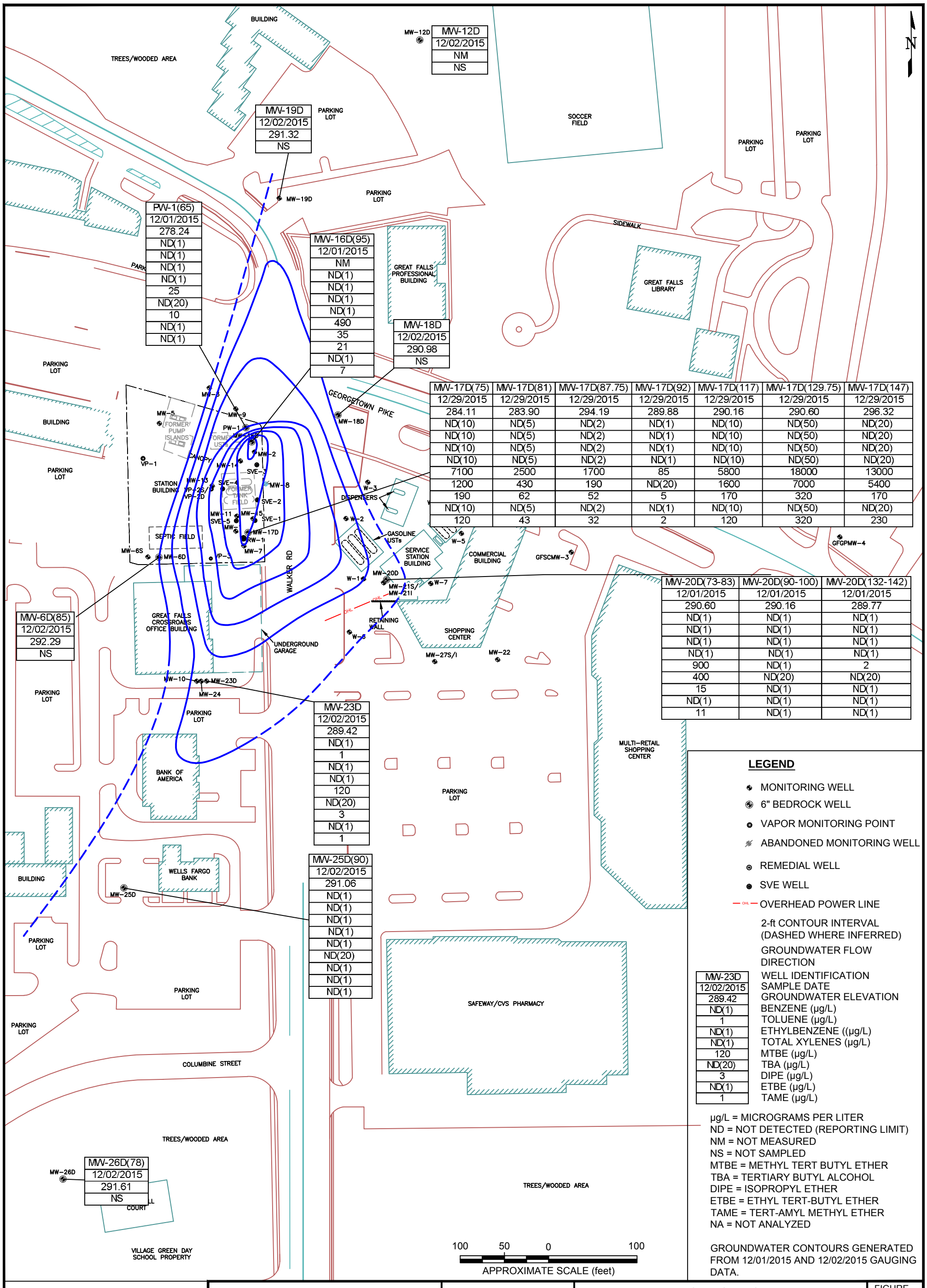

LEGEND

- MONITORING WELL
- 6" BEDROCK WELL
- VAPOR MONITORING POINT
- ABANDONED MONITORING WELL
- REMEDIAL WELL
- SVE WELL
- OHL — OVERHEAD POWER LINE
- 2-ft CONTOUR INTERVAL (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

MW-23D	WELL IDENTIFICATION
12/02/2015	SAMPLE DATE
289.42	GROUNDWATER ELEVATION
ND(1)	BENZENE (µg/L)
1	TOLUENE (µg/L)
ND(1)	ETHYLBENZENE ((µg/L)
ND(1)	TOTAL XYLENES (µg/L)
120	MTBE (µg/L)
ND(20)	TBA (µg/L)
3	DIPE (µg/L)
ND(1)	ETBE (µg/L)
1	TAME (µg/L)

µg/L = MICROGRAMS PER LITER
ND = NOT DETECTED (REPORTING LIMIT)
NM = NOT MEASURED
NS = NOT SAMPLED
MTBE = METHYL TERT BUTYL ETHER
TBA = TERTIARY BUTYL ALCOHOL
DIPE = ISOPROPYL ETHER
ETBE = ETHYL TERT-BUTYL ETHER
TAME = TERT-AMYL METHYL ETHER
NA = NOT ANALYZED

GROUNDWATER CONTOURS GENERATED FROM 12/01/2015 AND 12/02/2015 GAUGING DATA.

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DEEP MONITORING WELL GROUNDWATER CONTOUR / HYDROCARBON DISTRIBUTION MAP DECEMBER 1 AND 2, 2015

INACTIVE FAIRFAX FACILITY #26140
9901 GEORGETOWN PIKE
GREAT FALLS, VIRGINIA

FIGURE
4

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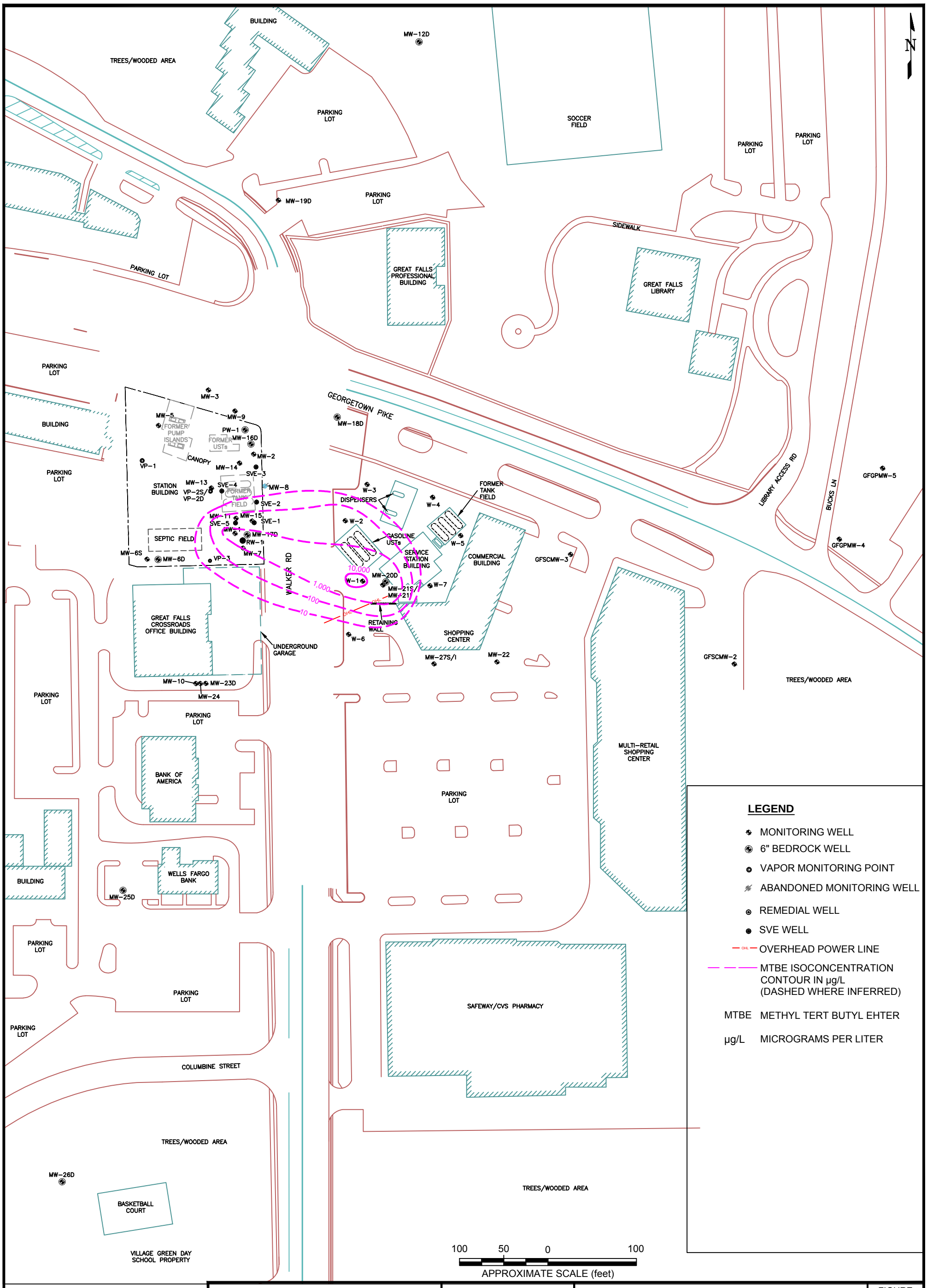

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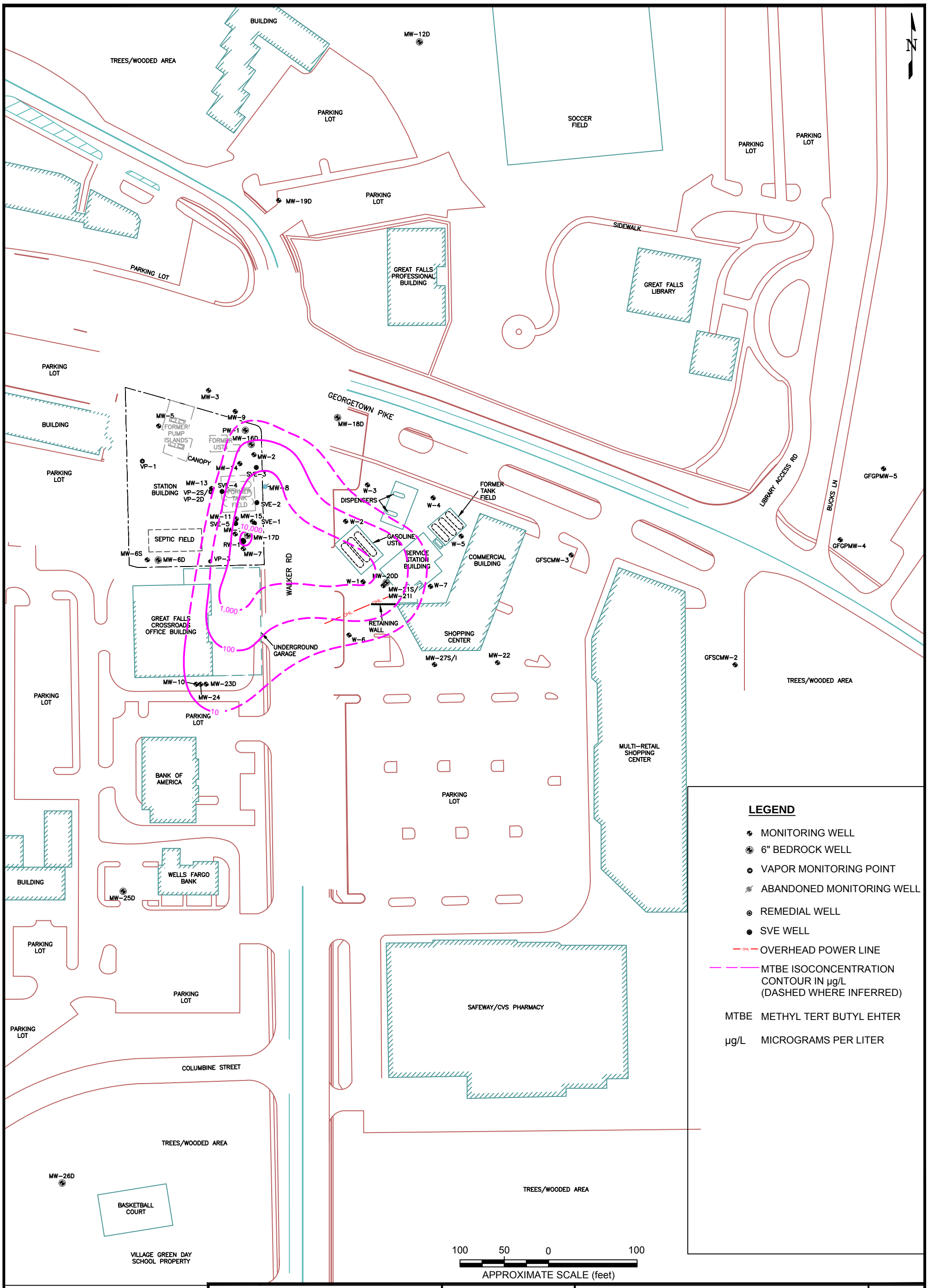
MTBE ISOCONCENTRATION MAP
SHALLOW MONITORING WELLS
DECEMBER 1, AND 2, 2015

INACTIVE FAIRFAX FACILITY #26140
9901 GEORGETOWN PIKE
GREAT FALLS, VIRGINIA

FIGURE
5

ATTACHED IMAGES: Images: 26140 deep ExtractPage1.jpg Images: 26140 shallow ExtractPage1.jpg Images: 26140 SHALLOWExtractPage1.jpg Images: 26140DEEPExtractPage2.jpg Images: 26140SHALLOWE
ATTACHED XREFS: XRef: X-Exst-S107520: XRef: Eng-B_11x17_P_StyleA



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PROJECT NO.	20153508
DRAWN:	1/27/16
DRAWN BY:	JR
CHECKED BY:	PW
FILE NAME:	26140_Q1_15.dwg

MTBE ISOCONCENTRATION MAP
DEEP MONITORING WELLS
DECEMBER 1, 2 AND 29, 2015

INACTIVE FAIRFAX FACILITY #26140
9901 GEORGETOWN PIKE
GREAT FALLS, VIRGINIA

FIGURE
6

PLOTTED: 30 Sep 2014, 5:18pm, pdan
LAYOUT: 8
CAD FILE: C:\Users\pdan\appdata\local\temp\AcPublish_6172\XRef: X-Exst-S107520: XRef: Eng-B_11x17_P_StyleA
ATTACHED XREFS:
ATTACHED IMAGES:
ALBUQUERQUE, NM

LEGEND

- MONITORING WELL
- 6" BEDROCK WELL
- VAPOR MONITORING POINT
- ABANDONED MONITORING WELL
- REMEDIAL WELL
- SVE WELL
- MASS FLUX TRANSECT LINE LOCATION

MW-19D
MW-12D (ACTUAL LOCATION 204' NORTH)
PARKING LOT
BUILDING
SIDEWALK
GEORGETOWN PIKE
MW-18D
MW-3
MW-9
MW-5
PW-1
MW-16D
MW-2
MW-14
SVE-3
VP-1
CANOPY
FORMER PUMP ISLANDS
FORMER USTs
MW-13
VP-2S/ VP-2D
SVE-4
MW-8
STATION BUILDING
FORMER TANK FIELD
SVE-2
MW-11
MW-15
SVE-1
SVE-5
MW-1
MW-17D
RW-1
MW-7
SEPTIC FIELD
MW-6S
MW-6D
VP-3
WALKER ROAD
A
A'
B
B'
C
C'
D
D'
W-3
W-4
W-2
W-5
W-1
W-7
W-6
DISPENSERS
CANOPY
GASOLINE USTs
FORMER TANK FIELD
HEATING OIL UST
SERVICE STATION BUILDING
COMMERCIAL BUILDING
MW-20D
MW-21S/ MW-21I
1000-GALLON USED OIL UST
STORAGE
RETAINING WALL
OHL
SHOPPING CENTER
MW-27S/I
MW-22
GREAT FALLS CROSSROADS OFFICE BUILDING 746 WALKER ROAD
UNDERGROUND GARAGE
MW-10
MW-24
MW-23D
GFSCMW-3
GFSCMW-2
LIBRARY ACCESS ROAD
BUCKS LN
GFGPMW-5
GFGPMW-4

N

60 30 0 60
APPROXIMATE SCALE (feet)

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PROJECT NO.	20143589
DRAWN:	9/19/14
DRAWN BY:	PD
CHECKED BY:	PW
FILE NAME:	26140_SP_14.dwg

MASS FLUX TRANSECT LOCATIONS

INACTIVE FAIRFAX FACILITY #26140
9901 GEORGETOWN PIKE
GREAT FALLS, VIRGINIA

FIGURE
7

TABLES

TABLE 1
Monitoring Well Construction Details

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia

Monitoring Well	Installation Date	Well Type	Well Diameter (inch)	Top of Casing Elevation (feet)	Riser / Casing Length (feet)	Screen Length / Open Interval (feet)	Total Borehole Depth (feet below grade)	Screen / Open Interval (feet below grade)	Comments
MW-1	7/20/2009	Monitoring	2	328.99	20	17	37	20-37	
MW-2	7/21/2009	Monitoring	2	332.05	25	15	42	25-40	
MW-3	7/22/2009	Monitoring	2	333.98	25	10	35	25-35	
MW-5	7/22/2009	Monitoring	2	332.35	30	10	42	30-40	
MW-6S	9/11/2009	Monitoring	4	321.85	20	15	35	20-35	
MW-6D	9/11/2009	Deep Monitoring	6	323.09	70	50	120	70-120	Open borehole after 70 feet
MW-7	10/16/2009	Monitoring	2	327.96	15	25	40	15-40	
MW-8	10/8/2009	Monitoring	2	330.54	25	20	45	25-45	Abandoned 9/19/2013
MW-9	10/9/2009	Monitoring	2	333.46	25	20	45	25-45	
MW-10	10/12/2009	Monitoring	2	324.17	10	30	40	10-40	
MW-11	10/14/2009	Monitoring	2	329.64	10	30	40	10-40	
MW-12D	1/11/2011	Deep Monitoring	6	326.43	100	60	160	100-160	Open borehole after 100 feet
MW-13	8/18/2011	Monitoring	4	332.00	25	20	45	25-45	
MW-14	8/18/2011	Monitoring	4	331.81	25	20	45	25-45	
MW-15	8/18/2011	Monitoring	4	328.95	25	20	45	25-45	
MW-16D	11/22/2011	Monitoring	6	332.90	85	25	110	85-110	Open borehole after 85 feet.
MW-17D	4/9/2013	Deep Monitoring	6	328.99	68	82	150	68-150	Converted to CMT on 4/9/2014.

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TABLE 1
Monitoring Well Construction Details

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia

Monitoring Well	Installation Date	Well Type	Well Diameter (inch)	Top of Casing Elevation (feet)	Riser / Casing Length (feet)	Screen Length / Open Interval (feet)	Total Borehole Depth (feet below grade)	Screen / Open Interval (feet below grade)	Comments
MW-17D (CMT-1)	4/9/2014	Discrete Interval Monitoring	0.4	328.84	71	6	150	71-77	The Continuous Multichannel Tubing (CMT) screens are approximately six inches in length. The Screen Length / Open Interval and Screen / Open Interval columns refer to the sand pack installed in the borehole annulus surrounding the CMT port.
MW-17D (CMT-2)	4/9/2014	Discrete Interval Monitoring	0.4	328.84	79	4	150	79-83	
MW-17D (CMT-3)	4/9/2014	Discrete Interval Monitoring	0.4	328.84	86	4	150	86-90	
MW-17D (CMT-4)	4/9/2014	Discrete Interval Monitoring	0.4	328.84	91	2	150	91-93	
MW-17D (CMT-5)	4/9/2014	Discrete Interval Monitoring	0.4	328.84	114	6	150	114-120	
MW-17D (CMT-6)	4/9/2014	Discrete Interval Monitoring	0.4	328.84	126	6	150	126-132	
MW-17D (CMT-7)	4/9/2014	Discrete Interval Monitoring	0.38	328.84	146	4	150	146-150	
MW-18D	11/22/2011	Deep Monitoring	6	334.88	97	58	136	92-150	Open borehole after 92 feet. Borehole blocked by rock at 101 feet during testing on 4/30/13.
MW-19D	3/8/2014	Deep Monitoring	2	341.91	80	20	100	80-100	
MW-20D	4/7/2014	Deep Monitoring	6	329.80	70	72	142	70-142	Open borehole after 70 feet.
MW-20D	4/7/2014	Deep Monitoring	1	329.57	73	73	83	70-142	MW-20D was converted to three discrete monitoring intervals on 8/20/2014
MW-20D	4/7/2014	Deep Monitoring	1	329.58	90	90	100	70-142	
MW-20D	4/7/2014	Deep Monitoring	1	329.56	132	132	142	70-142	
MW-21I	4/1/2014	Monitoring	2	329.71	56	10	66	56-66	Part of a nested well pair including MW-21S
MW-21S	4/1/2014	Monitoring	2	329.69	26	20	46	26-46	Part of a nested well pair including MW-21I
MW-22	4/3/2014	Monitoring	2	320.97	20	20	40	20-40	
MW-23D	5/1/2014	Deep Monitoring	2	324.81	90	10	100	90-100	
MW-24	4/3/2014	Monitoring	2	324.49	50	10	60	50-60	

TABLE 1
Monitoring Well Construction Details

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia

Monitoring Well	Installation Date	Well Type	Well Diameter (inch)	Top of Casing Elevation (feet)	Riser / Casing Length (feet)	Screen Length / Open Interval (feet)	Total Borehole Depth (feet below grade)	Screen / Open Interval (feet below grade)	Comments
MW-25D	8/17/2014	Deep Monitoring	6	317.18	65	36	101	65-101	Open borehole after 65 feet.
MW-26D	8/21/2014	Deep Monitoring	6	295.13	57	47	104	57-104	Open borehole after 57 feet.
MW-27I	8/21/2014	Monitoring	2	323.35	55	10	65	55-65	Part of a nested well pair including MW-27S
MW-27S	8/21/2014	Monitoring	2	323.40	20	20	40	20-40	Part of a nested well pair including MW-27I
PW-1	Unknown	Deep Monitoring	6	334.54	55	20	75	55 - 75	Former potable well. Partially abandoned in November 2011. Original well depth was approximately 116 feet.
RW-1	3/13/2014	Recovery	6	328.31	21	70	91	21-91	Total drilled depth was 100 feet; borehole collapsed to 91 feet during the installation of screen and casing.
SVE-1	2/17/2014	Soil Vapor Extraction	4	NSVD	15	20	35	15-35	
SVE-2	2/18/2014	Soil Vapor Extraction	4	329.64	25	20	45	25-45	Designed to serve as a SVE well and monitoring well to replace the abandoned MW-8
SVE-3	2/19/2014	Soil Vapor Extraction	4	NSVD	15	20	35	15-35	
SVE-4	2/19/2014	Soil Vapor Extraction	4	NSVD	15	20	35	15-35	
SVE-5	2/18/2014	Soil Vapor Extraction	4	NSVD	15	20	35	15-35	

Notes:
NSVD - Not Surveyed to Vertical Datum
CMT - Continuous Multichannel Tubing

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TABLE 2

Monitoring Well Gauging Data Summary
Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia

December 2, 2015

Sample ID	Date	Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Comments
MW-1	12/02/2015	328.99	DRY	DRY	DRY	DRY	
MW-2	12/02/2015	332.05	DRY	DRY	DRY	DRY	
MW-3	12/02/2015	333.98	DRY	DRY	DRY	DRY	
MW-5	12/02/2015	332.35	36.61	ND	ND	295.74	
MW-6S	12/02/2015	321.85	27.84	ND	ND	294.01	
MW-6D	12/02/2015	323.09	30.80	ND	ND	292.29	
MW-7	12/02/2015	327.96	DRY	DRY	DRY	DRY	
SVE-2	12/02/2015	329.64	40.46	ND	ND	289.18	
MW-9	12/02/2015	333.46	46.21	ND	ND	287.25	
MW-10	12/02/2015	324.17	34.13	ND	ND	290.04	
MW-11	12/02/2015	329.64	38.85	ND	ND	290.79	
MW-13	12/02/2015	332.00	39.03	ND	ND	292.97	
MW-14	12/02/2015	331.82	DRY	DRY	DRY	DRY	
MW-15	12/02/2015	328.95	DRY	DRY	DRY	DRY	
MW-16D	12/02/2015	332.90	55.30	ND	ND	277.60	
MW-18D	12/02/2015	334.88	43.90	ND	ND	290.98	
MW-19D	12/02/2015	341.91	50.59	ND	ND	291.32	
MW-20D(73-83)	12/02/2015	329.57	40.70	ND	ND	288.87	
MW-20D(90-100)	12/02/2015	329.58	39.82	ND	ND	289.76	
MW-20D(132-142)	12/02/2015	329.56	39.81	ND	ND	289.75	
MW-21S	12/02/2015	329.69	39.07	ND	ND	290.62	
MW-21I	12/02/2015	329.71	39.04	ND	ND	290.67	
MW-22	12/02/2015	320.97	31.76	ND	ND	289.21	
MW-23D	12/02/2015	324.81	35.39	ND	ND	289.42	
MW-24	12/02/2015	324.49	35.09	ND	ND	289.40	
MW-25D	12/02/2015	317.18	26.12	ND	ND	291.06	
MW-26D	12/02/2015	295.13	3.52	ND	ND	291.61	
MW-27S	12/02/2015	323.40	33.76	ND	ND	289.64	
MW-27I	12/02/2015	323.35	33.74	ND	ND	289.61	
PW-1	12/02/2015	334.54	48.03	ND	ND	286.51	
RW-1	12/02/2015	328.31	48.37	ND	ND	279.94	
W-1	12/02/2015	328.53	37.57	ND	ND	290.96	
W-2	12/02/2015	329.47	38.42	ND	ND	291.05	
W-3	12/02/2015	330.14	38.92	ND	ND	291.22	
W-4	12/02/2015	327.67	36.46	ND	ND	291.21	
W-5	12/02/2015	327.81	DRY	DRY	DRY	DRY	
W-6	12/02/2015	325.21	34.10	ND	ND	291.11	
W-7	12/02/2015	329.77	39.27	ND	ND	290.50	

Notes:
GW - Groundwater
ND - Not detected
NM - Not monitored
NSVD - Not surveyed to vertical datum

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Table 3

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-1	7/24/2009	100.00	30.45	ND	ND	69.55	13.3	<1.0	0.53	24	193000	NA	NA	NA	NA	Screened from 20-37'
	8/18/2009	328.99	NM	NM	NM	NM	ND(200)	ND(200)	ND(200)	ND(200)	138000	NA	NA	NA	NA	
	10/15/2009	328.99	31.88	ND	ND	297.11	ND(200)	ND(200)	ND(200)	ND(200)	139000	47000	4070	ND(1000)	2130	
	6/22/2010	328.99	28.65	ND	ND	300.34	ND(5)	ND(7)	ND(8)	ND(8)	13000	NA	NA	NA	NA	
	9/30/2010	328.99	31.11	ND	ND	297.88	ND(50)	ND(70)	ND(80)	110	240000	NA	NA	NA	NA	
	12/16/2010	328.99	30.93	ND	ND	298.06	ND(100)	ND(140)	ND(160)	ND(160)	220000	NA	NA	NA	NA	
	2/17/2011	328.99	31.46	ND	ND	297.53	ND(250)	ND(350)	ND(400)	ND(400)	190000	NA	NA	NA	NA	
	5/24/2011	328.99	30.24	ND	ND	298.75	ND(50)	ND(70)	ND(80)	ND(80)	140000	NA	NA	NA	NA	
	9/2/2011	328.99	32.92	ND	ND	296.07	ND(50)	ND(70)	ND(80)	ND(80)	160000	NA	NA	NA	NA	
	12/29/2011	328.99	30.99	ND	ND	298.00	ND(50)	ND(70)	ND(80)	ND(80)	160000	NA	NA	NA	NA	
	6/1/2012	328.99	31.47	ND	ND	297.52	ND(50)	ND(70)	ND(80)	ND(80)	140000	NA	NA	NA	NA	
	2/25/2013	328.99	32.84	ND	ND	296.15	ND(250)	ND(250)	ND(250)	ND(250)	120000	15000	3700	ND(250)	1700	
	6/6/2013	328.99	32.14	ND	ND	296.85	ND(50)	ND(70)	ND(80)	ND(80)	150000	NA	NA	NA	NA	
	12/19/2013	328.99	33.06	ND	ND	295.93	ND(250)	ND(250)	ND(250)	ND(250)	84000	6900	2200	ND(250)	1100	
	3/25/2014	328.99	31.04	ND	ND	297.95	ND(500)	ND(500)	ND(500)	ND(500)	71000	ND(8000)	1200	ND(500)	850	
	6/20/2014	328.99	29.43	ND	ND	299.56	ND(20)	ND(20)	ND(20)	ND(20)	20000	ND(400)	490	ND(20)	210	
	9/8/2014	328.99	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	328.99	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/11/2015	328.99	33.01	ND	ND	295.98	ND(5)	ND(5)	ND(5)	ND(5)	2800	180	23	ND(5)	20	
	6/4/2015	328.99	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	328.99	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	328.99	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	0	0	0	-43	-5	-10	0	-10	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-2	7/24/2009	102.90	33.19	ND	ND	69.71	70.2	8.0	1.0	131	107000	NA	NA	NA	NA	Screened from 25-40'
	8/18/2009	332.05	NM	NM	NM	NM	ND(100)	ND(100)	ND(100)	ND(100)	87100	NA	NA	NA	NA	
	10/15/2009	332.05	34.41	ND	ND	297.64	ND(200)	ND(200)	ND(200)	ND(200)	122000	ND(5000)	6130	ND(1000)	2420	
	7/1/2010	332.05	31.63	ND	ND	300.42	ND(100)	91.3	ND(100)	ND(100)	52400	NA	NA	NA	NA	
	9/30/2010	332.05	32.96	ND	ND	299.09	ND(25)	ND(35)	ND(40)	ND(40)	37000	NA	NA	NA	NA	
	12/16/2010	332.05	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	Well inaccessible
	2/17/2011	332.05	34.15	ND	ND	297.90	ND(100)	ND(140)	ND(160)	ND(160)	140000	NA	NA	NA	NA	
	5/24/2011	332.05	32.92	ND	ND	299.13	ND(25)	ND(35)	ND(40)	ND(40)	54000	NA	NA	NA	NA	
	9/2/2011	332.05	35.53	ND	ND	296.52	ND(50)	ND(70)	ND(80)	ND(80)	160000	NA	NA	NA	NA	
	12/29/2011	332.05	33.64	ND	ND	298.41	ND(25)	ND(35)	ND(40)	ND(40)	49000	NA	NA	NA	NA	
	6/1/2012	332.05	34.16	ND	ND	297.89	ND(50)	ND(70)	ND(80)	ND(80)	100000	NA	NA	NA	NA	
	2/25/2013	332.05	35.47	ND	ND	296.58	ND(250)	ND(250)	ND(250)	ND(250)	71000	4600	1900	ND(250)	1100	
	6/6/2013	332.05	34.91	ND	ND	297.14	ND(3)	ND(4)	ND(4)	ND(4)	3500	NA	NA	NA	NA	
	12/19/2013	332.05	35.50	ND	ND	296.55	ND(130)	ND(130)	ND(130)	ND(130)	19000	6800	710	ND(130)	280	
	3/25/2014	332.05	33.30	ND	ND	298.75	ND(50)	ND(50)	ND(50)	ND(50)	7500	2500	310	ND(50)	110	
	6/20/2014	332.05	31.27	ND	ND	300.78	ND(1)	ND(1)	ND(1)	ND(1)	450	ND(20)	29	ND(1)	7	
	9/10/2014	332.05	33.74	ND	ND	298.31	ND(1)	ND(1)	ND(1)	ND(1)	860	ND(20)	38	ND(1)	15	
	12/9/2014	332.05	40.02	ND	ND	292.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	Insufficient volume to sample
	3/12/2015	332.05	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	332.05	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	332.05	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	332.05	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	0	0	0	-37	-7	-8	0	-8	

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1340 Charwood Road, Suite I , Hanover, MD

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-3	7/24/2009	104.99	33.67	ND	ND	71.32	<0.50	<1.0	<1.0	ND	5.7	NA	NA	NA	NA	Screened from 25-35'
	8/18/2009	333.98	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	10/15/2009	333.98	34.51	ND	ND	299.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	Insufficent volume to sample
	7/1/2010	333.98	32.39	ND	ND	301.59	ND(2)	ND(2)	ND(2)	ND(2)	1.9	NA	NA	NA	NA	
	9/30/2010	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/16/2010	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	2/17/2011	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/24/2011	333.98	33.63	ND	ND	300.35	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	2 J	NA	NA	NA	NA	
	9/2/2011	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/29/2011	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/1/2012	333.98	34.56	ND	ND	299.42	NS	NS	NS	NS	NS	NS	NS	NS	NS	Insufficient volume to sample
	2/25/2013	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/6/2013	333.98	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/18/2013	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/24/2014	333.98	34.25	ND	ND	299.73	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/19/2014	333.98	32.09	ND	ND	301.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/4/2014	333.98	34.42	ND	ND	299.56	NS	NS	NS	NS	NS	NS	NS	NS	NS	Insufficent volume to sample
	12/9/2014	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	333.98	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-5	7/24/2009	103.43	30.72	ND	ND	72.71	<0.50	<1.0	<1.0	ND	1.3	NA	NA	NA	NA	Screened from 30-40'
	8/18/2009	332.35	NM	NM	NM	NM	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	0.48	NA	NA	NA	NA	
	10/15/2009	332.35	32.51	ND	ND	299.84	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	11.4	ND(25)	0.46	ND(5.0)	ND(5.0)	
	6/22/2010	332.35	29.40	ND	ND	302.95	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1 J	NA	NA	NA	NA	
	9/30/2010	332.35	32.30	ND	ND	300.05	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1	NA	NA	NA	NA	
	12/16/2010	332.35	32.12	ND	ND	300.23	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	12	NA	NA	NA	NA	
	2/17/2011	332.35	32.31	ND	ND	300.04	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	2 J	NA	NA	NA	NA	
	5/24/2011	332.35	30.84	ND	ND	301.51	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.9 J	NA	NA	NA	NA	
	9/2/2011	332.35	33.39	ND	ND	298.96	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.9 J	NA	NA	NA	NA	
	12/29/2011	332.35	31.36	ND	ND	300.99	ND(0.5)	1 J	ND(0.8)	1 J	7	NA	NA	NA	NA	
	6/1/2012	332.35	31.93	ND	ND	300.42	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.8 J	NA	NA	NA	NA	
	2/25/2013	332.35	33.28	ND	ND	299.07	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	6/6/2013	332.35	32.55	ND	ND	299.80	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1 J	NA	NA	NA	NA	
	12/18/2013	332.35	33.92	ND	ND	298.43	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	3/24/2014	332.35	31.32	ND	ND	301.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/19/2014	332.35	29.30	ND	ND	303.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/2/2014	332.35	31.37	ND	ND	300.98	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	332.35	35.19	ND	ND	297.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	332.35	34.59	ND	ND	297.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	332.35	33.31	ND	ND	299.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/3/2015	332.35	35.55	ND	ND	296.80	ND(1)	ND(1)	ND(1)	2	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	332.35	36.61	ND	ND	295.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	-3	0	7	-14	0	0	0	0	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-6S	9/24/2009	NM	NM	NM	NM	NM	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	2.8	ND(25)	2.1	ND(5.0)	ND(5.0)	Screened from 20-35'
	10/15/2009	321.85	23.35	ND	ND	298.50	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	2.8	ND(25)	1.3	ND(5.0)	ND(5.0)	
	6/22/2010	321.85	20.22	ND	ND	301.63	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	2	NA	NA	NA	NA	
	9/30/2010	321.85	23.00	ND	ND	298.85	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.9	NA	NA	NA	NA	
	12/16/2010	321.85	22.82	ND	ND	299.03	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1	NA	NA	NA	NA	
	2/17/2011	321.85	23.02	ND	ND	298.83	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1 J	NA	NA	NA	NA	
	5/24/2011	321.85	21.66	ND	ND	300.19	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1 J	NA	NA	NA	NA	
	9/2/2011	321.85	24.04	ND	ND	297.81	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1 J	NA	NA	NA	NA	
	12/29/2011	321.85	22.15	ND	ND	299.70	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	2 J	NA	NA	NA	NA	
	6/1/2012	321.85	22.72	ND	ND	299.13	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.8 J	NA	NA	NA	NA	
	2/25/2013	321.85	24.03	ND	ND	297.82	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	6/6/2013	321.85	23.49	ND	ND	298.36	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	12/17/2013	321.85	24.63	ND	ND	297.22	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	3/24/2014	321.85	22.19	ND	ND	299.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/19/2014	321.85	20.01	ND	ND	301.84	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/3/2014	321.85	22.41	ND	ND	299.44	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	321.85	26.42	ND	ND	295.43	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	321.85	25.91	ND	ND	295.94	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	321.85	36.59	ND	ND	285.26	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/2/2015	321.85	27.01	ND	ND	294.84	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	321.85	27.84	ND	ND	294.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	0	0	0	-26	0	0	0	0	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-7	10/15/2009	327.96	31.21	ND	ND	296.75	2.7	ND(10)	ND(10)	ND(10)	10600	2650	232	ND(50)	217	Screened from 15-40'
	6/22/2010	327.96	28.00	ND	ND	299.96	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	87	NA	NA	NA	NA	
	9/30/2010	327.96	30.24	ND	ND	297.72	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	12/16/2010	327.96	30.15	ND	ND	297.81	2	ND(1)	ND(2)	ND(2)	2100	NA	NA	NA	NA	
	2/17/2011	327.96	30.75	ND	ND	297.21	ND(10)	ND(14)	ND(16)	ND(16)	9700	NA	NA	NA	NA	
	5/24/2011	327.96	29.56	ND	ND	298.40	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	130	NA	NA	NA	NA	
	9/2/2011	327.96	32.21	ND	ND	295.75	11 J	ND(14)	ND(16)	ND(16)	16000	NA	NA	NA	NA	
	12/29/2011	327.96	30.24	ND	ND	297.72	ND(1)	ND(1)	ND(2)	ND(2)	1600	NA	NA	NA	NA	
	6/1/2012	327.96	30.74	ND	ND	297.22	ND(5)	ND(7)	ND(8)	ND(8)	6700	NA	NA	NA	NA	
	2/25/2013	327.96	32.23	ND	ND	295.73	ND(250)	ND(250)	ND(250)	ND(250)	61000	14000	1700	ND(250)	940	
	6/6/2013	327.96	31.49	ND	ND	296.47	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	950	NA	NA	NA	NA	
	12/18/2013	327.96	32.79	ND	ND	295.17	ND(250)	ND(250)	ND(250)	ND(250)	140000	29000	3000	ND(250)	1600	
	3/28/2014	327.96	30.35	ND	ND	297.61	ND(1)	ND(1)	ND(1)	ND(1)	430	ND(20)	13	ND(1)	6	
	6/20/2014	327.96	28.19	ND	ND	299.77	ND(1)	ND(1)	ND(1)	ND(1)	72	35	9	ND(1)	ND(1)	
	9/8/2014	327.96	37.53	ND	ND	290.43	NS	NS	NS	NS	NS	NS	NS	NS	NS	Insufficent volume to sample
	12/9/2014	327.96	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	327.96	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	327.96	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	327.96	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	327.96	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							-5	0	0	0	-7	-2	-4	0	-4	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-8	10/15/2009	330.54	34.01	ND	ND	296.53	ND(500)	ND(500)	ND(500)	ND(500)	226000	30800	6250	ND(2500)	3080	Screened from 25-45'
	6/22/2010	330.54	30.91	ND	ND	299.63	ND(5)	ND(7)	ND(8)	ND(8)	15000	NA	NA	NA	NA	
	9/30/2010	330.54	32.97	ND	ND	297.57	11	ND(14)	ND(16)	ND(16)	44000	NA	NA	NA	NA	
	12/16/2010	330.54	32.85	ND	ND	297.69	ND(25)	ND(35)	ND(40)	ND(40)	49000	NA	NA	NA	NA	
	2/17/2011	330.54	33.62	ND	ND	296.92	ND(25)	ND(35)	ND(40)	ND(40)	41000	NA	NA	NA	NA	
	5/24/2011	330.54	32.44	ND	ND	298.10	ND(5)	ND(7)	ND(8)	ND(8)	8400	NA	NA	NA	NA	
	9/2/2011	330.54	35.18	ND	ND	295.36	ND(10)	ND(14)	ND(16)	ND(16)	15000	NA	NA	NA	NA	
	12/29/2011	330.54	33.23	ND	ND	297.31	ND(3)	ND(4)	ND(4)	ND(4)	1800	NA	NA	NA	NA	
	6/1/2012	330.54	33.73	ND	ND	296.81	3 J	ND(1)	ND(2)	4 J	1200	NA	NA	NA	NA	
	2/25/2013	330.54	35.27	ND	ND	295.27	ND(5)	ND(5)	ND(5)	ND(5)	180	280	220	ND(5)	ND(5)	
	6/6/2013	330.54	34.49	ND	ND	296.05	0.7 J	ND(0.7)	ND(0.8)	ND(0.8)	160	NA	NA	NA	NA	
	9/19/2013	330.54	36.01	ND	ND	294.53	ND(5)	ND(5)	ND(5)	ND(5)	170	NA	NA	NA	NA	Abandoned (9/19/2013)
Mann-Kendall Statistic							4	0	0	5	-53	N/A	N/A	N/A	N/A	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
SVE-2	3/25/2014	329.69	31.32	ND	ND	298.37	ND(1)	ND(1)	ND(1)	ND(1)	600	76	44	ND(1)	11	Screened from 25-45'
	6/19/2014	329.69	27.45	ND	ND	302.24	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/10/2014	329.69	30.79	ND	ND	298.90	ND(1)	ND(1)	ND(1)	ND(1)	8	ND(20)	3	ND(1)	ND(1)	
	12/9/2014	329.69	35.25	ND	ND	294.44	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	329.69	34.40	ND	ND	295.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	329.69	36.48	ND	ND	293.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/3/2015	329.69	39.75	ND	ND	289.94	ND(1)	ND(1)	ND(1)	ND(1)	45	ND(20)	5	ND(1)	ND(1)	
	12/2/2015	329.64	40.46	ND	ND	289.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-9	10/15/2009	333.46	35.60	ND	ND	297.86	ND(1.0)	0.33	ND(1.0)	0.38	64.7	ND(25)	125	ND(5.0)	2.9	Screened from 25-45'
	6/22/2010	333.46	32.32	ND	ND	301.14	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	22	NA	NA	NA	NA	
	9/30/2010	333.46	34.85	ND	ND	298.61	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	52	NA	NA	NA	NA	
	12/16/2010	333.46	34.73	ND	ND	298.73	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	81	NA	NA	NA	NA	
	2/17/2011	333.46	35.28	ND	ND	298.18	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	48	NA	NA	NA	NA	
	5/24/2011	333.46	34.04	ND	ND	299.42	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	26	NA	NA	NA	NA	
	9/2/2011	333.46	36.86	ND	ND	296.60	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	80	NA	NA	NA	NA	
	12/29/2011	333.46	34.68	ND	ND	298.78	ND(0.5)	2 J	ND(0.8)	1 J	58	NA	NA	NA	NA	
	6/1/2012	333.46	35.17	ND	ND	298.29	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	190	NA	NA	NA	NA	
	2/25/2013	333.46	36.65	ND	ND	296.81	ND(5)	ND(5)	ND(5)	ND(5)	55	ND(80)	17	ND(5)	ND(5)	
	6/6/2013	333.46	35.98	ND	ND	297.48	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	20	NA	NA	NA	NA	
	12/18/2013	333.46	37.33	ND	ND	296.13	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	3/24/2014	333.46	34.67	ND	ND	298.79	ND(5)	ND(5)	ND(5)	ND(5)	12	ND(80)	6	ND(5)	ND(5)	
	6/19/2014	333.46	32.56	ND	ND	300.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/8/2014	333.46	35.91	ND	ND	297.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	333.46	40.12	ND	ND	293.34	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	333.46	40.65	ND	ND	292.81	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	333.46	39.21	ND	ND	294.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	333.46	41.15	ND	ND	292.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	Insufficient volume to sample
	12/2/2015	333.46	46.21	ND	ND	287.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	-2	0	-2	-14	N/A	N/A	N/A	N/A	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
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)	10.3	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	Screened from 10-40'
	6/22/2010	324.17	25.80	ND	ND	298.37	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	4	NA	NA	NA	NA	
	12/16/2010	324.17	27.72	ND	ND	296.45	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	10	NA	NA	NA	NA	
	2/17/2011	324.17	28.05	ND	ND	296.12	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	7	NA	NA	NA	NA	
	5/24/2011	324.17	27.04	ND	ND	297.13	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	3 J	NA	NA	NA	NA	
	9/2/2011	324.17	29.60	ND	ND	294.57	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	8	NA	NA	NA	NA	
	12/29/2011	324.17	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	Well inaccessible
	6/1/2012	324.17	28.17	ND	ND	296.00	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	4 J	NA	NA	NA	NA	
	2/25/2013	324.17	29.45	ND	ND	294.72	ND(5)	ND(5)	ND(5)	ND(5)	7	ND(80)	ND(5)	ND(5)	ND(5)	
	6/6/2013	324.17	28.87	ND	ND	295.30	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	12/18/2013	324.17	30.04	ND	ND	294.13	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	3/24/2014	324.17	27.24	ND	ND	296.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/18/2014	324.17	25.67	ND	ND	298.50	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/3/2014	324.17	28.02	ND	ND	296.15	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	324.17	32.88	ND	ND	291.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	324.17	32.22	ND	ND	291.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	324.17	31.04	ND	ND	293.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/2/2015	324.17	33.51	ND	ND	290.66	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	324.17	34.13	ND	ND	290.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	0	0	0	-24	0	0	0	0	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-11	10/16/2009	NM	NM	NM	NM	NM	15.3	ND(10)	ND(10)	10.9	38400	23300	1290	ND(50)	464	Screened from 10-40'
	6/22/2010	329.64	29.00	ND	ND	300.64	ND(50)	ND(70)	ND(80)	ND(80)	170000	NA	NA	NA	NA	
	9/30/2010	329.64	31.42	ND	ND	298.22	ND(50)	ND(70)	ND(80)	ND(80)	130000	NA	NA	NA	NA	
	12/16/2010	329.64	31.22	ND	ND	298.42	ND(25)	ND(35)	ND(40)	ND(40)	41000	NA	NA	NA	NA	
	2/17/2011	329.64	31.81	ND	ND	297.83	ND(10)	ND(14)	ND(16)	ND(16)	23000	NA	NA	NA	NA	
	5/24/2011	329.64	30.56	ND	ND	299.08	ND(13)	ND(18)	ND(20)	ND(20)	16000	NA	NA	NA	NA	
	9/2/2011	329.64	33.22	ND	ND	296.42	4 J	ND(4)	ND(4)	ND(4)	7400	NA	NA	NA	NA	
	12/29/2011	329.64	31.29	ND	ND	298.35	ND(10)	ND(14)	ND(16)	ND(16)	9000	NA	NA	NA	NA	
	6/1/2012	329.64	31.77	ND	ND	297.87	7 J	21 J	ND(8)	34 J	4200	NA	NA	NA	NA	
	2/25/2013	329.64	33.03	ND	ND	296.61	ND(10)	ND(10)	ND(10)	ND(10)	1400	180	530	ND(10)	22	
	6/6/2013	329.64	32.46	ND	ND	297.18	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	770	NA	NA	NA	NA	
	12/18/2013	329.64	33.91	ND	ND	295.73	ND(5)	ND(5)	ND(5)	7	140	ND(80)	130	ND(5)	ND(5)	
	3/24/2014	329.64	31.19	ND	ND	298.45	ND(5)	ND(5)	ND(5)	ND(5)	41	ND(80)	25	ND(5)	ND(5)	
	6/20/2014	329.64	28.93	ND	ND	300.71	ND(1)	ND(1)	ND(1)	ND(1)	27	ND(20)	6	ND(1)	ND(1)	
	9/10/2014	329.64	30.90	ND	ND	298.74	ND(1)	ND(1)	ND(1)	ND(1)	26	ND(20)	13	ND(1)	ND(1)	
	12/9/2014	329.64	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	329.64	36.52	ND	ND	293.12	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	329.64	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	329.64	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	329.64	38.85	ND	ND	290.79	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							-7	-2	0	1	-53	-4	-8	0	-4	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-13	9/2/2011	332.00	34.37	ND	ND	297.63	5	ND(0.7)	ND(0.8)	5	6800	NA	NA	NA	NA	Screened from 25-45'
	12/29/2011	332.00	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	Well inaccessible
	6/1/2012	332.00	32.88	ND	ND	299.12	ND(5)	ND(7)	ND(8)	ND(8)	5700	NA	NA	NA	NA	
	2/25/2013	332.00	33.80	ND	ND	298.20	ND(25)	ND(25)	ND(25)	ND(25)	5300	ND(400)	150	ND(25)	80	
	6/6/2013	332.00	33.33	ND	ND	298.67	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1300	NA	NA	NA	NA	
	12/19/2013	332.00	34.43	ND	ND	297.57	ND(5)	ND(5)	ND(5)	ND(5)	1100	ND(80)	43	ND(5)	18	
	3/24/2014	332.00	32.29	ND	ND	299.71	ND(5)	ND(5)	ND(5)	ND(5)	21	ND(80)	ND(5)	ND(5)	ND(5)	
	6/19/2014	332.00	30.07	ND	ND	301.93	ND(1)	ND(1)	ND(1)	ND(1)	3	ND(20)	ND(1)	ND(1)	ND(1)	
	9/10/2014	332.00	32.95	ND	ND	299.05	ND(1)	ND(1)	ND(1)	ND(1)	7	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	332.00	30.16	ND	ND	301.84	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	332.00	34.27	ND	ND	297.73	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	332.00	35.94	ND	ND	296.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/3/2015	332.00	38.73	ND	ND	293.27	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	332.00	39.03	ND	ND	292.97	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							-7	0	0	-7	-26	0	-1	0	-1	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-14	9/2/2011	331.81	35.02	ND	ND	296.79	54	ND(4)	ND(4)	55	170000	NA	NA	NA	NA	Screened from 25-45'
	12/29/2011	331.81	33.36	ND	ND	298.45	ND(50)	ND(70)	ND(80)	ND(80)	99000	NA	NA	NA	NA	
	6/1/2012	331.81	33.90	ND	ND	297.91	ND(50)	ND(70)	ND(80)	ND(80)	91000	NA	NA	NA	NA	
	2/25/2013	331.81	35.07	ND	ND	296.74	ND(50)	ND(50)	ND(50)	ND(50)	29000	2500	1100	ND(50)	450	
	6/6/2013	331.81	34.35	ND	ND	297.46	ND(1)	ND(1)	ND(2)	ND(2)	3600	NA	NA	NA	NA	
	12/19/2013	331.81	35.15	ND	ND	296.66	ND(5)	ND(5)	ND(5)	ND(5)	33	ND(80)	11	ND(5)	ND(5)	
	3/24/2014	331.82	32.91	ND	ND	298.91	ND(5)	ND(5)	ND(5)	ND(5)	14	ND(80)	ND(5)	ND(5)	ND(5)	
	6/19/2014	331.82	27.27	ND	ND	304.55	ND(1)	ND(1)	ND(1)	ND(1)	62	ND(20)	14	ND(1)	2	
	9/10/2014	331.82	24.65	ND	ND	307.17	ND(1)	ND(1)	ND(1)	ND(1)	190	ND(20)	5	ND(1)	3	
	12/9/2014	331.82	33.27	ND	ND	298.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	331.82	24.74	ND	ND	307.08	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	331.82	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	331.82	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	331.82	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							-8	0	0	-8	-26	0	0	0	0	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-15	9/2/2011	328.95	33.06	ND	ND	295.89	ND(0.5)	ND(0.7)	ND(0.8)	1 J	21000	NA	NA	NA	NA	Screened from 25-45'
	12/29/2011	328.95	31.10	ND	ND	297.85	ND(1)	ND(1)	ND(2)	ND(2)	1100	NA	NA	NA	NA	
	6/1/2012	328.95	31.64	ND	ND	297.31	ND(10)	ND(14)	ND(16)	ND(16)	14000	NA	NA	NA	NA	
	2/25/2013	328.95	33.10	ND	ND	295.85	ND(10)	ND(10)	ND(10)	ND(10)	1800	300	140	ND(10)	28	
	6/6/2013	328.95	32.32	ND	ND	296.63	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	120	NA	NA	NA	NA	
	12/18/2013	328.95	33.86	ND	ND	295.09	ND(10)	ND(10)	ND(10)	14	1700	260	210	ND(10)	27	
	3/25/2014	328.95	30.90	ND	ND	298.05	ND(5)	ND(5)	ND(5)	ND(5)	350	ND(80)	50	ND(5)	5	
	6/20/2014	328.95	28.74	ND	ND	300.21	ND(1)	ND(1)	ND(1)	ND(1)	42	ND(20)	17	ND(1)	ND(1)	
	9/10/2014	328.95	31.49	ND	ND	297.46	ND(1)	ND(1)	ND(1)	1	530	110	150	ND(1)	12	
	12/10/2014	328.95	38.19	ND	ND	290.76	ND(2)	ND(2)	ND(2)	5	2100	750	370	ND(2)	42	
	3/11/2015	328.95	36.23	ND	ND	292.72	ND(1)	ND(1)	ND(1)	ND(1)	63	ND(20)	21	ND(1)	ND(1)	
	6/3/2015	328.95	36.27	ND	ND	292.68	ND(1)	ND(1)	ND(1)	ND(1)	62	ND(20)	8	ND(1)	ND(1)	
	9/1/2015	328.95	40.62	ND	ND	288.33	NS	NS	NS	NS	NS	NS	NS	NS	NS	Insufficient volume to sample
	12/2/2015	328.95	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	0	0	1	-32	-5	-4	0	-6	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-21S	4/11/2014	329.69	33.65	ND	ND	296.04	ND(10)	ND(10)	ND(10)	ND(10)	7500	6200	79	ND(10)	78	Screened from 26-46'
	6/18/2014	329.69	31.42	ND	ND	298.27	ND(1)	ND(1)	ND(1)	ND(1)	53	ND(20)	1	ND(1)	ND(1)	
	9/16/2014	329.69	34.26	ND	ND	295.43	ND(1)	ND(1)	ND(1)	ND(1)	130	31	4	ND(1)	1	
	12/10/2014	329.69	37.30	ND	ND	292.39	ND(1)	ND(1)	ND(1)	ND(1)	780	320	20	ND(1)	8	
	3/11/2015	329.69	37.33	ND	ND	292.36	ND(2)	ND(2)	ND(2)	ND(2)	910	610	17	ND(2)	8	
	6/3/2015	329.69	35.74	ND	ND	293.95	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/4/2015	329.69	37.78	ND	ND	291.91	ND(1)	ND(1)	ND(1)	ND(1)	32	ND(20)	3	ND(1)	ND(1)	
	12/1/2015	329.69	38.98	ND	ND	290.71	ND(1)	ND(1)	ND(1)	ND(1)	1500	890	23	ND(1)	16	
Mann-Kendall Statistic							0	0	0	0	-2	-1	-2	0	-2	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-21I	4/11/2014	329.71	33.71	ND	ND	296.00	ND(2)	ND(2)	ND(2)	ND(2)	2500	1700	31	ND(2)	28	Screened from 56-66'
	6/18/2014	329.71	31.52	ND	ND	298.19	ND(1)	ND(1)	ND(1)	ND(1)	1700	910	26	ND(1)	18	
	9/16/2014	329.71	34.35	ND	ND	295.36	ND(1)	ND(1)	ND(1)	ND(1)	2100	1500	29	ND(1)	26	
	12/10/2014	329.71	37.40	ND	ND	292.31	ND(1)	ND(1)	ND(1)	ND(1)	1900	1400	29	ND(1)	24	
	3/11/2015	329.71	37.40	ND	ND	292.31	ND(2)	ND(2)	ND(2)	ND(2)	1300	1000	22	ND(2)	15	
	5/6/2015	329.71	35.89	ND	ND	293.82	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	4	ND(1)	ND(1)	
	6/3/2015	329.71	35.81	ND	ND	293.90	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/4/2015	329.71	37.88	ND	ND	291.83	ND(2)	ND(2)	ND(2)	ND(2)	2300	1500	24	ND(2)	23	
	12/2/2015	329.71	39.04	ND	ND	290.67	ND(2)	ND(2)	ND(2)	ND(2)	2100	1400	23	ND(2)	22	
Mann-Kendall Statistic							0	0	0	0	-8	-9	-19	0	-15	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-22	4/11/2014	320.97	28.55	ND	ND	292.42	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	Screened from 20-40'
	6/18/2014	320.97	25.75	ND	ND	295.22	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/2/2014	320.97	27.48	ND	ND	293.49	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	320.97	30.54	ND	ND	290.43	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	320.97	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	320.97	28.49	ND	ND	292.48	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/2/2015	320.97	30.29	ND	ND	290.68	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	320.97	31.76	ND	ND	289.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	0	0	0	0	0	0	0	0	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-24	4/11/2014	324.49	27.66	ND	ND	296.83	ND(1)	1	ND(1)	ND(1)	29	ND(20)	1	ND(1)	ND(1)	Screened from 50-60'
	6/18/2014	324.49	26.39	ND	ND	298.10	ND(1)	ND(1)	ND(1)	ND(1)	21	ND(20)	ND(1)	ND(1)	ND(1)	
	9/3/2014	324.49	29.30	ND	ND	295.19	ND(1)	ND(1)	ND(1)	ND(1)	21	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	324.49	33.93	ND	ND	290.56	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	324.49	33.66	ND	ND	290.83	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(20)	ND(1)	ND(1)	ND(1)	
	6/3/2015	324.49	32.51	ND	ND	291.98	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(20)	ND(1)	ND(1)	ND(1)	
	9/4/2015	324.49	35.15	ND	ND	289.34	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	324.49	35.09	ND	ND	289.40	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(20)	ND(1)	ND(1)	ND(1)	
Mann-Kendall Statistic							0	-5	0	0	-11	0	-5	0	0	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-27S	8/26/2014	323.40	28.42	ND	ND	294.98	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(20)	ND(1)	ND(1)	ND(1)	
	9/2/2014	323.40	28.88	ND	ND	294.52	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	323.40	32.28	ND	ND	291.12	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(20)	ND(1)	ND(1)	ND(1)	
	3/11/2015	323.40	32.35	ND	ND	291.05	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(20)	ND(1)	ND(1)	ND(1)	
	6/3/2015	323.40	30.72	ND	ND	292.68	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(20)	ND(1)	ND(1)	ND(1)	
	9/3/2015	323.40	32.46	ND	ND	290.94	ND(1)	ND(1)	ND(1)	7	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/1/2015	323.40	33.80	ND	ND	289.60	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
Mann-Kendall Statistic							0	0	0	4	-6	0	0	0	0	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-27I	8/26/2014	323.35	28.26	ND	ND	295.09	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(20)	ND(1)	ND(1)	ND(1)	
	9/2/2014	323.35	27.69	ND	ND	295.66	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	323.35	32.31	ND	ND	291.04	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(20)	ND(1)	ND(1)	ND(1)	
	3/11/2015	323.35	32.39	ND	ND	290.96	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	6/3/2015	323.35	30.75	ND	ND	292.60	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(20)	ND(1)	ND(1)	ND(1)	
	9/3/2015	323.35	32.41	ND	ND	290.94	ND(1)	ND(1)	3	38	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/1/2015	323.35	33.42	ND	ND	289.93	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
Mann-Kendall Statistic							0	0	4	4	-7	0	0	0	0	

Kleinfelder
1340 Charwood Road, Suite I , Hanover, MD

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
W-1	1/18/2003	328.53	33.83	ND	ND	294.70	ND(5)	ND(5)	ND(5)	ND(10)	13000	9100	81	ND(5)	240	Screened from 10-40'
	8/5/2008	328.53	34.81	ND	ND	293.72	9.6	ND(5.0)	ND(5.0)	ND(5.0)	5200	NA	NA	NA	NA	
	6/7/2013	328.53	34.52	ND	ND	294.01	ND(10)	ND(14)	ND(16)	ND(16)	26000	NA	NA	NA	NA	
	12/19/2013	328.53	36.11	ND	ND	292.42	ND(100)	ND(100)	ND(100)	ND(100)	13000	6900	150	ND(100)	130	
	3/25/2014	328.53	33.50	ND	ND	295.03	ND(25)	ND(25)	ND(25)	ND(25)	16000	15000	170	ND(25)	170	
	6/19/2014	328.53	29.91	ND	ND	298.62	ND(50)	ND(50)	ND(50)	ND(50)	15000	13000	130	ND(50)	140	
	9/3/2014	328.53	31.77	ND	ND	296.76	ND(20)	ND(20)	ND(20)	ND(20)	13000	8900	95	ND(20)	100	
	12/10/2014	328.53	36.07	ND	ND	292.46	ND(20)	ND(20)	ND(20)	ND(20)	18000	14000	170	ND(20)	170	
	3/12/2015	328.53	35.89	ND	ND	292.64	ND(20)	ND(20)	ND(20)	ND(20)	11000	9100	120	ND(20)	110	
	6/4/2015	328.53	34.34	ND	ND	294.19	ND(50)	ND(50)	ND(50)	ND(50)	8800	4700	98	ND(50)	84	
	9/4/2015	328.53	36.46	ND	ND	292.07	ND(10)	ND(10)	ND(10)	ND(10)	11000	7800	94	ND(10)	89	
	12/2/2015	328.53	37.57	ND	ND	290.96	ND(10)	ND(10)	ND(10)	ND(10)	16000	16000	140	ND(10)	160	
Mann-Kendall Statistic							-9	0	0	0	-5	-5	-1	0	-15	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
W-2	1/18/2003	329.47	34.56	ND	ND	294.91	ND(5)	ND(5)	ND(5)	ND(10)	100	ND(100)	ND(5)	ND(5)	ND(5)	Screened from 10-40'
	8/5/2008	329.47	35.53	ND	ND	293.94	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	320	NA	NA	NA	NA	
	6/7/2013	329.47	35.30	ND	ND	294.17	ND(5)	ND(7)	ND(8)	ND(8)	14000	NA	NA	NA	NA	
	12/19/2013	329.47	36.82	ND	ND	292.65	ND(50)	ND(50)	ND(50)	ND(50)	7700	ND(800)	130	ND(50)	74	
	3/25/2014	329.47	34.26	ND	ND	295.21	ND(100)	ND(100)	ND(100)	ND(100)	7000	ND(1600)	130	ND(100)	ND(100)	
	6/19/2014	329.47	30.74	ND	ND	298.73	ND(10)	ND(10)	ND(10)	ND(10)	5000	ND(200)	39	ND(10)	38	
	9/3/2014	329.47	32.64	ND	ND	296.83	ND(10)	ND(10)	ND(10)	ND(10)	3900	ND(200)	21	ND(10)	27	
	12/10/2014	329.47	36.75	ND	ND	292.72	ND(2)	ND(2)	ND(2)	ND(2)	2100	ND(40)	25	ND(2)	18	
	3/11/2015	329.47	36.74	ND	ND	292.73	ND(2)	ND(2)	ND(2)	ND(2)	1000	84	20	ND(2)	9	
	6/3/2015	329.47	35.19	ND	ND	294.28	ND(5)	ND(5)	ND(5)	ND(5)	1400	ND(100)	15	ND(5)	11	
	9/4/2015	329.47	DRY	DRY	DRY	DRY	ND(1)	ND(1)	ND(1)	ND(1)	1100	ND(20)	22	ND(1)	9	
	12/2/2015	329.47	38.42	ND	ND	291.05	ND(1)	ND(1)	ND(1)	ND(1)	440	ND(20)	16	ND(1)	3	
Mann-Kendall Statistic							0	0	0	0	-20	5	-11	0	-3	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
W-3	1/18/2003	330.14	35.88	ND	ND	294.26	ND(5)	ND(5)	ND(5)	ND(10)	ND(5)	ND(100)	ND(5)	ND(5)	ND(5)	Screened from 10-45'
	8/5/2008	330.14	35.92	ND	ND	294.22	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	22	NA	NA	NA	NA	
	6/7/2013	330.14	35.84	ND	ND	294.30	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	2 J	NA	NA	NA	NA	
	12/18/2013	330.14	37.22	ND	ND	292.92	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	3/24/2014	330.14	34.57	ND	ND	295.57	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/19/2014	330.14	31.08	ND	ND	299.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/3/2014	330.14	33.20	ND	ND	296.94	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	330.14	37.11	ND	ND	293.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	330.14	35.61	ND	ND	294.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	330.14	35.69	ND	ND	294.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/4/2015	330.14	37.66	ND	ND	292.48	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	330.14	38.92	ND	ND	291.22	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	0	0	0	-1	0	0	0	0	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
W-4	1/18/2003	327.67	34.12	ND	ND	293.55	71	920	850	8700	55	790	ND(5)	ND(5)	ND(5)	Screened from 10-40'
	8/5/2008	327.67	34.25	ND	ND	293.42	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	22	NA	NA	NA	NA	
	6/7/2013	327.67	34.08	ND	ND	293.59	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	12/18/2013	327.67	35.91	ND	ND	291.76	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	3/24/2014	327.67	33.24	ND	ND	294.43	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/19/2014	327.67	29.62	ND	ND	298.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/8/2014	327.67	31.54	ND	ND	296.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	327.67	35.98	ND	ND	291.69	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	327.67	35.09	ND	ND	292.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	327.67	33.00	ND	ND	294.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/2/2015	327.67	34.91	ND	ND	292.76	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	327.67	36.46	ND	ND	291.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							-3	-3	-3	-3	-5	N/A	N/A	N/A	N/A	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
W-5	8/5/2008	327.81	35.93	ND	ND	291.88	320	3000	3000	16000	ND(5.0)	NA	NA	NA	NA	Interval not available
	6/7/2013	327.81	35.30	ND	ND	292.51	180	96	270	11000	ND(0.5)	NA	NA	NA	NA	
	12/18/2013	327.81	37.46	ND	ND	290.35	290	160	860	6000	ND(13)	ND(200)	ND(13)	ND(13)	ND(13)	
	3/24/2014	327.81	34.75	ND	ND	293.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/19/2014	327.81	31.23	ND	ND	296.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/8/2014	327.81	31.98	ND	ND	295.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	327.81	37.19	ND	ND	290.62	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	327.81	37.15	ND	ND	290.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	327.81	33.47	ND	ND	294.34	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/3/2015	327.81	35.20	ND	ND	292.61	240	210	790	7600	ND(1)	51	ND(1)	ND(1)	ND(1)	
	12/2/2015	327.81	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							-1	-1	-1	-3	0	N/A	N/A	N/A	N/A	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
W-6	8/5/2008	325.21	31.63	ND	ND	293.58	ND(5.0)	ND(5.0)	ND(5.0)	18.6	16	NA	NA	NA	NA	Interval not available
	6/7/2013	325.21	31.12	ND	ND	294.09	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	6	NA	NA	NA	NA	
	12/18/2013	325.21	32.12	ND	ND	293.09	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	3/25/2014	325.21	29.37	ND	ND	295.84	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	6/18/2014	325.21	26.56	ND	ND	298.65	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/3/2014	325.21	26.98	ND	ND	298.23	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	325.21	30.37	ND	ND	294.84	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	3/11/2015	325.21	25.36	ND	ND	299.85	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	6/2/2015	325.21	31.07	ND	ND	294.14	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/3/2015	325.21	34.37	ND	ND	290.84	1	1	3	40	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/1/2015	325.21	34.34	ND	ND	290.87	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
Mann-Kendall Statistic							8	8	8	-1	-19	0	0	0	0	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
W-7	8/5/2008	329.77	37.35	ND	ND	292.42	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	16	NA	NA	NA	NA	Interval not available
	6/6/2013	329.77	37.04	ND	ND	292.73	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	12/18/2013	329.77	38.24	ND	ND	291.53	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	3/24/2014	329.77	35.60	ND	ND	294.17	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	6/18/2014	329.77	32.49	ND	ND	297.28	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/3/2014	329.77	34.24	ND	ND	295.53	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	329.77	37.70	ND	ND	292.07	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	3/10/2015	329.77	37.74	ND	ND	292.03	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	6/2/2015	329.77	34.60	ND	ND	295.17	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/3/2015	329.77	37.95	ND	ND	291.82	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/1/2015	329.77	39.19	ND	ND	290.58	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
Mann-Kendall Statistic							0	0	0	0	-10	0	0	0	0	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
GFSCMW-2	3/24/2014	316.79	30.18	ND	ND	286.61	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	Interval not available
	6/19/2014	316.79	29.12	ND	ND	287.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/4/2014	316.79	27.99	ND	ND	288.80	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	316.79	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	316.79	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	316.79	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	316.79	29.38	ND	ND	287.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	316.79	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
GFSCMW-3	3/24/2014	319.78	29.14	ND	ND	290.64	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	Interval not available
	6/19/2014	319.78	28.42	ND	ND	291.36	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/4/2014	319.78	27.24	ND	ND	292.54	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	319.78	34.56	ND	ND	285.22	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	319.78	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	319.78	27.82	ND	ND	291.96	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	319.78	29.81	ND	ND	289.97	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	319.78	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
GFGPMW-4	3/24/2014	310.10	18.87	ND	ND	291.23	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	Screened from 5.5-20.5'
	6/19/2014	310.10	17.21	ND	ND	292.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/4/2014	310.10	18.39	ND	ND	291.71	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	310.10	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	310.10	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	310.10	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	310.10	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	310.10	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
GFGPMW-5	3/24/2014	310.72	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	Screened from 5-25'
	6/19/2014	310.72	DRY	DRY	DRY	DRY	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/4/2014	310.72	22.31	ND	ND	288.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	310.72	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	310.72	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	310.72	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	310.72	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	310.72	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Table 3 (Continued)

Groundwater Monitoring & Analytical Data – Shallow Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
January 18, 2003 through December 2, 2015

Notes:

µg/L - micrograms per liter (µg/L)
CMT - Continuous Multichannel Tubing
DIPE - Isopropyl ether
ETBE - Ethyl tert-butyl ether
GW - Groundwater
J - Indicates an estimated value
MTBE - Methyl Tertiary Butyl Ether
NA - Not analyzed
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
NSVD - Not surveyed to vertical datum
TAME - Tert-Amyl methyl ether
TBA - Tert-Butyl alcohol

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Table 4

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
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)	1	NA	NA	NA	NA	Open from 70-120'
	9/30/2010	323.09	26.52	ND	ND	296.57	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1	NA	NA	NA	NA	
	12/16/2010	323.09	25.92	ND	ND	297.17	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1	NA	NA	NA	NA	
	2/17/2011	323.09	26.14	ND	ND	296.95	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1 J	NA	NA	NA	NA	
	5/24/2011	323.09	25.83	ND	ND	297.26	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1 J	NA	NA	NA	NA	
	9/2/2011	323.09	27.45	ND	ND	295.64	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.9 J	NA	NA	NA	NA	
	12/22/2011	323.09	25.47	ND	ND	297.62	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.8 J	NA	NA	NA	NA	
	6/1/2012	323.09	25.95	ND	ND	297.14	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.8 J	NA	NA	NA	NA	
	2/25/2013	323.09	27.13	ND	ND	295.96	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	6/6/2013	323.09	26.66	ND	ND	296.43	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	12/17/2013	323.09	27.85	ND	ND	295.24	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/24/2014	323.09	25.24	ND	ND	297.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/18/2014	323.09	23.37	ND	ND	299.72	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/8/2014	323.09	26.15	ND	ND	296.94	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	323.09	29.34	ND	ND	293.75	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	323.09	28.85	ND	ND	294.24	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	323.09	39.72	ND	ND	283.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/2/2015	323.09	30.33	ND	ND	292.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	323.09	30.80	ND	ND	292.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	0	0	0	-23	N/A	N/A	N/A	N/A	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
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)	1	NA	NA	NA	NA	
	9/30/2010	323.09	26.51	ND	ND	296.58	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1	NA	NA	NA	NA	
	12/16/2010	323.09	25.92	ND	ND	297.17	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	6	NA	NA	NA	NA	
	2/17/2011	323.09	26.14	ND	ND	296.95	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1 J	NA	NA	NA	NA	
	5/24/2011	323.09	25.83	ND	ND	297.26	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1 J	NA	NA	NA	NA	
	9/2/2011	323.09	27.45	ND	ND	295.64	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.9 J	NA	NA	NA	NA	
	12/22/2011	323.09	25.47	ND	ND	297.62	ND(0.5)	1 J	ND(0.8)	ND(0.8)	0.8 J	NA	NA	NA	NA	
	6/1/2012	323.09	25.95	ND	ND	297.14	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.8 J	NA	NA	NA	NA	
	2/25/2013	323.09	27.13	ND	ND	295.96	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	6/6/2013	323.09	26.66	ND	ND	296.43	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	6/18/2014	323.09	23.37	ND	ND	299.72	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	3/12/2015	323.09	28.85	ND	ND	294.24	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	323.09	39.72	ND	ND	283.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/2/2015	323.09	30.33	ND	ND	292.76	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	323.09	30.80	ND	ND	292.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	2	0	0	-41	N/A	N/A	N/A	N/A	

Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
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)	2 J	NA	NA	NA	NA	
	9/30/2010	323.09	26.52	ND	ND	296.57	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1	NA	NA	NA	NA	
	12/16/2010	323.09	25.92	ND	ND	297.17	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1	NA	NA	NA	NA	
	2/17/2011	323.09	26.14	ND	ND	296.95	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1 J	NA	NA	NA	NA	
	5/24/2011	323.09	25.83	ND	ND	297.26	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	1 J	NA	NA	NA	NA	
	9/2/2011	323.09	27.45	ND	ND	295.64	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.9 J	NA	NA	NA	NA	
	12/22/2011	323.09	25.47	ND	ND	297.62	ND(0.5)	1 J	ND(0.8)	ND(0.8)	0.9 J	NA	NA	NA	NA	
	6/1/2012	323.09	25.95	ND	ND	297.14	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	0.9 J	NA	NA	NA	NA	
	2/25/2013	323.09	27.13	ND	ND	295.96	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	6/6/2013	323.09	26.66	ND	ND	296.43	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	6/18/2014	323.09	23.37	ND	ND	299.72	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	3/12/2015	323.09	28.85	ND	ND	294.24	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	323.09	39.72	ND	ND	283.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/2/2015	323.09	30.33	ND	ND	292.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	323.09	30.80	ND	ND	292.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	2	0	0	-43	N/A	N/A	N/A	N/A	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-12D(110)	5/24/2011	326.43	28.12	ND	ND	298.31	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	Open from 100-160'
	9/2/2011	326.43	32.37	ND	ND	294.06	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	12/22/2011	326.43	29.63	ND	ND	296.80	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	6/1/2012	326.43	29.75	ND	ND	296.68	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	2/25/2013	326.43	30.86	ND	ND	295.57	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	6/6/2013	326.43	30.59	ND	ND	295.84	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	12/17/2013	326.43	31.51	ND	ND	294.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/24/2014	326.43	29.33	ND	ND	297.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/18/2014	326.43	25.98	ND	ND	300.45	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/2/2015	326.43	32.43	ND	ND	294.00	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
Mann-Kendall Statistic							0	0	0	0	0	N/A	N/A	N/A	N/A	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-12D(153)	5/24/2011	326.43	28.12	ND	ND	298.31	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	Open from 100-160'
	9/2/2011	326.43	32.37	ND	ND	294.06	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	6/1/2012	326.43	29.75	ND	ND	296.68	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	2/25/2013	326.43	30.86	ND	ND	295.57	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	
	6/6/2013	326.43	30.59	ND	ND	295.84	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	6/18/2014	326.43	25.98	ND	ND	300.45	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
Mann-Kendall Statistic							0	0	0	0	0	N/A	N/A	N/A	N/A	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-16D(95)	6/1/2012	332.90	35.33	ND	ND	297.57	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	140	NA	NA	NA	NA	Abandoned to 110' (April 2011)
	2/25/2013	332.90	36.83	ND	ND	296.07	ND(100)	ND(100)	ND(100)	ND(100)	9800	ND(1600)	360	ND(100)	200	Open from 85-110'
	6/6/2013	332.90	36.15	ND	ND	296.75	18 J	ND(7)	ND(8)	ND(8)	11000	NA	NA	NA	NA	
	12/19/2013	332.90	37.13	ND	ND	295.77	ND(130)	ND(130)	ND(130)	ND(130)	19000	2800	770	ND(130)	390	
	3/25/2014	332.90	34.64	ND	ND	298.26	25	ND(25)	ND(25)	ND(25)	14000	2000	520	ND(25)	300	
	6/19/2014	332.90	32.75	ND	ND	300.15	28	ND(20)	ND(20)	ND(20)	13000	1100	660	ND(20)	280	
	9/3/2014	332.90	36.14	ND	ND	296.76	6	ND(5)	ND(5)	ND(5)	3600	450	140	ND(5)	69	
	12/9/2014	332.90	40.36	ND	ND	292.54	ND(5)	ND(5)	ND(5)	ND(5)	2100	ND(100)	29	ND(5)	19	
	3/9/2015	NM	NM	NM	NM	NM	ND(2)	ND(2)	ND(2)	ND(2)	1300	290	67	ND(2)	17	
	6/1/2015	NM	NM	NM	NM	NM	ND(1)	ND(1)	ND(1)	ND(1)	610	34	47	ND(1)	9	
	8/17/2015	NM	NM	NM	NM	NM	ND(2)	ND(2)	ND(2)	ND(2)	450	NA	NA	NA	NA	
	8/31/2015	332.90	44.79	ND	ND	288.11	ND(1)	ND(1)	ND(1)	ND(1)	300	23	26	ND(1)	4	
	12/1/2015	332.90	NM	NM	NM	NM	ND(1)	ND(1)	ND(1)	ND(1)	490	35	21	ND(1)	7	
Mann-Kendall Statistic							-14	0	0	0	-36	-11	-16	0	-22	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-17D(75)	4/25/2014	328.84	30.77	ND	ND	298.07	ND(100)	ND(100)	ND(100)	ND(100)	120000	39000	2000	ND(100)	1900	CMT
	6/11/2014	328.84	29.81	ND	ND	299.03	ND(1)	ND(1)	ND(1)	ND(1)	20	ND(20)	2	ND(1)	ND(1)	
	9/2/2014	328.84	31.70	ND	ND	297.14	ND(1)	ND(1)	ND(1)	ND(1)	190	ND(20)	31	ND(1)	2	
	12/8/2014	328.84	49.65	ND	ND	279.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	328.84	NM	NM	NM	NM	21	ND(20)	ND(20)	ND(20)	37000	8300	860	ND(20)	600	
	3/9/2015	328.84	42.23	ND	ND	286.61	ND(20)	ND(20)	ND(20)	ND(20)	23000	4900	300	ND(20)	210	
	6/1/2015	328.84	35.71	ND	ND	293.13	ND(1)	ND(1)	ND(1)	ND(1)	200	ND(20)	21	ND(1)	4	
	8/31/2015	328.84	36.89	ND	ND	291.95	ND(10)	ND(10)	ND(10)	ND(10)	13000	3400	400	ND(10)	280	
	12/29/2015	328.84	44.73	ND	ND	284.11	ND(10)	ND(10)	ND(10)	ND(10)	7100	1200	190	ND(10)	120	
Mann-Kendall Statistic							0	0	0	0	-1	-4	-1	0	1	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-17D(81)	4/25/2014	328.84	28.89	ND	ND	299.95	ND(100)	ND(100)	ND(100)	ND(100)	92000	23000	1700	ND(100)	1400	CMT
	6/11/2014	328.84	30.72	ND	ND	298.12	ND(10)	ND(10)	ND(10)	ND(10)	5000	1800	70	ND(10)	60	
	9/2/2014	328.84	31.13	ND	ND	297.71	ND(1)	ND(1)	ND(1)	ND(1)	10	ND(20)	2	ND(1)	ND(1)	
	12/8/2014	328.84	50.40	ND	ND	278.44	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	328.84	NM	NM	NM	NM	ND(10)	ND(10)	ND(10)	ND(10)	5900	2800	89	ND(10)	73	
	3/9/2015	328.84	42.25	ND	ND	286.59	ND(1)	ND(1)	ND(1)	ND(1)	14	ND(20)	2	ND(1)	ND(1)	
	6/1/2015	328.84	35.58	ND	ND	293.26	ND(5)	ND(5)	ND(5)	ND(5)	2600	400	88	ND(5)	44	
	8/31/2015	328.84	36.62	ND	ND	292.22	3	ND(2)	ND(2)	ND(2)	790	150	41	ND(2)	18	
	12/29/2015	328.84	44.94	ND	ND	283.90	ND(5)	ND(5)	ND(5)	ND(5)	2500	430	62	ND(5)	43	
Mann-Kendall Statistic							6	0	0	0	-7	-8	-6	0	-8	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-17D(87.75)	4/25/2014	328.84	30.93	ND	ND	297.91	ND(50)	ND(50)	ND(50)	ND(50)	40000	11000	700	ND(50)	620	CMT
	6/11/2014	328.84	29.96	ND	ND	298.88	ND(25)	ND(25)	ND(25)	ND(25)	12000	2600	240	ND(25)	170	
	9/2/2014	328.84	31.57	ND	ND	297.27	ND(1)	ND(1)	ND(1)	ND(1)	250	61	6	ND(1)	3	
	12/8/2014	328.84	34.62	ND	ND	294.22	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	328.84	NM	NM	NM	NM	ND(20)	ND(20)	ND(20)	ND(20)	25000	1200	360	ND(20)	290	
	3/9/2015	328.84	36.27	ND	ND	292.57	ND(1)	ND(1)	ND(1)	ND(1)	80	21	3	ND(1)	ND(1)	
	6/1/2015	328.84	35.16	ND	ND	293.68	2	ND(1)	ND(1)	ND(1)	630	57	31	ND(1)	11	
	8/31/2015	328.84	36.20	ND	ND	292.64	ND(20)	ND(20)	ND(20)	ND(20)	7200	ND(400)	120	ND(20)	77	
	12/29/2015	328.84	34.65	ND	ND	294.19	ND(2)	ND(2)	ND(2)	ND(2)	1700	190	52	ND(2)	32	
Mann-Kendall Statistic							4	0	0	0	-7	-17	-7	0	-7	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-17D(92)	4/25/2014	328.84	30.94	ND	ND	297.90	ND(25)	ND(25)	ND(25)	ND(25)	15000	3200	370	ND(25)	270	CMT
	6/10/2014	328.84	29.95	ND	ND	298.89	ND(10)	ND(10)	ND(10)	ND(10)	11000	2200	320	ND(10)	200	
	9/2/2014	328.84	32.84	ND	ND	296.00	ND(10)	ND(10)	ND(10)	ND(10)	11000	3300	200	ND(10)	130	
	12/8/2014	328.84	37.26	ND	ND	291.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	328.84	NM	NM	NM	NM	ND(20)	ND(20)	ND(20)	ND(20)	32000	12000	600	ND(20)	390	
	3/9/2015	328.84	37.04	ND	ND	291.80	ND(3)	ND(3)	ND(3)	ND(3)	620	220	16	ND(3)	8	
	6/1/2015	328.84	35.00	ND	ND	293.84	ND(50)	ND(50)	ND(50)	ND(50)	17000	3700	410	ND(50)	200	
	8/31/2015	328.84	36.01	ND	ND	292.83	ND(10)	ND(10)	ND(10)	ND(10)	8100	200	140	ND(10)	95	
	12/29/2015	328.84	38.96	ND	ND	289.88	ND(1)	ND(1)	ND(1)	ND(1)	85	ND(20)	5	ND(1)	2	
Mann-Kendall Statistic							0	0	0	0	-4	-3	-5	0	-8	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-17D(117)	4/25/2014	328.84	31.35	ND	ND	297.49	ND(100)	ND(100)	ND(100)	ND(100)	120000	31000	2300	ND(100)	1800	CMT
	6/10/2014	328.84	30.58	ND	ND	298.26	ND(50)	ND(50)	ND(50)	ND(50)	54000	14000	1000	ND(50)	740	
	9/3/2014	328.84	32.99	ND	ND	295.85	ND(50)	ND(50)	ND(50)	ND(50)	23000	5500	450	ND(50)	300	
	12/8/2014	328.84	38.28	ND	ND	290.56	ND(5)	ND(5)	ND(5)	ND(5)	5000	1400	130	ND(5)	76	
	3/10/2015	328.84	37.65	ND	ND	291.19	ND(20)	ND(20)	ND(20)	ND(20)	8700	3300	350	ND(20)	120	
	6/2/2015	328.84	35.72	ND	ND	293.12	ND(50)	ND(50)	ND(50)	ND(50)	19000	2900	500	ND(50)	230	
	9/1/2015	328.84	36.70	ND	ND	292.14	ND(10)	ND(10)	ND(10)	ND(10)	9400	2400	290	ND(10)	160	
	12/29/2015	328.84	38.68	ND	ND	290.16	ND(10)	ND(10)	ND(10)	ND(10)	5800	1600	170	ND(10)	120	
Mann-Kendall Statistic							0	0	0	0	-16	-20	-16	0	-15	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-17D(129.75)	4/25/2014	328.84	32.77	ND	ND	296.07	ND(100)	ND(100)	ND(100)	ND(100)	120000	30000	2300	ND(100)	1800	CMT
	6/10/2014	328.84	31.59	ND	ND	297.25	ND(50)	ND(50)	ND(50)	ND(50)	49000	17000	830	ND(50)	690	
	9/3/2014	328.84	33.61	ND	ND	295.23	ND(100)	ND(100)	ND(100)	ND(100)	80000	23000	1400	ND(100)	990	
	12/8/2014	328.84	38.10	ND	ND	290.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	328.84	NM	NM	NM	NM	ND(50)	ND(50)	ND(50)	ND(50)	69000	21000	1500	ND(50)	1000	
	3/10/2015	328.84	43.87	ND	ND	284.97	ND(10)	ND(10)	ND(10)	ND(10)	12000	3300	360	ND(10)	180	
	6/2/2015	328.84	35.96	ND	ND	292.88	ND(100)	ND(100)	ND(100)	ND(100)	64000	9500	1300	ND(100)	790	
	8/31/2015	328.84	36.95	ND	ND	291.89	ND(100)	ND(100)	ND(100)	ND(100)	49000	15000	910	ND(100)	660	
	12/29/2015	328.84	38.24	ND	ND	290.60	ND(50)	ND(50)	ND(50)	ND(50)	18000	7000	320	ND(50)	320	
Mann-Kendall Statistic							0	0	0	0	-10	-11	-7	0	-9	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-17D(147)	4/25/2014	328.84	33.41	ND	ND	295.43	ND(100)	ND(100)	ND(100)	ND(100)	98000	30000	2000	ND(100)	1500	CMT
	6/11/2014	328.84	31.96	ND	ND	296.88	ND(100)	ND(100)	ND(100)	ND(100)	82000	22000	1500	ND(100)	1200	
	9/3/2014	328.84	33.92	ND	ND	294.92	6	ND(1)	ND(1)	ND(1)	55000	16000	790	ND(1)	570	
	12/8/2014	328.84	37.99	ND	ND	290.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/9/2014	328.84	NM	NM	NM	NM	ND(50)	ND(50)	ND(50)	ND(50)	70000	21000	1500	ND(50)	1000	
	3/10/2015	328.84	49.26	ND	ND	279.58	ND(50)	ND(50)	ND(50)	ND(50)	25000	9500	470	ND(50)	280	
	6/2/2015	328.84	35.87	ND	ND	292.97	ND(100)	ND(100)	ND(100)	ND(100)	56000	11000	960	ND(100)	650	
	9/1/2015	328.84	36.92	ND	ND	291.92	ND(50)	ND(50)	ND(50)	ND(50)	43000	13000	900	ND(50)	630	
	12/29/2015	328.84	37.52	ND	ND	291.32	ND(20)	ND(20)	ND(20)	ND(20)	13000	5400	170	ND(20)	230	
Mann-Kendall Statistic							-2	0	0	0	-13	-13	-10	0	-11	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-18D	5/10/2013	334.88	40.57	ND	ND	294.31	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	Open from 97-136'
	6/6/2013	334.88	40.69	ND	ND	294.19	ND(0.5)	ND(0.7)	ND(0.8)	ND(0.8)	ND(0.5)	NA	NA	NA	NA	
	12/18/2013	334.88	41.60	ND	ND	293.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/24/2014	334.88	38.94	ND	ND	295.94	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/18/2014	334.88	36.04	ND	ND	298.84	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/3/2014	334.88	38.14	ND	ND	296.74	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	334.88	42.23	ND	ND	292.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	334.88	42.19	ND	ND	292.69	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	334.88	40.72	ND	ND	294.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/2/2015	334.88	42.77	ND	ND	292.11	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	334.88	43.90	ND	ND	290.98	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	0	0	0	0	0	0	0	0	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-19D	3/28/2014	341.91	43.16	ND	ND	298.75	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	6/20/2014	341.91	41.11	ND	ND	300.80	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/4/2014	341.91	43.36	ND	ND	298.55	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	341.91	47.56	ND	ND	294.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	341.91	48.76	ND	ND	293.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	341.91	47.39	ND	ND	294.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/2/2015	341.91	49.27	ND	ND	292.64	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	341.91	50.59	ND	ND	291.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	0	0	0	0	0	0	0	0	

Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-20D(73-83)	4/11/2014	329.57	NM	NM	NM	NM	ND(1)	ND(1)	ND(1)	ND(1)	72	32	2	ND(1)	ND(1)	
	7/10/2014	329.57	NM	NM	NM	NM	ND(1)	ND(1)	ND(1)	ND(1)	100	28	3	ND(1)	ND(1)	
	8/26/2014	329.57	31.26	ND	ND	298.31	ND(1)	ND(1)	ND(1)	ND(1)	100	34	2	ND(1)	ND(1)	
	9/2/2014	329.57	33.62	ND	ND	295.95	ND(1)	ND(1)	ND(1)	ND(1)	120	27	3	ND(1)	1	
	12/9/2014	329.57	36.52	ND	ND	293.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	329.57	38.02	ND	ND	291.55	ND(2)	ND(2)	ND(2)	ND(2)	740	340	15	ND(2)	8	
	3/27/2015	329.57	37.51	ND	ND	292.06	ND(1)	ND(1)	ND(1)	ND(1)	1400	480	24	ND(1)	18	
	5/6/2015	329.57	36.48	ND	ND	293.09	ND(1)	ND(1)	ND(1)	ND(1)	980	280	15	ND(1)	9	
	6/1/2015	329.57	36.52	ND	ND	293.05	ND(2)	ND(2)	ND(2)	ND(2)	940	190	16	ND(2)	10	
	9/1/2015	329.57	38.69	ND	ND	290.88	ND(1)	ND(1)	ND(1)	ND(1)	990	360	19	ND(1)	11	
	12/1/2015	329.57	38.97	ND	ND	290.60	ND(1)	ND(1)	ND(1)	ND(1)	900	400	15	ND(1)	11	
Mann-Kendall Statistic							0	0	0	0	27	16	25	0	27	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-20D(90-100)	4/11/2014	329.58	NM	NM	NM	NM	ND(1)	ND(1)	ND(1)	ND(1)	55	24	1	ND(1)	ND(1)	
	7/10/2014	329.58	NM	NM	NM	NM	ND(1)	ND(1)	ND(1)	ND(1)	73	21	2	ND(1)	ND(1)	
	8/26/2014	329.58	32.88	ND	ND	296.70	ND(1)	ND(1)	ND(1)	ND(1)	75	26	1	ND(1)	ND(1)	
	9/2/2014	329.58	34.25	ND	ND	295.33	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	329.58	37.24	ND	ND	292.34	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	329.58	38.22	ND	ND	291.36	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(20)	ND(1)	ND(1)	ND(1)	
	6/1/2015	329.58	36.72	ND	ND	292.86	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/1/2015	329.58	38.82	ND	ND	290.76	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/1/2015	329.58	39.42	ND	ND	290.16	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
Mann-Kendall Statistic							0	0	0	0	-14	-11	-12	0	0	

Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-20D(110)	4/11/2014	329.80	NM	NM	NM	NM	ND(1)	ND(1)	ND(1)	ND(1)	37	ND(20)	ND(1)	ND(1)	ND(1)	Hydrasleeve
	7/10/2014	329.80	NM	NM	NM	NM	ND(1)	ND(1)	ND(1)	ND(1)	43	ND(20)	1	ND(1)	ND(1)	
Mann-Kendall Statistic							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-20D(132-142)	4/11/2014	329.56	NM	NM	NM	NM	ND(1)	ND(1)	ND(1)	ND(1)	32	ND(20)	ND(1)	ND(1)	ND(1)	
	7/10/2014	329.56	NM	NM	NM	NM	ND(1)	ND(1)	ND(1)	ND(1)	55	ND(20)	1	ND(1)	ND(1)	
	8/26/2014	329.56	33.85	ND	ND	295.71	ND(1)	ND(1)	ND(1)	ND(1)	130	42	2	ND(1)	1	
	9/2/2014	329.56	34.36	ND	ND	295.20	ND(1)	ND(1)	ND(1)	ND(1)	100	38	3	ND(1)	ND(1)	
	12/9/2014	329.56	38.19	ND	ND	291.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	329.56	38.26	ND	ND	291.30	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	6/1/2015	329.56	36.73	ND	ND	292.83	ND(1)	ND(1)	ND(1)	ND(1)	8	ND(20)	ND(1)	ND(1)	ND(1)	
	9/1/2015	329.56	38.80	ND	ND	290.76	ND(1)	ND(1)	ND(1)	ND(1)	7	ND(20)	ND(1)	ND(1)	ND(1)	
	12/1/2015	329.56	39.79	ND	ND	289.77	ND(1)	ND(1)	ND(1)	ND(1)	2	ND(20)	ND(1)	ND(1)	ND(1)	
Mann-Kendall Statistic							0	0	0	0	-7	-3	-3	0	-2	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-23D	5/19/2014	324.81	27.72	ND	ND	297.09	ND(10)	ND(10)	ND(10)	ND(10)	8000	1800	260	ND(10)	120	Screened from 90-100'
	6/10/2014	324.81	27.34	ND	ND	297.47	ND(20)	ND(20)	ND(20)	ND(20)	11000	2200	340	ND(20)	180	
	6/19/2014	324.81	27.19	ND	ND	297.62	ND(10)	ND(10)	ND(10)	ND(10)	5100	ND(200)	130	ND(10)	57	
	8/20/2014	324.81	28.42	ND	ND	296.39	ND(10)	ND(10)	ND(10)	ND(10)	10000	2100	270	ND(10)	140	
	9/3/2014	324.81	29.86	ND	ND	294.95	ND(20)	ND(20)	ND(20)	ND(20)	9300	1700	280	ND(20)	130	
	9/22/2014	324.81	32.83	ND	ND	291.98	ND(5)	ND(5)	ND(5)	ND(5)	4600	950	NA	NA	NA	
	10/21/2014	324.81	33.46	ND	ND	291.35	ND(10)	ND(10)	ND(10)	ND(10)	4100	790	120	ND(10)	68	
	12/10/2014	324.81	34.79	ND	ND	290.02	ND(1)	ND(1)	ND(1)	ND(1)	400	24	21	ND(1)	6	
	3/11/2015	324.81	33.63	ND	ND	291.18	ND(1)	27	ND(1)	2	200	32	11	ND(1)	2	
	6/3/2015	324.81	32.59	ND	ND	292.22	ND(1)	ND(1)	ND(1)	ND(1)	3	ND(20)	3	ND(1)	ND(1)	
	9/4/2015	324.81	35.85	ND	ND	288.96	ND(1)	ND(1)	ND(1)	ND(1)	53	ND(20)	4	ND(1)	ND(1)	
	12/2/2015	324.81	35.39	ND	ND	289.42	ND(1)	1	ND(1)	ND(1)	120	ND(20)	3	ND(1)	1	
Mann-Kendall Statistic							0	15	0	5	-50	-42	-31	0	-32	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-25D(76)	8/20/2014	323.92	22.06	ND	ND	301.86	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	Open from 65-101'
	9/2/2014	317.18	22.63	ND	ND	294.55	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	3/10/2015	317.18	23.25	ND	ND	293.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	317.18	23.33	ND	ND	293.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	317.18	23.76	ND	ND	293.42	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	317.18	26.12	ND	ND	291.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/1/2015	317.18	37.27	ND	ND	279.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-25D(90)	8/20/2014	323.92	22.06	ND	ND	301.86	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/2/2014	317.18	22.63	ND	ND	294.55	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	317.18	25.04	ND	ND	292.14	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	3/10/2015	317.18	23.25	ND	ND	293.93	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	6/2/2015	317.18	23.76	ND	ND	293.42	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/2/2015	317.18	26.12	ND	ND	291.06	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/1/2015	317.18	37.27	ND	ND	279.91	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
Mann-Kendall Statistic							0	0	0	0	0	0	0	0	0	

Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-25D(98)	8/20/2014	323.92	22.06	ND	ND	301.86	ND(1)	1	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/2/2014	317.18	22.63	ND	ND	294.55	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	3/10/2015	317.18	23.25	ND	ND	293.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	317.18	23.33	ND	ND	293.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	317.18	23.76	ND	ND	293.42	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	317.18	26.12	ND	ND	291.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/1/2015	317.18	37.27	ND	ND	279.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-26D(67)	8/26/2014	295.13	2.63	ND	ND	292.50	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	Open from 57-104'
	9/2/2014	295.13	2.68	ND	ND	292.45	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	295.13	2.46	ND	ND	292.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/10/2015	295.13	1.98	ND	ND	293.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	295.13	1.82	ND	ND	293.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	295.13	2.08	ND	ND	293.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	295.13	3.52	ND	ND	291.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-26D(78)	8/26/2014	295.13	2.63	ND	ND	292.50	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/2/2014	295.13	2.68	ND	ND	292.45	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	295.13	2.46	ND	ND	292.67	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	3/10/2015	295.13	1.98	ND	ND	293.15	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	6/4/2015	295.13	1.82	ND	ND	293.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/2/2015	295.13	2.08	ND	ND	293.05	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/2/2015	295.13	3.52	ND	ND	291.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							0	0	0	0	0	0	0	0	0	

Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
MW-26D(89)	8/26/2014	295.13	2.63	ND	ND	292.50	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	9/2/2014	295.13	2.68	ND	ND	292.45	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(20)	ND(1)	ND(1)	ND(1)	
	12/9/2014	295.13	2.46	ND	ND	292.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/10/2015	295.13	1.98	ND	ND	293.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	295.13	1.97	ND	ND	293.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/4/2015	295.13	1.82	ND	ND	293.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/1/2015	295.13	2.08	ND	ND	293.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	12/2/2015	295.13	3.52	ND	ND	291.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Mann-Kendall Statistic							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
PW-1(65)	8/17/2009	334.54	NM	NM	NM	NM	0.76	ND(0.50)	ND(0.50)	0.46 J	1320	80.9	148	ND(0.50)	36.8	Abandoned to 75' (Nov 2011)
	10/16/2009	334.54	NM	NM	NM	NM	8	ND	ND	8.4	2520	NA	NA	NA	NA	Open from 55-75'
	6/22/2010	334.54	34.47	ND	ND	300.07	8	ND(0.7)	ND(0.8)	7	1600	NA	NA	NA	NA	
	9/30/2010	334.54	36.84	ND	ND	297.70	9	ND(0.7)	ND(0.8)	5	1600	NA	NA	NA	NA	
	12/16/2010	334.54	36.51	ND	ND	298.03	6	ND(1)	ND(2)	5	1700	NA	NA	NA	NA	
	5/24/2011	334.54	35.87	ND	ND	298.67	8 J	ND(4)	ND(4)	4 J	2100	NA	NA	NA	NA	
	9/2/2011	334.54	38.61	ND	ND	295.93	6	ND(0.7)	ND(0.8)	3 J	1800	NA	NA	NA	NA	Abandoned to 75' (Nov 2011)
	12/22/2011	334.54	36.37	ND	ND	298.17	4 J	ND(4)	ND(4)	ND(4)	1300	NA	NA	NA	NA	
	6/1/2012	334.54	36.82	ND	ND	297.72	3 J	ND(1)	ND(2)	ND(2)	860	NA	NA	NA	NA	
	2/25/2013	334.54	38.28	ND	ND	296.26	ND(5)	ND(5)	ND(5)	ND(5)	800	110	140	ND(5)	51	
	6/6/2013	334.54	37.41	ND	ND	297.13	3 J	ND(0.7)	ND(0.8)	ND(0.8)	1200	NA	NA	NA	NA	
	12/19/2013	334.54	38.60	ND	ND	295.94	ND(25)	ND(25)	ND(25)	ND(25)	4700	630	280	ND(25)	140	
	3/25/2014	334.54	36.19	ND	ND	298.35	ND(10)	ND(10)	ND(10)	ND(10)	6900	1000	290	ND(10)	180	
	6/19/2014	334.54	34.23	ND	ND	300.31	ND(5)	ND(5)	ND(5)	ND(5)	3300	420	170	ND(5)	76	
	9/10/2014	334.54	36.96	ND	ND	297.58	ND(10)	ND(10)	ND(10)	ND(10)	4600	370	210	ND(10)	120	
	12/10/2014	334.54	42.23	ND	ND	292.31	1	ND(1)	ND(1)	ND(1)	890	110	130	ND(1)	40	
	3/12/2015	334.54	43.30	ND	ND	291.24	ND(1)	ND(1)	ND(1)	ND(1)	460	70	100	ND(1)	21	
	6/3/2015	334.54	41.52	ND	ND	293.02	ND(1)	ND(1)	ND(1)	ND(1)	360	ND(20)	75	ND(1)	13	
	9/4/2015	334.54	43.42	ND	ND	291.12	ND(1)	ND(1)	ND(1)	ND(1)	150	29	36	ND(1)	4	
	12/1/2015	334.54	56.30	ND	ND	278.24	ND(1)	ND(1)	ND(1)	ND(1)	25	ND(20)	10	ND(1)	ND(1)	
Mann-Kendall Statistic							-68	0	0	-42	-48	-31	-33	0	-33	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
PW-1(85)	6/22/2010	334.54	34.47	ND	ND	300.07	8	ND(0.7)	ND(0.8)	5	2000	NA	NA	NA	NA	
	9/30/2010	334.54	36.85	ND	ND	297.69	9	ND(0.7)	ND(0.8)	6	1700	NA	NA	NA	NA	
	12/16/2010	334.54	36.51	ND	ND	298.03	8	ND(0.7)	ND(0.8)	6	1900	NA	NA	NA	NA	
	5/24/2011	334.54	35.87	ND	ND	298.67	6 J	ND(1)	ND(2)	3 J	2100	NA	NA	NA	NA	
	9/2/2011	334.54	38.61	ND	ND	295.93	5 J	ND(0.7)	ND(0.8)	2 J	1600	NA	NA	NA	NA	Abandoned to 75' (Nov 2011)
Mann-Kendall Statistic							-7	0	0	-5	-2	N/A	N/A	N/A	N/A	

Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
PW-1(105)	10/16/2009	334.54	NM	NM	NM	NM	5.8	ND	ND	4.1	1180	NA	NA	NA	NA	
	6/22/2010	334.54	34.47	ND	ND	300.07	5	ND(1)	ND(2)	3	2300	NA	NA	NA	NA	
	9/30/2010	334.54	36.85	ND	ND	297.69	9	ND(0.7)	ND(0.8)	5	1800	NA	NA	NA	NA	
	12/16/2010	334.54	36.51	ND	ND	298.03	8	ND(1)	ND(2)	5	1700	NA	NA	NA	NA	
	5/24/2011	334.54	35.87	ND	ND	298.67	5 J	ND(1)	ND(2)	2 J	1900	NA	NA	NA	NA	
	9/2/2011	334.54	38.61	ND	ND	295.93	3 J	ND(0.7)	ND(0.8)	1 J	1400	NA	NA	NA	NA	Abandoned to 75' (Nov 2011)
Mann-Kendall Statistic							-6	0	0	-6	-1	N/A	N/A	N/A	N/A	

Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

		Gauging Data					Analytical Data									
Well ID	**Date**	**Top of Casing Elevation (feet)**	**Depth to Water (feet)**	**Depth to Hydro-carbon (feet)**	**Hydro-carbon Thickness (feet)**	**Corrected GW Elevation (feet)**	**Benzene (µg/L)**	**Toluene (µg/L)**	**Ethyl-benzene (µg/L)**	**Total Xylenes (µg/L)**	**MTBE (µg/L)**	**TBA (µg/L)**	**DIPE (µg/L)**	**ETBE (µg/L)**	**TAME (µg/L)**	**Comments**
RW-1	3/24/2014	328.31	30.91	ND	ND	297.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	Screened from 21-91'
	6/19/2014	328.31	28.14	ND	ND	300.17	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	8/20/2014	328.31	30.26	ND	ND	298.05	ND(20)	ND(20)	ND(20)	ND(20)	19000	3800	420	ND(20)	220	
	12/11/2014	328.31	58.61	ND	ND	269.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/12/2015	328.31	44.47	ND	ND	283.84	ND(20)	ND(20)	ND(20)	ND(20)	7200	1800	200	ND(20)	100	
	6/1/2015	NM	NM	NM	NM	NM	ND(10)	ND(10)	ND(10)	ND(10)	4700	550	140	ND(10)	71	
	8/17/2015	NM	NM	NM	NM	NM	ND(5)	ND(5)	ND(5)	ND(5)	4500	NA	NA	NA	NA	
	8/31/2015	328.31	54.69	ND	ND	273.62	ND(10)	ND(10)	ND(10)	ND(10)	4400	810	120	ND(10)	63	
	12/1/2015	328.31	NM	NM	NM	NM	2	ND(1)	ND(1)	ND(1)	3900	740	100	ND(1)	66	
Mann-Kendall Statistic							0	0	0	0	-3	-1	-1	0	-1	

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Table 4 (Continued)

Groundwater Monitoring & Analytical Data – Deep Wells

Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia
August 17, 2009 through December 29, 2015

Notes:

µg/L - micrograms per liter (µg/L)
CMT - Continuous Multichannel Tubing
DIPE - Isopropyl ether
ETBE - Ethyl tert-butyl ether
GW - Groundwater
J - Indicates an estimated value
MTBE - Methyl Tertiary Butyl Ether
NA - Not analyzed
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
NSVD - Not surveyed to vertical datum
TAME - Tert-Amyl methyl ether
TBA - Tert-Butyl alcohol

Table 5

Monitored Natural Attenuation Field Parameters Summary
Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia

March 24, 2014 through December 2, 2015

		Monitored Natural Attenuation Field Parameters				
Well ID	**Date**	**Dissolved Oxygen (mg/L)**	**ORP (mV)**	**pH (su)**	**Specific Conductance (mS/cm)**	**Comments**
MW-1	3/25/2014	0.91	-123.2	11.56	0.425	
	6/20/2014	0.56	219.8	4.59	0.692	
MW-2	3/25/2014	2.98	-114.3	12.78	0.278	
	6/20/2014	5.38	210.7	4.67	0.414	
	9/10/2014	3.87	41.0	6.05	0.602	
MW-5	9/2/2014	0.68	107.2	6.12	0.431	
	9/3/2015	5.36	193.0	4.66	2.126	
MW-6S	9/3/2014	2.37	121.3	6.68	0.627	
	9/2/2015	0.93	-91.6	6.80	0.431	
MW-6D (65)	6/18/2014	0.79	-64.6	6.34	0.686	
MW-6D (85)	6/18/2014	0.44	-118.9	6.79	0.727	
	9/2/2015	1.07	-39.6	6.91	0.537	
MW-6D (105)	6/18/2014	0.39	-147.9	6.63	0.839	
MW-7	3/28/2014	0.67	-159.8	11.84	0.216	
	6/20/2014	4.19	204.1	4.95	0.403	
SVE-2	3/25/2014	1.92	-144.5	12.04	0.664	
	9/10/2014	1.13	28.7	6.26	1.007	
	9/3/2015	0.56	138.6	5.53	0.794	
MW-9	3/24/2014	3.60	-36.4	8.26	0.538	
MW-10	6/18/2014	3.66	153.9	5.97	0.743	
	9/3/2014	6.03	-126.1	5.08	0.310	
	9/2/2015	0.76	-56.5	6.92	0.406	
MW-11	3/24/2014	2.09	-117.6	10.09	0.806	
	6/20/2014	2.71	-86.4	10.62	0.729	
	9/10/2014	0.66	85.2	6.80	0.304	
MW-12D (110)	6/18/2014	2.63	-97.2	6.57	0.713	
	9/2/2015	0.71	-18.1	6.92	0.552	
MW-12D (153)	6/18/2014	2.25	-101.4	5.82	0.849	
MW-13	3/24/2014	0.75	-118.5	10.40	0.245	
	6/19/2014	1.52	-131.8	10.06	0.296	
	9/10/2014	1.61	-89.9	5.19	0.451	
	9/3/2015	2.83	137.1	5.66	0.895	
MW-14	3/24/2014	3.59	-106.4	9.75	0.809	
	6/19/2014	3.81	-114.8	8.47	0.832	
	9/10/2014	7.08	-84.2	6.12	0.340	
MW-15	3/25/2014	2.08	-119.8	12.24	1.137	
	6/20/2014	2.54	-173.4	12.14	1.071	
	9/10/2014	2.15	42.5	6.17	0.629	
	12/10/2014	2.93	95.7	6.70	0.702	
	3/11/2015	5.68	105.2	5.52	0.696	
	6/3/2015	3.78	123.1	5.94	0.631	
MW-16D(95)	3/25/2014	0.26	-112.3	11.56	0.858	
	6/19/2014	0.37	-71.7	6.38	0.894	
MW-18D	6/18/2014	2.65	-138.2	6.87	0.638	
	9/3/2014	0.73	-196.0	8.87	0.286	
	9/2/2015	1.05	21.7	6.94	0.309	
MW-19D	3/28/2014	3.17	-78.5	6.26	0.805	
	6/20/2014	0.69	-178.2	8.00	0.904	
	9/4/2014	6.23	-184.0	5.63	0.540	
	9/2/2015	1.46	-107.9	6.79	0.209	
MW-20D(73-83)	8/26/2014	2.68	54.8	6.23	0.302	
	9/2/2014	0.85	50.2	6.60	0.503	
	3/12/2015	2.71	-57.4	6.42	0.506	
MW-20D(90-100)	8/26/2014	4.55	45.1	6.12	0.370	
	9/2/2014	2.36	63.1	6.17	0.489	
	3/12/2015	2.58	-16.2	6.74	0.304	
MW-20D(132-142)	8/26/2014	3.64	79.2	6.39	0.257	
	9/2/2014	3.59	88.2	7.13	0.551	
	3/12/2015	2.46	-55.6	6.32	0.423	

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Table 5

Monitored Natural Attenuation Field Parameters Summary
Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia

March 24, 2014 through December 2, 2015

		Monitored Natural Attenuation Field Parameters				
Well ID	**Date**	**Dissolved Oxygen (mg/L)**	**ORP (mV)**	**pH (su)**	**Specific Conductance (mS/cm)**	**Comments**
MW-21S	4/11/2014	3.51	173.9	5.72	0.879	
	6/18/2014	1.76	158.5	6.09	0.855	
	12/10/2014	1.25	150.8	5.43	0.860	
	3/11/2015	0.90	89.6	5.66	0.652	
	6/3/2015	0.78	60.1	5.87	0.642	
	9/4/2015	2.05	210.8	5.12	0.709	
	12/1/2015	0.18	177.4	5.39	0.833	
MW-21I	4/11/2014	1.89	196.6	5.58	0.737	
	6/18/2014	1.18	213.2	5.89	0.702	
	12/10/2014	0.50	92.3	5.42	0.861	
	3/11/2015	0.37	97.0	5.56	0.605	
	6/3/2015	0.66	116.1	5.70	0.629	
	9/4/2015	0.62	197.4	5.39	0.747	
	12/2/2015	0.06	165.7	5.50	0.884	
MW-22	4/11/2014	5.86	184.8	5.79	0.539	
	6/18/2014	5.50	185.8	5.89	0.574	
	9/2/2014	1.69	-215.2	4.95	0.355	
	9/2/2015	0.96	-45.0	6.87	0.273	
MW-23D	6/19/2014	1.48	-95.1	8.91	0.694	
	8/20/2014	2.27	272.3	3.19	0.718	
	9/3/2014	0.72	-195.0	5.77	0.799	
	10/21/2014	0.50	77.2	5.80	0.809	
	12/10/2014	0.80	121.2	6.36	0.827	
	3/11/2015	1.27	70.9	6.04	0.392	
	6/3/2015	0.96	113.8	6.38	0.428	
	9/4/2015	0.55	125.5	6.04	0.578	
	12/2/2015	0.22	112.6	6.07	0.575	
MW-24	4/11/2014	6.28	212.6	5.71	0.639	
	6/18/2014	6.61	215.2	5.88	0.589	
	9/3/2014	5.70	-127.6	4.83	0.553	
	3/12/2018	0.98	108.9	6.58	0.468	
	6/3/2015	0.71	118.2	6.80	0.569	
	9/4/2015	6.46	176.1	5.07	0.636	
	12/2/2015	1.15	199.0	5.21	0.635	
MW-25D (76)	8/20/2014	NA	1.9	6.10	0.547	
	9/2/2014	0.48	-189.6	6.16	0.663	
MW-25D (90)	8/20/2014	NA	-19.1	6.17	0.543	
	9/2/2014	0.49	-244.4	6.17	0.649	
	12/9/2014	0.73	-205.0	6.23	0.661	
	3/10/2015	0.67	-63.2	6.64	0.637	
	6/2/2015	0.68	-56.8	6.77	0.597	
	9/2/2015	1.00	-58.5	6.82	0.605	
	12/1/2015	0.74	-78.7	6.67	0.681	
MW-25D (98)	8/20/2014	NA	-32.6	6.16	0.541	
	9/2/2014	0.85	-231.9	6.20	0.658	
MW-26D (67)	8/26/2014	1.71	81.2	7.08	0.305	
	9/2/2014	1.03	-223.5	5.95	0.467	
MW-26D (78)	8/26/2014	2.36	79.8	7.09	0.402	
	9/2/2014	1.11	-263.3	6.16	0.540	
	12/9/2014	0.68	-184.4	6.45	0.676	
	3/10/2015	1.41	-85.3	7.36	0.294	
	9/2/2015	0.88	-66.1	6.88	0.530	
MW-26D (89)	8/26/2014	1.41	81.2	6.95	0.346	
	9/2/2014	1.20	-250.3	6.07	0.554	

Kleinfelder
1340 Charwood Road, Suite I, Hanover, MD 21076

Table 5

Monitored Natural Attenuation Field Parameters Summary
Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia

March 24, 2014 through December 2, 2015

		Monitored Natural Attenuation Field Parameters				
Well ID	**Date**	**Dissolved Oxygen (mg/L)**	**ORP (mV)**	**pH (su)**	**Specific Conductance (mS/cm)**	**Comments**
MW-27S	8/26/2014	1.77	34.1	6.80	0.453	
	9/2/2014	0.38	-251.3	5.78	0.420	
	12/9/2014	1.04	14.2	5.41	0.339	
	3/11/2015	1.27	44.7	5.95	0.250	
	6/3/2015	0.97	66.2	6.08	0.321	
	9/2/2015	3.90	136.9	5.54	0.500	
	12/1/2015	1.01	126.0	5.48	0.348	
MW-27I	8/26/2014	1.95	75.7	6.65	0.509	
	9/2/2014	1.12	-234.5	5.70	0.785	
	12/9/2014	1.60	199.3	5.41	0.786	
	3/11/2015	2.00	74.2	5.72	0.560	
	6/3/2015	1.89	45.6	5.93	0.597	
	9/3/2015	2.55	127.0	5.54	0.800	
	12/1/2015	1.74	133.0	5.62	0.844	
PW-1(65)	3/25/2014	0.37	-137.8	12.61	0.772	
	6/19/2014	0.49	-168.2	11.13	0.827	
	9/10/2014	0.97	69.5	6.22	0.871	
	12/10/2014	1.16	105.3	6.94	0.710	
	3/12/2015	0.97	18.9	6.27	0.413	
	6/3/2015	0.58	33.7	6.84	0.387	
	9/4/2015	1.58	94.5	5.54	0.610	
	12/1/2015	1.01	117.7	5.45	0.718	

Kleinfelder
1340 Charwood Road, Suite I, Hanover, MD 21076

Table 5

Monitored Natural Attenuation Field Parameters Summary
Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia

March 24, 2014 through December 2, 2015

		Monitored Natural Attenuation Field Parameters				
Well ID	**Date**	**Dissolved Oxygen (mg/L)**	**ORP (mV)**	**pH (su)**	**Specific Conductance (mS/cm)**	**Comments**
W-1	3/25/2014	0.72	197.3	5.35	1.011	
	6/19/2014	0.72	219.6	5.12	0.932	
	9/3/2014	0.84	-64.1	5.18	1.261	
	12/10/2014	0.23	157.8	5.16	1.187	
	3/12/2015	0.75	126.9	4.87	0.422	
	6/4/2015	0.92	142.1	5.56	0.480	
	9/4/2015	0.88	142.7	5.24	1.112	
	12/2/2015	0.08	179.0	5.32	1.167	
W-2	3/25/2014	2.98	144.8	5.75	0.473	
	6/19/2014	2.85	197.8	6.13	0.420	
	9/3/2014	1.34	-85.7	5.46	1.042	
	12/10/2014	0.95	68.0	4.66	0.579	
	3/11/2015	1.14	130.9	4.78	0.390	
	6/3/2015	1.92	187.2	5.30	0.438	
W-3	9/3/2014	5.32	-107.9	4.42	0.639	
	9/4/2015	4.96	184.3	4.83	0.501	
W-4	9/2/2015	0.69	-73.5	6.64	0.482	
W-5	9/3/2015	1.50	-30.1	6.49	0.793	
W-6	3/25/2014	5.87	179.6	5.21	0.124	
	6/18/2014	5.68	122.6	5.65	0.169	
	9/3/2014	4.70	-123.8	4.90	0.146	
	12/9/2014	4.87	68.6	5.87	0.160	
	3/11/2015	6.31	76.8	6.45	1.489	
	6/2/2015	6.06	78.2	6.51	1.327	
	9/3/2015	5.09	107.9	5.31	0.199	
	12/1/2015	0.75	91.9	5.69	0.254	
W-7	3/24/2014	0.99	77.3	6.03	0.392	
	6/18/2014	1.43	60.2	6.08	0.384	
	9/3/2014	0.59	-167.1	5.69	0.431	
	12/9/2014	0.93	32.9	6.07	0.383	
	3/10/2015	0.97	-19.3	6.87	0.344	
	6/2/2015	0.77	-28.2	6.88	0.364	
	9/3/2015	0.15	68.1	6.36	0.435	
	12/1/2015	0.11	30.9	6.26	0.438	
RW-1	8/20/2014	5.71	278.1	5.72	0.363	
GFSCMW-2	3/24/2014	1.32	67.5	6.15	0.425	
GFSCMW-3	3/24/2014	1.45	80.1	6.06	0.409	
GFSTMW-1	6/20/2014	5.19	181.2	5.26	0.599	

Notes:
mg/L - miligrams per liter
mV - milivolt
su - standard units
mS/cm - milisiemens per centimeter
NA - not available

Kleinfelder
1340 Charwood Road, Suite I, Hanover, MD 21076

Table 6

Groundwater Recovery System Monitoring and Performance

Inactive Fairfax Facility #26140
9901 Georgetown Pike,
Great Falls, Virginia

August 28, 2014 through December 29, 2015

SYSTEM OPERATING DATA:

Date	Date and Time	RW-1 Influent Totalizer Reading (gallons)	RW-1 Runtime (hours)	RW-1 Average Flow (gpm)	MW-16D Influent Totalizer Reading (gallons)	MW-16D Runtime (hours)	MW-16D Average Flow (gpm)	Effluent Totalizer Reading (gallons)	Gallons Treated during Period	Operating Days during Period	Average Flow (gpm)	Average Flow (gpd)	MTBE Beg. Conc. (µg/L)	MTBE End Conc. (µg/L)	Avg. Influent Total MTBE (µg/L)	MTBE Recovery Rate (lbs/hr)	MTBE Mass Recovered (lbs) during Period	MTBE Cumulative Mass Recovered (lbs)
8/28/2014	8/28/14 7:40	84	0	0.00	97	0	0	582	--	0.0	--	--	--	40,000	--	--	--	--
8/28/2014[1]	8/28/14 10:40	1,338	3	7.82	97	0	0.00	NR	NR	0.1	8.35	1,338	40,000	40,000	40,000	0.17	0.45	0.45
8/29/2014[2]	8/29/14 6:30	1,338	3	0.00	10,869	20	8.98	12,884	12,302	0.8	9.06	10,869	4,200	4,200	4,200	0.02	0.38	0.83
8/29/2014	8/29/14 9:20	1,361	6	0.14	10,869	20	0.00	13,599	715	0.1	4.21	6,064	40,000	60,000	50,000	0.11	0.30	1.13
9/2/2014	9/2/14 18:05	19,950	97	3.39	10,869	20	0.00	32,320	18,721	3.8	3.41	4,910	60,000	60,000	60,000	0.10	9.37	10.50
9/3/2014	9/3/14 7:00	24,901	111	5.89	10,869	20	0.00	37,020	4,700	0.6	5.60	8,057	60,000	29,000	44,500	0.12	1.75	12.24
9/4/2014	9/4/14 15:15	41,155	143	8.40	10,869	20	0.00	53,274	16,254	1	8.40	12,096	29,000	33,000	31,000	0.13	4.20	16.45
9/12/2014	9/12/14 14:15	106,698	286	7.64	10,869	20	0.00	118,402	81,382	6	9.49	13,659	33,000	33,000	33,000	0.16	22.41	38.86
9/16/2014	9/16/14 7:15	154,200	362	10.45	10,869	20	0.00	165,065	46,663	3.7	8.74	12,583	33,000	21,000	27,000	0.12	10.51	49.37
9/22/2014	9/22/14 7:30	228,617	506	8.61	10,869	20	0.00	238,365	73,300	6.0	8.48	12,217	21,000	21,000	21,000	0.09	12.84	62.22
9/30/2014	9/30/14 8:30	317,802	684	8.35	10,869	20	0.00	327,777	89,412	7.4	8.37	12,056	21,000	21,000	21,000	0.09	15.67	77.88
10/6/2014	10/6/14 8:00	388,909	827	8.29	10,869	20	0.00	399,420	71,643	6.0	8.35	12,024	21,000	16,000	18,500	0.08	11.06	88.94
10/13/2014	10/13/14 7:20	468,702	988	8.26	10,869	20	0.00	479,111	79,691	6.7	8.25	11,879	16,000	16,000	16,000	0.07	10.64	99.58
10/20/2014	10/20/14 8:20	552,099	1,157	8.22	10,869	20	0.00	561,935	82,824	7.0	8.17	11,762	16,000	17,000	16,500	0.07	11.40	110.99
10/27/2014	10/27/14 8:00	634,476	1,318	8.53	10,869	20	0.00	644,143	82,208	6.7	8.51	12,255	17,000	17,000	17,000	0.07	11.66	122.65
11/6/2014	11/6/14 10:45	741,202	1,533	8.27	10,869	20	0.00	750,608	106,465	9.0	8.25	11,884	17,000	12,000	14,500	0.06	12.88	135.53
11/18/2014	11/18/14 14:33	839,069	1,734	8.12	10,869	20	0.00	848,425	97,817	8.4	8.11	11,680	12,000	12,000	12,000	0.05	9.79	145.32
11/25/2014	11/25/14 10:20	918,427	1,896	8.16	10,869	20	0.00	927,265	78,840	6.8	8.11	11,680	12,000	12,000	12,000	0.05	7.89	153.22
11/26/2014	11/26/14 10:00	922,579	1,903	9.89	10,869	20	0.00	930,784	3,519	0.3	8.38	12,065	12,000	12,000	12,000	0.05	0.35	153.57
12/3/2014	12/3/14 11:54	991,666	2,045	8.11	10,869	20	0.00	995,891	65,107	5.9	7.64	11,004	12,000	12,000	12,000	0.05	6.52	160.09
12/17/2014	12/17/14 14:45	1,125,750	2,383	6.61	10,869	20	0.00	1,160,620	164,729	14.1	8.12	11,697	12,000	12,000	12,000	0.05	16.49	176.58
12/29/2014	12/29/14 10:15	1,300,720	2,668	10.23	10,869	20	0.00	1,299,310	138,690	11.9	8.11	11,679	12,000	8,700	10,350	0.04	11.98	188.56
1/5/2015	1/5/15 13:30	1,385,250	2,840	8.19	10,869	20	0.00	1,384,070	84,760	7.2	8.21	11,879	8,700	8,700	8,700	0.04	6.15	194.72
1/14/2015	1/14/15 10:00	1,488,490	3,050	8.19	10,869	20	0.00	1,488,830	104,760	8.8	8.31	11,832	8,700	8,700	8,700	0.04	7.61	202.32
1/26/2015	1/26/15 14:30	1,490,480	3,054	8.29	10,869	20	0.00	1,490,340	1,510	0.2	6.29	124	12,000	12,000	12,000	0.04	0.15	202.47
1/30/2015	1/30/15 9:45	1,562,290	3,145	13.15	10,869	20	0.00	1,535,710	45,370	3.80	8.29	11,933	12,000	12,000	12,000	0.05	4.54	207.01
2/3/2015	2/3/15 10:00	1,590,570	3,219	6.37	24,731	94	3.12	1,571,390	35,680	4.01	6.18	8,897	3,900	5,300	4,600	0.01	1.37	208.38
2/11/2015	2/11/15 9:38	1,647,930	3,408	5.06	59,978	282	3.12	1,661,500	90,110	7.98	7.84	11,285	5,300	5,300	5,300	0.02	3.99	212.37
2/20/2015	2/20/15 11:00	1,712,450	3,492	12.80	75,606	367	3.06	1,701,030	39,530	9.06	3.03	4,365	5,300	5,300	5,300	0.01	1.75	214.12
2/27/2015	2/27/15 13:00	1,757,040	3,644	4.89	105,201	520	3.22	1,760,620	59,590	7.08	5.84	8,413	5,300	5,300	5,300	0.02	2.64	216.75
3/4/2015	3/4/15 10:35	1,790,190	3,761	4.72	126,911	637	3.09	1,813,180	52,560	4.90	7.45	10,728	5,300	4,900	5,100	0.02	2.24	218.99
3/9/2015	3/9/15 14:50	1,824,630	3,884	4.67	149,977	760	3.13	1,867,980	54,800	5.18	7.35	10,585	4,900	4,900	4,900	0.02	2.24	221.23
3/17/2015	3/17/15 12:35	1,877,980	4,074	4.68	188,633	950	3.39	1,951,870	83,890	7.91	7.37	10,611	4,900	4,900	4,900	0.02	3.43	224.66
3/27/2015	3/27/15 13:30	1,945,690	4,314	4.70	234,952	1,191	3.20	2,059,280	107,410	10.04	7.43	10,700	4,900	4,900	4,900	0.02	4.39	229.05
4/1/2015	4/1/15 8:25	1,980,270	4,430	4.97	234,952	1,191	0.00	2,092,050	32,770	4.83	4.71	6,780	4,900	6,500	5,700	0.01	1.56	230.61
4/7/2015	4/7/15 8:40	1,996,540	4,483	5.12	234,952	1,191	0.00	2,107,220	15,170	2.21	4.77	6,869	6,500	6,500	6,500	0.02	0.82	231.43
4/21/2015	4/21/15 13:00	2,090,500	4,785	5.19	235,228	1,192	4.60	2,197,450	90,230	12.58	4.98	7,171	6,500	6,500	6,500	0.02	4.89	236.33
4/30/2015	4/30/15 7:58	2,141,590	4,974	4.51	273,370	1,381	3.36	2,280,320	82,870	8.79	6.55	9,427	6,500	6,500	6,500	0.02	4.49	240.82
5/6/2015	5/6/15 12:10	2,180,480	5,122	4.38	302,819	1,529	3.32	2,343,870	63,550	6.18	7.15	10,291	6,500	4,200	5,350	0.02	2.84	243.66
5/22/2015	5/22/15 9:45	2,276,900	5,504	4.21	376,197	1,910	3.21	2,501,160	157,290	15.90	6.87	9,893	4,200	4,200	4,200	0.01	5.51	249.17
6/1/2015	6/1/15 14:05	2,327,770	5,708	4.16	415,361	2,115	3.18	2,582,700	81,540	10.18	5.56	8,009	4,200	4,000	4,100	0.01	2.79	251.96
6/2/2015	6/2/15 15:40	2,330,660	5,719	4.38	417,438	2,126	3.15	2,587,170	4,470	0.46	6.77	9,753	4,000	4,000	4,000	0.01	0.15	252.11

Table 6

Groundwater Recovery System Monitoring and Performance

Inactive Fairfax Facility #26140
9901 Georgetown Pike,
Great Falls, Virginia

August 28, 2014 through December 29, 2015

SYSTEM OPERATING DATA:

Date	Date and Time	RW-1 Influent Totalizer Reading (gallons)	RW-1 Runtime (hours)	RW-1 Average Flow (gpm)	MW-16D Influent Totalizer Reading (gallons)	MW-16D Runtime (hours)	MW-16D Average Flow (gpm)	Effluent Totalizer Reading (gallons)	Gallons Treated during Period	Operating Days during Period	Average Flow (gpm)	Average Flow (gpd)	MTBE Beg. Conc. (µg/L)	MTBE End Conc. (µg/L)	Avg. Influent Total MTBE (µg/L)	MTBE Recovery Rate (lbs/hr)	MTBE Mass Recovered (lbs) during Period	MTBE Cumulative Mass Recovered (lbs)
6/4/2015	6/4/15 11:10	2,341,600	5,763	4.14	426,456	2,170	3.42	2,605,400	18,230	1.83	6.91	9,944	4,000	4,000	4,000	0.01	0.61	252.72
6/9/2015	6/9/15 12:50	2,351,070	5,800	4.27	436,307	2,207	4.44	2,622,630	17,230	1.54	7.76	11,176	4,000	4,000	4,000	0.02	0.58	253.29
6/15/2015	6/15/15 12:45	2,388,230	5,944	4.30	473,883	2,351	4.35	2,689,500	66,870	6.00	7.74	11,145	4,000	3,800	3,900	0.02	2.18	255.47
6/17/2015	6/17/15 10:30	2,394,120	5,967	4.27	479,771	2,374	4.27	2,700,110	10,610	0.96	7.69	11,071	3,800	3,800	3,800	0.01	0.34	255.81
7/2/2015	7/2/15 10:00	2,456,940	6,218	4.17	541,121	2,624	4.09	2,812,230	112,120	10.46	7.44	10,721	3,800	3,600	3,700	0.01	3.46	259.27
7/9/2015	7/9/15 10:55	2,499,270	6,386	4.20	578,973	2,793	3.73	2,883,620	71,390	7.00	7.08	10,199	3,600	4,000	3,800	0.01	2.26	261.53
7/14/2015	7/14/15 11:45	2,546,580	6,507	6.52	603,518	2,914	3.38	2,950,570	66,950	5.04	9.22	13,279	4,000	4,000	4,000	0.02	2.23	263.77
8/3/2015	8/3/15 12:30	2,736,220	6,988	6.57	678,526	3,395	2.60	3,193,030	242,460	20.04	8.40	12,098	4,000	4,400	4,200	0.02	8.50	272.26
8/17/2015	8/17/15 12:45	2,877,480	7,325	6.99	722,491	3,732	2.17	3,363,080	170,050	14.04	8.41	12,110	4,000	3,300	3,650	0.02	5.18	277.44
9/1/2015	9/1/15 1:45	3,026,620	7,685	6.90	760,311	4,092	1.75	3,534,960	171,880	15.00	7.96	11,459	3,300	3,300	3,300	0.01	4.73	282.18
9/15/2015	9/15/15 11:30	3,158,520	8,018	6.60	787,720	4,424	1.38	3,685,170	150,210	13.88	7.52	10,826	3,300	3,400	3,350	0.01	4.20	286.37
9/22/2015	9/22/15 12:24	3,222,530	8,188	6.28	799,479	4,595	1.15	3,758,660	73,490	7.08	7.20	10,375	3,300	3,400	3,350	0.01	2.05	288.43
9/25/2015	9/25/15 12:45	3,228,370	8,204	6.08	803,832	4,611	4.53	3,767,940	9,280	0.67	9.67	13,920	3,300	3,400	3,350	0.02	0.26	288.69
9/29/2015	9/29/15 13:00	3,257,360	8,301	4.98	830,472	4,707	4.63	3,819,140	51,200	4.04	8.80	12,668	3,300	3,400	3,350	0.01	1.43	290.12
10/5/2015	10/5/15 12:30	3,300,270	8,444	5.00	872,488	4,851	4.86	3,895,190	76,050	5.96	8.86	12,764	3,400	2,800	3,100	0.01	1.97	292.09
10/15/2015	10/15/15 11:00	3,371,850	8,682	5.01	946,992	5,089	5.22	4,021,980	126,790	9.92	8.88	12,786	2,800	1,800	2,300	0.01	2.43	294.52
11/2/2015	11/2/15 9:45	3,493,100	9,098	4.86	1,084,290	5,505	5.50	4,243,880	221,900	17.33	8.89	12,802	1,800	1,500	1,650	0.01	3.06	297.58
11/17/2015	11/17/15 10:15	3,581,660	9,385	5.14	1,183,850	5,792	5.78	4,405,660	161,780	11.96	9.39	13,529	1,500	1,500	1,500	0.01	2.02	299.60
11/30/2015	11/30/15 10:42	3,670,000	9,698	4.70	1,275,130	6,105	4.86	4,557,230	151,570	13.04	8.07	11,622	1,500	1,500	1,500	0.01	1.90	301.50
12/1/2015	12/1/15 14:30	3,677,570	9,726	4.51	1,282,870	6,133	4.61	4,570,260	13,030	1.17	7.76	11,169	1,500	2,400	1,950	0.01	0.21	301.71
12/16/2015	12/16/15 9:10	3,771,960	10,081	4.43	1,374,660	6,488	4.31	4,731,750	161,490	14.79	7.58	10,918	2,400	2,100	2,250	0.01	3.03	304.74
12/29/2015	12/29/15 14:30	3,854,020	NR	4.31	1,442,400	NR	3.56	4,867,060	135,310	13.22	7.11	10,234	2,100	2,100	2,100	0.01	2.37	307.11

Cumulative Hydrocarbon Recovery and Discharge

Groundwater Treated/Discharged this Period (gal)	4,866,478
Total Operating Days	433
Total Days in Period	488
Run Time (%)	89%
Average Flow (gpm)	6.92
Average Flow (gpd)	9,966
Total MTBE Mass Recovered (lbs)	307.11

Third Quarter (September 29, 2015 through December 29, 2015)

Groundwater Treated/Discharged this Period (gal)	1,047,920
Total Operating Days	87
Total Days in Period	91
Run Time (%)	96%
Average Flow (gpm)	7.99
Average Flow (gpd)	11,508
Total MTBE Mass Recovered this Period (lbs)	16.99

HYDROCARBON RECOVERY & DISCHARGE CALCULATION:

Mass discharged/recovery rate (lbs/hr) = (conc.)(3.785 L/gal)(1 lb/453600000 µg)(flow rate-gpm)(60 min/hr)
Mass discharged/recovery (lbs) = (conc.)(3.785 L/gal)(1 lb/453600000 µg)(flow rate-gpd)(days operating)
Operating days are from the last monitoring event of the previous quarter to the last monitoring event of the current month.

Notes:
gal = gallons
gpm = gallons per minute
gpd = gallons per day
µg/l = micrograms per liter

Kleinfelder
1340 Charwood Road, Suite I, Hanover, MD

Table 6

Groundwater Recovery System Monitoring and Performance

Inactive Fairfax Facility #26140
9901 Georgetown Pike,
Great Falls, Virginia

August 28, 2014 through December 29, 2015

SYSTEM OPERATING DATA:

Date	Date and Time	RW-1 Influent Totalizer Reading (gallons)	RW-1 Runtime (hours)	RW-1 Average Flow (gpm)	MW-16D Influent Totalizer Reading (gallons)	MW-16D Runtime (hours)	MW-16D Average Flow (gpm)	Effluent Totalizer Reading (gallons)	Gallons Treated during Period	Operating Days during Period	Average Flow (gpm)	Average Flow (gpd)	MTBE Beg. Conc. (µg/L)	MTBE End Conc. (µg/L)	Avg. Influent Total MTBE (µg/L)	MTBE Recovery Rate (lbs/hr)	MTBE Mass Recovered (lbs) during Period	MTBE Cumulative Mass Recovered (lbs)

lbs / hr = pounds per hour
lbs = pounds
MTBE = methyl tertiary butyl ether
If compounds were detected below the laboratory recordable limits, then half of the sum of the detection limits for each compound are used in calculating hydrocarbon mass recovery.
System readings collected upon departure; gallons treated and average flow calculations determined from effluent totalizer values.
1 - Data representative of RW-1 pumping from 0800 - 1040 on 8/28/14. RW-1 pump turned off and MW-16D pump turned on at 1040 on 8/28/14.
2 - Data representative of MW-16D pumping from 1030 on 8/28/14 - 0630 on 8/29/14. MW-16D pump turned off and RW-1 pump turned on at 0630 on 8/29/14.

APPENDIX A

Lancaster Laboratories Analysis Reports – Groundwater

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

December 21, 2015

Project: Fairfax 26140

Submittal Date: 12/03/2015
Group Number: 1614230
PO Number: 51141-315335
State of Sample Origin: VA

Client Sample Description	Lancaster Labs (LL) #
MW-27I Grab Water	8159792
MW-27S Grab Water	8159793
MW-21S Grab Water	8159794
MW-20D(90-100) Grab Water	8159795
MW-20D(132-142) Grab Water	8159796
MW-20D(73-83) Grab Water	8159797
MW-24 Grab Water	8159798
MW-23D Grab Water	8159799
PW-1(65) Grab Water	8159800
MW-16D(95) Grab Water	8159801
RW-1 Grab Water	8159802
MW-25D(90) Grab Water	8159803
W-6 Grab Water	8159804
W-7 Grab Water	8159805
W-2 Grab Water	8159806
MW-21I Grab Water	8159807
W-1 Grab Water	8159808

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO	Kleinfelder	Attn: Jennifer Kozak
ELECTRONIC COPY TO	Kleinfelder	Attn: Nathan Stevens

ELECTRONIC COPY TO	Kleinfelder	Attn: Paxton Wertz
ELECTRONIC COPY TO	Kleinfelder	Attn: Venelda Williams
ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: MW-27I Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159792
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 12:50

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF27I

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	t-Amyl methyl ether	994-05-8	< 1	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	di-Isopropyl ether	108-20-3	< 1	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153442AA	12/11/2015 05:20	Graham A Goulding	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153442AA	12/11/2015 05:20	Graham A Goulding	1

Sample Description: MW-27S Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159793
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 12:00

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF27S

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	t-Amyl methyl ether	994-05-8	< 1	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	di-Isopropyl ether	108-20-3	< 1	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153442AA	12/11/2015 05:42	Graham A Goulding	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153442AA	12/11/2015 05:42	Graham A Goulding	1

Sample Description: MW-21S Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159794
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 13:55

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF21S

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**16**	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	**t-Butyl alcohol**	75-65-0	**890**	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	**di-Isopropyl ether**	108-20-3	**23**	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**1,500**	10	10
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153442AA	12/11/2015 06:03	Graham A Goulding	1
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 15:57	Brett W Kenyon	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153442AA	12/11/2015 06:03	Graham A Goulding	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L153451AA	12/11/2015 15:57	Brett W Kenyon	10

Sample Description: MW-20D(90-100) Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159795
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 14:10

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

20100

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	t-Amyl methyl ether	994-05-8	< 1	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	di-Isopropyl ether	108-20-3	< 1	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153442AA	12/11/2015 06:25	Graham A Goulding	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153442AA	12/11/2015 06:25	Graham A Goulding	1

Sample Description: MW-20D(132-142) Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159796
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 14:25

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

20142

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	t-Amyl methyl ether	994-05-8	< 1	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	di-Isopropyl ether	108-20-3	< 1	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**2**	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153442AA	12/11/2015 06:47	Graham A Goulding	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153442AA	12/11/2015 06:47	Graham A Goulding	1

Sample Description: MW-20D(73-83) Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159797
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 13:45

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

20-83

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**11**	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	**t-Butyl alcohol**	75-65-0	**400**	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	**di-Isopropyl ether**	108-20-3	**15**	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**900**	10	10
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 11:56	Brett W Kenyon	1
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153471AA	12/14/2015 05:43	Christopher G Torres	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153451AA	12/11/2015 11:56	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L153471AA	12/14/2015 05:43	Christopher G Torres	10

Sample Description: MW-24 Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159798
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/02/2015 10:05

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF-24

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	t-Amyl methyl ether	994-05-8	< 1	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	di-Isopropyl ether	108-20-3	< 1	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**2**	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153471AA	12/14/2015 00:36	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153471AA	12/14/2015 00:36	Christopher G Torres	1

Sample Description: MW-23D Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159799
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/02/2015 09:15

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF23D

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**1**	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	**di-Isopropyl ether**	108-20-3	**3**	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**120**	1	1
10335	**Toluene**	108-88-3	**1**	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 12:39	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153451AA	12/11/2015 12:39	Brett W Kenyon	1

Sample Description: PW-1(65) Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159800
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 10:35

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

PW165

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	t-Amyl methyl ether	994-05-8	< 1	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	**di-Isopropyl ether**	108-20-3	**10**	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**25**	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 13:01	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153451AA	12/11/2015 13:01	Brett W Kenyon	1

Sample Description: MW-16D(95) Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159801
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 08:25

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

16D95

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**7**	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	**t-Butyl alcohol**	75-65-0	**35**	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	**di-Isopropyl ether**	108-20-3	**21**	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**490**	10	10
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 13:23	Brett W Kenyon	1
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153471AA	12/14/2015 06:05	Christopher G Torres	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153451AA	12/11/2015 13:23	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L153471AA	12/14/2015 06:05	Christopher G Torres	10

Sample Description: RW-1 Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159802
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 08:30

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFRW1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**66**	1	1
10335	**Benzene**	71-43-2	**2**	1	1
10335	**t-Butyl alcohol**	75-65-0	**740**	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	**di-Isopropyl ether**	108-20-3	**100**	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**3,900**	20	20
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 13:45	Brett W Kenyon	1
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153471AA	12/14/2015 06:26	Christopher G Torres	20
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153451AA	12/11/2015 13:45	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L153471AA	12/14/2015 06:26	Christopher G Torres	20

Sample Description: MW-25D(90) Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159803
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 09:25

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

25D90

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	t-Amyl methyl ether	994-05-8	< 1	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	di-Isopropyl ether	108-20-3	< 1	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 14:07	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153451AA	12/11/2015 14:07	Brett W Kenyon	1

Sample Description: W-6 Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159804
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 11:40

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF-W6

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	t-Amyl methyl ether	994-05-8	< 1	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	di-Isopropyl ether	108-20-3	< 1	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 14:29	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153451AA	12/11/2015 14:29	Brett W Kenyon	1

Sample Description: W-7 Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159805
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 12:50

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF-W7

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	t-Amyl methyl ether	994-05-8	< 1	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	di-Isopropyl ether	108-20-3	< 1	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 14:51	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153451AA	12/11/2015 14:51	Brett W Kenyon	1

Sample Description: W-2 Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159806
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/02/2015 10:45

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF-W2

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**3**	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	**di-Isopropyl ether**	108-20-3	**16**	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**440**	10	10
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 10:50	Brett W Kenyon	1
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 11:12	Brett W Kenyon	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153451AA	12/11/2015 10:50	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L153451AA	12/11/2015 11:12	Brett W Kenyon	10

Sample Description: MW-21I Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159807
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/02/2015 12:30

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF21I

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**22**	2	2
10335	Benzene	71-43-2	< 2	2	2
10335	**t-Butyl alcohol**	75-65-0	**1,400**	40	2
10335	Ethyl t-butyl ether	637-92-3	< 2	2	2
10335	Ethylbenzene	100-41-4	< 2	2	2
10335	**di-Isopropyl ether**	108-20-3	**23**	2	2
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**2,100**	20	20
10335	Toluene	108-88-3	< 2	2	2
10335	Xylene (Total)	1330-20-7	< 2	2	2

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 17:24	Brett W Kenyon	2
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 17:46	Brett W Kenyon	20
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153451AA	12/11/2015 17:24	Brett W Kenyon	2
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L153451AA	12/11/2015 17:46	Brett W Kenyon	20

Sample Description: W-1 Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159808
LL Group # 1614230
Account # 12152

Project Name: Fairfax 26140

Collected: 12/02/2015 11:40

Submitted: 12/03/2015 16:08
Reported: 12/21/2015 20:42

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF-W1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**160**	10	10
10335	Benzene	71-43-2	< 10	10	10
10335	**t-Butyl alcohol**	75-65-0	**16,000**	2,000	100
10335	Ethyl t-butyl ether	637-92-3	< 10	10	10
10335	Ethylbenzene	100-41-4	< 10	10	10
10335	**di-Isopropyl ether**	108-20-3	**140**	10	10
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**16,000**	100	100
10335	Toluene	108-88-3	< 10	10	10
10335	Xylene (Total)	1330-20-7	< 10	10	10

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 18:08	Brett W Kenyon	10
10335	BTEX + 5 Oxys	SW-846 8260B	1	L153451AA	12/11/2015 18:30	Brett W Kenyon	100
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153451AA	12/11/2015 18:08	Brett W Kenyon	10
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L153451AA	12/11/2015 18:30	Brett W Kenyon	100

Quality Control Summary

Client Name: Kleinfelder Group Number: 1614230
Reported: 12/21/2015 20:42

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: L153442AA	Sample number(s): 8159792-8159796							
t-Amyl methyl ether	< 1	1.	ug/l	103	105	75-120	2	30
Benzene	< 1	1.	ug/l	107	108	78-120	1	30
t-Butyl alcohol	< 20	20.	ug/l	106	110	78-121	4	30
Ethyl t-butyl ether	< 1	1.	ug/l	101	104	69-120	3	30
Ethylbenzene	< 1	1.	ug/l	108	109	78-120	1	30
di-Isopropyl ether	< 1	1.	ug/l	104	107	70-124	3	30
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	103	105	75-120	2	30
Toluene	< 1	1.	ug/l	108	109	80-120	1	30
Xylene (Total)	< 1	1.	ug/l	110	110	80-120	0	30
Batch number: L153451AA	Sample number(s): 8159794,8159797,8159799-8159808							
t-Amyl methyl ether	< 1	1.	ug/l	99	102	75-120	3	30
Benzene	< 1	1.	ug/l	104	106	78-120	2	30
t-Butyl alcohol	< 20	20.	ug/l	110	110	78-121	1	30
Ethyl t-butyl ether	< 1	1.	ug/l	96	99	69-120	4	30
Ethylbenzene	< 1	1.	ug/l	103	106	78-120	2	30
di-Isopropyl ether	< 1	1.	ug/l	94	97	70-124	3	30
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	99	104	75-120	5	30
Toluene	< 1	1.	ug/l	104	106	80-120	2	30
Xylene (Total)	< 1	1.	ug/l	106	108	80-120	2	30
Batch number: L153471AA	Sample number(s): 8159797-8159798,8159801-8159802							
t-Amyl methyl ether	< 1	1.	ug/l	101	104	75-120	3	30
Benzene	< 1	1.	ug/l	104	109	78-120	4	30
t-Butyl alcohol	< 20	20.	ug/l	118	113	78-121	4	30
Ethyl t-butyl ether	< 1	1.	ug/l	98	101	69-120	3	30
Ethylbenzene	< 1	1.	ug/l	105	110	78-120	5	30
di-Isopropyl ether	< 1	1.	ug/l	100	103	70-124	3	30
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	101	103	75-120	2	30
Toluene	< 1	1.	ug/l	107	112	80-120	4	30
Xylene (Total)	< 1	1.	ug/l	107	112	80-120	5	30

Surrogate Quality Control

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1614230
Reported: 12/21/2015 20:42

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.

Analysis Name: BTEX + 5 Oxys
Batch number: L153442AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8159792	105	102	97	95
8159793	106	105	95	95
8159794	102	100	97	94
8159795	105	103	97	93
8159796	105	103	97	94
Blank	103	100	97	95
LCS	101	100	100	100
LCSD	102	101	99	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX + 5 Oxys
Batch number: L153451AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8159797	104	101	95	95
8159799	106	103	96	95
8159800	106	102	96	93
8159801	105	100	96	94
8159802	103	100	96	94
8159803	106	104	94	94
8159804	107	102	95	94
8159805	104	100	97	94
8159806	103	102	97	96
8159807	105	100	95	93
8159808	106	101	95	93
Blank	106	102	96	94
LCS	105	103	98	98
LCSD	105	103	98	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX + 5 Oxys
Batch number: L153471AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8159798	105	103	98	92
Blank	105	103	99	92
LCS	102	104	98	95
LCSD	103	101	99	90
Limits:	80-116	77-113	80-113	78-113

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Lancaster Laboratories

Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152
Group #: 614230 Sample #: 8159792-808

Client: Fairfax Petroleum	Acct. #:	Matrix				Analyses Requested / Preservation Codes	For Lab Use Only
Project Name/#: Great Falls	PWSID #:						FSC:
Project Manager: Mark C. Steele	P.O. #: 51141-315335						SCR#:
Sampler:	Quote #:						
Name of State where samples were collected: Virginia							

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	BTEX + OXY								Remarks	Temperature of samples upon receipt (if requested)
					Potable	NPDES			H									
MW-27I	12/1/15	12:50	X			X			X									
MW-27S	12/1/15	12:00	X			X			X									
MW-21S	12/1/15	13:55	X			X			X									
MW-20D(90-100)	12/1/15	14:10	X			X			X									
MW-20D(132-142)	12/1/15	14:25	X			X			X									
MW-20D(73-83)	12/1/15	13:45	X			X			X									
MW-24	12/2/15	10:05	X			X			X									
MW-23D	12/2/15	0915	X			X			X									
M-15			X			X			X									
MW-7			X			X			X									
PW-1(65)	12/1/15	10:35	X			X			X									
MW-2			X			X			X									

Preservation Codes: H=HCl T=Thiosulfate N=HNO3 B=NaOH S=H2SO4 O=Other

Turnaround Time Requested (TAT) (please circle): (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax (E-mail)
Phone #: Fax #:
E-mail address:

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplecate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/2/15	17:00	cooler room	12/2/15	17:00
[signature]	12/3/15	1:25	[signature]	12-3-15	1325
[signature]	12-3-15	1608			

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Lancaster Laboratories

Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152
Group #: 161230 Sample #: 815972-808

Client: Fairfax Petroleum	Acct. #:	Matrix				Analyses Requested	For Lab Use Only
Project Name/#: Great Falls	PWSID #:					Preservation Codes	FSC:
Project Manager: Mark C. Steele	P.O. #: 51141-315335						SCR#:
Sampler:	Quote #:						
Name of State where samples were collected: Virginia							

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Potable Water	NPDES Water	Other	Total # of Containers	BTEX + OXY								Remarks	Temperature of samples upon receipt (if requested)
										H								Preservation Codes: H=HCl T=Thiosulfate N=HNO3 B=NaOH S=H2SO4 O=Other	
MW-17D(75)			X			X				X									
MW-17D(81)			X			X				X									
MW-17D(87.75)			X			X				X									
MW-17D(92)			X			X				X									
MW-17D(117)			X			X				X									
MW-17D(129.75)			X			X				X									
MW-17D(147)			X			X				X									
MW-16D(95)	12/1/15	0825	X			X				X									
RW-1	12/1/15	08:30	X			X				X									
MW-25D(90)	12/1/15	0925	X			X				X									
W-6	12/1/15	11:40	X			X				X									
W-7	12/1/15	12:50	X			X				X									

Turnaround Time Requested (TAT) (please circle) (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax (E-mail)
Phone #: Fax #:
E-mail address:

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplicate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/2/15	17:00	cooler room	12/2/15	17:00
[signature]	12/3/15	1:25	[signature]	12-3-15	1325
[signature]	12-3-15	1608			
			[signature]	12/3/15	1608

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Lancaster Laboratories

Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152
Group #: 1614230 Sample #: 8159797-806

Client:	Fairfax Petroleum	Acct. #:	
Project Name/#:	Great Falls	PWSID #:	
Project Manager:	Mark C. Steele	P.O. #:	51141-315335
Sampler:		Quote #:	

Name of State where samples were collected: Virginia

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Other	Total # of Containers	Analyses Requested: BTEX + OXY	Preservation Codes: H	Remarks
W-2	12/2/15	10:45	X			X			X		
MW-21I	12/2/15	12:30	X			X			X		
~~MW-1~~	—	—	X			X			X		
W-1	12/2/15	11:40	X			X			X		

Matrix: Potable, NPDES

For Lab Use Only
FSC:
SCR#:

Preservation Codes: H=HCl T=Thiosulfate N=HNO3 B=NaOH S=H2SO4 O=Other

Temperature of samples upon receipt (if requested)

Turnaround Time Requested (TAT) (please circle) (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax (E-mail)
Phone #: Fax #:
E-mail address:

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplecate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/2/15	17:00	cooler room	12/2/15	17:00
[signature]	12/3/15	1:25	[signature]	12-3-15	1325
[signature]	12-3-15	1608			
			[signature]	12/3/15	1608

Lancaster Laboratories, Inc. 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 717-656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client

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)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than
>	greater than
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 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.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) 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.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

January 13, 2016

Project: Fairfax 26140

Submittal Date: 12/30/2015
Group Number: 1620713
PO Number: 51141-315335
State of Sample Origin: VA

Client Sample Description	Lancaster Labs (LL) #
MW-17D(75) Grab Water	8192965
MW-17D(81) Grab Water	8192966
MW-17D(87.75) Grab Water	8192967
MW-17D(92) Grab Water	8192968
MW-17D(117) Grab Water	8192969
MW-17D(129.75) Grab Water	8192970
MW-17D(147) Grab Water	8192971

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO	Kleinfelder	Attn: Nathan Stevens
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ELECTRONIC COPY TO	Kleinfelder	Attn: Venelda Williams
ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: MW-17D(75) Grab Water
Fairfax Petroleum 26140

LL Sample # WW 8192965
LL Group # 1620713
Account # 12152

Project Name: Fairfax 26140

Collected: 12/29/2015 10:10 by EM

Submitted: 12/30/2015 17:10
Reported: 01/13/2016 09:19

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

FPG75

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**120**	10	10
10335	Benzene	71-43-2	< 10	10	10
10335	**t-Butyl alcohol**	75-65-0	**1,200**	200	10
10335	Ethyl t-butyl ether	637-92-3	< 10	10	10
10335	Ethylbenzene	100-41-4	< 10	10	10
10335	**di-Isopropyl ether**	108-20-3	**190**	10	10
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**7,100**	100	100
10335	Toluene	108-88-3	< 10	10	10
10335	Xylene (Total)	1330-20-7	< 10	10	10

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	L160062AA	01/07/2016 03:33	Graham A Goulding	10
10335	BTEX + 5 Oxys	SW-846 8260B	1	L160062AA	01/07/2016 03:55	Graham A Goulding	100
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L160062AA	01/07/2016 03:33	Graham A Goulding	10
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L160062AA	01/07/2016 03:55	Graham A Goulding	100

Sample Description: MW-17D(81) Grab Water
Fairfax Petroleum 26140

LL Sample # WW 8192966
LL Group # 1620713
Account # 12152

Project Name: Fairfax 26140

Collected: 12/29/2015 10:50 by EM

Submitted: 12/30/2015 17:10
Reported: 01/13/2016 09:19

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

FPG81

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**43**	5	5
10335	Benzene	71-43-2	< 5	5	5
10335	**t-Butyl alcohol**	75-65-0	**430**	100	5
10335	Ethyl t-butyl ether	637-92-3	< 5	5	5
10335	Ethylbenzene	100-41-4	< 5	5	5
10335	**di-Isopropyl ether**	108-20-3	**62**	5	5
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**2,500**	50	50
10335	Toluene	108-88-3	< 5	5	5
10335	Xylene (Total)	1330-20-7	< 5	5	5

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	T160071AA	01/07/2016 11:09	Linda C Pape	5
10335	BTEX + 5 Oxys	SW-846 8260B	1	T160071AA	01/07/2016 11:32	Linda C Pape	50
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T160071AA	01/07/2016 11:09	Linda C Pape	5
01163	GC/MS VOA Water Prep	SW-846 5030B	2	T160071AA	01/07/2016 11:32	Linda C Pape	50

Sample Description: MW-17D(87.75) Grab Water
Fairfax Petroleum 26140

LL Sample # WW 8192967
LL Group # 1620713
Account # 12152

Project Name: Fairfax 26140

Collected: 12/29/2015 11:20 by EM

Submitted: 12/30/2015 17:10
Reported: 01/13/2016 09:19

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

FPG87

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**32**	2	2
10335	Benzene	71-43-2	< 2	2	2
10335	**t-Butyl alcohol**	75-65-0	**190**	40	2
10335	Ethyl t-butyl ether	637-92-3	< 2	2	2
10335	Ethylbenzene	100-41-4	< 2	2	2
10335	**di-Isopropyl ether**	108-20-3	**52**	2	2
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**1,700**	20	20
10335	Toluene	108-88-3	< 2	2	2
10335	Xylene (Total)	1330-20-7	< 2	2	2

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	T160071AA	01/07/2016 11:56	Linda C Pape	2
10335	BTEX + 5 Oxys	SW-846 8260B	1	T160071AA	01/07/2016 12:20	Linda C Pape	20
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T160071AA	01/07/2016 11:56	Linda C Pape	2
01163	GC/MS VOA Water Prep	SW-846 5030B	2	T160071AA	01/07/2016 12:20	Linda C Pape	20

Sample Description: MW-17D(92) Grab Water
Fairfax Petroleum 26140

LL Sample # WW 8192968
LL Group # 1620713
Account # 12152

Project Name: Fairfax 26140

Collected: 12/29/2015 12:05 by EM

Submitted: 12/30/2015 17:10
Reported: 01/13/2016 09:19

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

FPG92

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**2**	1	1
10335	Benzene	71-43-2	< 1	1	1
10335	t-Butyl alcohol	75-65-0	< 20	20	1
10335	Ethyl t-butyl ether	637-92-3	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	**di-Isopropyl ether**	108-20-3	**5**	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**85**	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	T160071AA	01/07/2016 10:46	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T160071AA	01/07/2016 10:46	Linda C Pape	1

Sample Description: MW-17D(117) Grab Water
Fairfax Petroleum 26140

LL Sample # WW 8192969
LL Group # 1620713
Account # 12152

Project Name: Fairfax 26140

Collected: 12/29/2015 12:45 by EM

Submitted: 12/30/2015 17:10
Reported: 01/13/2016 09:19

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

FPG11

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**120**	10	10
10335	Benzene	71-43-2	< 10	10	10
10335	**t-Butyl alcohol**	75-65-0	**1,600**	200	10
10335	Ethyl t-butyl ether	637-92-3	< 10	10	10
10335	Ethylbenzene	100-41-4	< 10	10	10
10335	**di-Isopropyl ether**	108-20-3	**170**	10	10
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**5,800**	100	100
10335	Toluene	108-88-3	< 10	10	10
10335	Xylene (Total)	1330-20-7	< 10	10	10

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	T160071AA	01/07/2016 12:43	Linda C Pape	10
10335	BTEX + 5 Oxys	SW-846 8260B	1	T160071AA	01/07/2016 13:07	Linda C Pape	100
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T160071AA	01/07/2016 12:43	Linda C Pape	10
01163	GC/MS VOA Water Prep	SW-846 5030B	2	T160071AA	01/07/2016 13:07	Linda C Pape	100

Sample Description: MW-17D(129.75) Grab Water
Fairfax Petroleum 26140

LL Sample # WW 8192970
LL Group # 1620713
Account # 12152

Project Name: Fairfax 26140

Collected: 12/29/2015 13:35 by EM

Submitted: 12/30/2015 17:10
Reported: 01/13/2016 09:19

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

FPG12

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**320**	50	50
10335	Benzene	71-43-2	< 50	50	50
10335	**t-Butyl alcohol**	75-65-0	**7,000**	1,000	50
10335	Ethyl t-butyl ether	637-92-3	< 50	50	50
10335	Ethylbenzene	100-41-4	< 50	50	50
10335	**di-Isopropyl ether**	108-20-3	**320**	50	50
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**18,000**	500	500
10335	Toluene	108-88-3	< 50	50	50
10335	Xylene (Total)	1330-20-7	< 50	50	50

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	T160071AA	01/07/2016 13:30	Linda C Pape	50
10335	BTEX + 5 Oxys	SW-846 8260B	1	T160071AA	01/07/2016 13:54	Linda C Pape	500
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T160071AA	01/07/2016 13:30	Linda C Pape	50
01163	GC/MS VOA Water Prep	SW-846 5030B	2	T160071AA	01/07/2016 13:54	Linda C Pape	500

Sample Description: MW-17D(147) Grab Water
Fairfax Petroleum 26140

LL Sample # WW 8192971
LL Group # 1620713
Account # 12152

Project Name: Fairfax 26140

Collected: 12/29/2015 14:30 by EM

Submitted: 12/30/2015 17:10
Reported: 01/13/2016 09:19

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

FPG14

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	**t-Amyl methyl ether**	994-05-8	**230**	20	20
10335	Benzene	71-43-2	< 20	20	20
10335	**t-Butyl alcohol**	75-65-0	**5,400**	400	20
10335	Ethyl t-butyl ether	637-92-3	< 20	20	20
10335	Ethylbenzene	100-41-4	< 20	20	20
10335	**di-Isopropyl ether**	108-20-3	**170**	20	20
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**13,000**	200	200
10335	Toluene	108-88-3	< 20	20	20
10335	Xylene (Total)	1330-20-7	< 20	20	20

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	BTEX + 5 Oxys	SW-846 8260B	1	T160071AA	01/07/2016 14:17	Linda C Pape	20
10335	BTEX + 5 Oxys	SW-846 8260B	1	T160071AA	01/07/2016 14:40	Linda C Pape	200
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T160071AA	01/07/2016 14:17	Linda C Pape	20
01163	GC/MS VOA Water Prep	SW-846 5030B	2	T160071AA	01/07/2016 14:40	Linda C Pape	200

Quality Control Summary

Client Name: Kleinfelder
Reported: 01/13/2016 09:19

Group Number: 1620713

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	LOQ
	ug/l	ug/l
Batch number: L160062AA	Sample number(s): 8192965	
t-Amyl methyl ether	< 1	1
Benzene	< 1	1
t-Butyl alcohol	< 20	20
Ethyl t-butyl ether	< 1	1
Ethylbenzene	< 1	1
di-Isopropyl ether	< 1	1
Methyl Tertiary Butyl Ether	< 1	1
Toluene	< 1	1
Xylene (Total)	< 1	1
Batch number: T160071AA	Sample number(s): 8192966-8192971	
t-Amyl methyl ether	< 1	1
Benzene	< 1	1
t-Butyl alcohol	< 20	20
Ethyl t-butyl ether	< 1	1
Ethylbenzene	< 1	1
di-Isopropyl ether	< 1	1
Methyl Tertiary Butyl Ether	< 1	1
Toluene	< 1	1
Xylene (Total)	< 1	1

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: L160062AA	Sample number(s): 8192965								
t-Amyl methyl ether	20	19.93	20	20.16	100	101	75-120	1	30
Benzene	20	19.12	20	19.52	96	98	78-120	2	30
t-Butyl alcohol	200	165.5	200	165.44	83	83	78-121	0	30
Ethyl t-butyl ether	20	19.66	20	20.24	98	101	69-120	3	30
Ethylbenzene	20	19.41	20	19.74	97	99	78-120	2	30
di-Isopropyl ether	20	20.71	20	21.05	104	105	70-124	2	30
Methyl Tertiary Butyl Ether	20	19.72	20	20.07	99	100	75-120	2	30
Toluene	20	19.55	20	19.71	98	99	80-120	1	30
Xylene (Total)	60	58.79	60	59.62	98	99	80-120	1	30
Batch number: T160071AA	Sample number(s): 8192966-8192971								
t-Amyl methyl ether	20	19.37	20	19.87	97	99	75-120	3	30
Benzene	20	20.53	20	20.92	103	105	78-120	2	30
t-Butyl alcohol	200	220.33	200	225.45	110	113	78-121	2	30

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Kleinfelder
Reported: 01/13/2016 09:19

Group Number: 1620713

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Ethyl t-butyl ether	20	19.43	20	19.74	97	99	69-120	2	30
Ethylbenzene	20	21.27	20	21.54	106	108	78-120	1	30
di-Isopropyl ether	20	19.7	20	20.18	98	101	70-124	2	30
Methyl Tertiary Butyl Ether	20	18.72	20	18.94	94	95	75-120	1	30
Toluene	20	21.86	20	21.85	109	109	80-120	0	30
Xylene (Total)	60	62.41	60	63.38	104	106	80-120	2	30

MS/MSD

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

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: L160062AA	Sample number(s): 8192965 UNSPK: P193237									
t-Amyl methyl ether	< 1	20	19.84	20	20.11	99	101	75-120	1	30
Benzene	< 1	20	20.42	20	20.49	102	102	78-120	0	30
t-Butyl alcohol	< 20	200	180.92	200	204.51	90	102	78-121	12	30
Ethyl t-butyl ether	< 1	20	19.76	20	20.05	99	100	69-120	1	30
Ethylbenzene	< 1	20	20.48	20	20.83	102	104	78-120	2	30
di-Isopropyl ether	< 1	20	21.07	20	21.19	105	106	70-124	1	30
Methyl Tertiary Butyl Ether	< 1	20	19.86	20	19.94	99	100	75-120	0	30
Toluene	< 1	20	20.49	20	20.68	102	103	80-120	1	30
Xylene (Total)	< 1	60	61.54	60	62.82	103	105	80-120	2	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.

Analysis Name: BTEX + 5 Oxys
Batch number: L160062AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8192965	99	100	99	98
Blank	99	100	100	100
LCS	100	99	100	100
LCSD	100	100	100	100
MS	100	100	101	99
MSD	99	99	100	100
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX + 5 Oxys
Batch number: T160071AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8192966	98	100	102	102
8192967	99	101	104	104
8192968	98	99	102	104
8192969	100	101	102	102

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1620713
Reported: 01/13/2016 09:19

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8192970	101	100	101	103
8192971	103	106	102	103
Blank	97	98	103	102
LCS	97	100	105	105
LCSD	96	101	106	104
Limits:	80-116	77-113	80-113	78-113

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Lancaster Laboratories

Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152
Group #: 1620713 Sample #: 8192965-71 (2)

Client:	Fairfax Petroleum	Acct. #:	
Project Name/#:	Great Falls	PWSID #:	
Project Manager:	Mark C. Steele	P.O. #:	51141-315335
Sampler:	Evan McMullen	Quote #:	
Name of State where samples were collected:	Virginia		

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Other	Total # of Containers	Analyses Requested: BTEX + OXY (8260B)
MW-17D(75)	12/29/15	10:10	X			X		3	X
MW-17D(81)		10:50	X			X		3	X
MW-17D(87.75)		11:20	X			X		3	X
MW-17D(92)		12:05	X			X		3	X
MW-17D(117)		12:45	X			X		3	X
MW-17D(129.75)		13:35	X			X		3	X
MW-17D(147)		14:30	X			X		3	X

Matrix: Potable, NPDES

Preservation Codes: H

Preservation Codes: H=HCl T=Thiosulfate N=HNO3 B=NaOH S=H2SO4 O=Other

For Lab Use Only
FSC:
SCR#:

Remarks

Temperature of samples upon receipt (if requested)

Turnaround Time Requested (TAT) (please circle) Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address:

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplecate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
E M. Mc	12/29/15	17:00	cooler room	12/29/15	1700
cooler room	12/30/15	10:30	[illegible]	12/30/15	10:30
[illegible]	12/30/15	17:10			
			[illegible]	12/30/15	1710

Lancaster Laboratories, Inc. 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 717-656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client

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Sample Administration Receipt Documentation Log

Doc Log ID: 132434

Group Number(s): 1620713

Client: Kleinfelder

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	12/30/2015 17:10
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	VA		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Patrick Engle (3472) at 17:54 on 12/30/2015

Samples Chilled Details

Thermometer Types: *DT = Digital (Temp. Bottle)* *IR = Infrared (Surface Temp)* *All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	0.4	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T 717-656-2300
F 717-656-2681
www.LancasterLabs.com

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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)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than
>	greater than
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 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.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) 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.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

APPENDIX B

Lancaster Laboratories Analysis Reports – Groundwater Recovery System

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

October 19, 2015

Project: Great Falls, VA

Submittal Date: 10/06/2015
Group Number: 1598628
PO Number: 51141-315335
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LL) #
Influent Grab Water	8078346
Air Stripper Effluent Grab Water	8078347
LGAC1 Effluent Grab Water	8078348
LGAC2 Effluent Grab Water	8078349
LGAC3 Effluent Grab Water	8078350

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO	Kleinfelder	Attn: Jennifer Kozak
ELECTRONIC COPY TO	Kleinfelder	Attn: Venelda Williams
ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: Influent Grab Water
Great Falls, VA

LL Sample # WW 8078346
LL Group # 1598628
Account # 12152

Project Name: Great Falls, VA

Collected: 10/05/2015 11:25 by PW

Submitted: 10/06/2015 17:55
Reported: 10/19/2015 16:40

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GRFIN

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Benzene	71-43-2	< 10	10	10
10335	Carbon Tetrachloride	56-23-5	< 10	10	10
10335	Chlorobenzene	108-90-7	< 10	10	10
10335	Chloroethane	75-00-3	< 10	10	10
10335	Chloroform	67-66-3	< 10	10	10
10335	1,2-Dichlorobenzene	95-50-1	< 50	50	10
10335	1,1-Dichloroethane	75-34-3	< 10	10	10
10335	1,2-Dichloroethane	107-06-2	< 10	10	10
10335	1,1-Dichloroethene	75-35-4	< 10	10	10
10335	**cis-1,2-Dichloroethene**	156-59-2	**75**	10	10
10335	trans-1,2-Dichloroethene	156-60-5	< 10	10	10
10335	Ethylbenzene	100-41-4	< 10	10	10
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**2,800**	10	10
10335	Methylene Chloride	75-09-2	< 40	40	10
10335	**Tetrachloroethene**	127-18-4	**12**	10	10
10335	Toluene	108-88-3	< 10	10	10
10335	1,1,1-Trichloroethane	71-55-6	< 10	10	10
10335	1,1,2-Trichloroethane	79-00-5	< 10	10	10
10335	Trichloroethene	79-01-6	< 10	10	10
10335	Trichlorofluoromethane	75-69-4	< 10	10	10
10335	Vinyl Chloride	75-01-4	< 10	10	10
10335	Xylene (Total)	1330-20-7	< 10	10	10

Reporting limits were raised due to interference from the sample matrix.

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	8260 VOCs	SW-846 8260B	1	N152882AA	10/15/2015 22:21	Sara E Johnson	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	N152882AA	10/15/2015 22:21	Sara E Johnson	10

Sample Description: Air Stripper Effluent Grab Water
Great Falls, VA

LL Sample # WW 8078347
LL Group # 1598628
Account # 12152

Project Name: Great Falls, VA

Collected: 10/05/2015 11:20 by PW

Submitted: 10/06/2015 17:55
Reported: 10/19/2015 16:40

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GRFAS

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**200**	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	P152872AA	10/14/2015 20:13	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P152872AA	10/14/2015 20:13	Hu Yang	1

Sample Description: LGAC1 Effluent Grab Water
Great Falls, VA

LL Sample # WW 8078348
LL Group # 1598628
Account # 12152

Project Name: Great Falls, VA

Collected: 10/05/2015 11:15 by PW

Submitted: 10/06/2015 17:55
Reported: 10/19/2015 16:40

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GRF-1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**12**	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	P152872AA	10/14/2015 20:39	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P152872AA	10/14/2015 20:39	Hu Yang	1

Sample Description: LGAC2 Effluent Grab Water
Great Falls, VA

LL Sample # WW 8078349
LL Group # 1598628
Account # 12152

Project Name: Great Falls, VA

Collected: 10/05/2015 11:10 by PW

Submitted: 10/06/2015 17:55
Reported: 10/19/2015 16:40

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GRF-2

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	P152872AA	10/14/2015 21:05	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P152872AA	10/14/2015 21:05	Hu Yang	1

Sample Description: LGAC3 Effluent Grab Water
Great Falls, VA

LL Sample # WW 8078350
LL Group # 1598628
Account # 12152

Project Name: Great Falls, VA

Collected: 10/05/2015 11:05 by PW

Submitted: 10/06/2015 17:55
Reported: 10/19/2015 16:40

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GRF-3

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	
10335	Benzene	71-43-2	< 1	1	1
10335	Carbon Tetrachloride	56-23-5	< 1	1	1
10335	Chlorobenzene	108-90-7	< 1	1	1
10335	Chloroethane	75-00-3	< 1	1	1
10335	Chloroform	67-66-3	< 1	1	1
10335	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10335	1,1-Dichloroethane	75-34-3	< 1	1	1
10335	1,2-Dichloroethane	107-06-2	< 1	1	1
10335	1,1-Dichloroethene	75-35-4	< 1	1	1
10335	cis-1,2-Dichloroethene	156-59-2	< 1	1	1
10335	trans-1,2-Dichloroethene	156-60-5	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10335	Methylene Chloride	75-09-2	< 4	4	1
10335	Tetrachloroethene	127-18-4	< 1	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	1,1,1-Trichloroethane	71-55-6	< 1	1	1
10335	1,1,2-Trichloroethane	79-00-5	< 1	1	1
10335	Trichloroethene	79-01-6	< 1	1	1
10335	Trichlorofluoromethane	75-69-4	< 1	1	1
10335	Vinyl Chloride	75-01-4	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	8260 VOCs	SW-846 8260B	1	N152882AA	10/15/2015 21:58	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	N152882AA	10/15/2015 21:58	Sara E Johnson	1

Quality Control Summary

Client Name: Kleinfelder Group Number: 1598628
Reported: 10/19/2015 16:40

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: N152882AA	Sample number(s): 8078346,8078350							
Benzene	< 1	1.	ug/l	106	105	78-120	1	30
Carbon Tetrachloride	< 1	1.	ug/l	104	101	74-130	2	30
Chlorobenzene	< 1	1.	ug/l	100	99	80-120	1	30
Chloroethane	< 1	1.	ug/l	87	84	56-120	4	30
Chloroform	< 1	1.	ug/l	105	102	80-120	2	30
1,2-Dichlorobenzene	< 5	5.	ug/l	96	93	80-120	3	30
1,1-Dichloroethane	< 1	1.	ug/l	105	104	80-120	1	30
1,2-Dichloroethane	< 1	1.	ug/l	108	106	72-127	2	30
1,1-Dichloroethene	< 1	1.	ug/l	107	102	76-124	4	30
cis-1,2-Dichloroethene	< 1	1.	ug/l	103	102	80-120	1	30
trans-1,2-Dichloroethene	< 1	1.	ug/l	106	103	80-120	3	30
Ethylbenzene	< 1	1.	ug/l	101	100	78-120	0	30
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	98	97	75-120	2	30
Methylene Chloride	< 4	4.	ug/l	103	101	77-121	2	30
Tetrachloroethene	< 1	1.	ug/l	99	99	80-122	0	30
Toluene	< 1	1.	ug/l	99	99	80-120	1	30
1,1,1-Trichloroethane	< 1	1.	ug/l	94	94	66-126	0	30
1,1,2-Trichloroethane	< 1	1.	ug/l	99	96	80-120	3	30
Trichloroethene	< 1	1.	ug/l	105	104	80-120	1	30
Trichlorofluoromethane	< 1	1.	ug/l	108	106	60-142	3	30
Vinyl Chloride	< 1	1.	ug/l	92	89	69-120	3	30
Xylene (Total)	< 1	1.	ug/l	96	94	80-120	2	30
Batch number: P152872AA	Sample number(s): 8078347-8078349							
Benzene	< 1	1.	ug/l	107	106	78-120	1	30
Ethylbenzene	< 1	1.	ug/l	99	97	78-120	2	30
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	105	108	75-120	3	30
Toluene	< 1	1.	ug/l	101	99	80-120	2	30
Xylene (Total)	< 1	1.	ug/l	100	98	80-120	1	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.

Analysis Name: 8260 VOCs
Batch number: N152882AA

*- 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 Group Number: 1598628
Reported: 10/19/2015 16:40

Surrogate Quality Control

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8078346	104	102	98	93
8078350	106	104	98	94
Blank	105	103	98	94
LCS	103	101	101	101
LCSD	103	99	100	102
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST BTEX, MTBE in Water
Batch number: P152872AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8078347	100	97	95	97
8078348	100	101	95	96
8078349	100	96	95	97
Blank	100	101	96	98
LCS	100	101	96	97
LCSD	101	101	96	98
Limits:	80-116	77-113	80-113	78-113

*- 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.

Lancaster Laboratories

Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152
Group #: 1598628 Sample #: 8078346-50

Client:	Fairfax Petroleum	Acct. #:	
Project Name/#:	Great Falls	PWSID #:	
Project Manager:	Mark C. Steele	P.O. #:	51141-311962
Sampler:	Paxton Wertz	Quote #:	
Name of State where samples were collected:	Virginia		

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water (Potable)	Matrix: Water (NPDES)	Matrix: Other	Total # of Containers	Analyses Requested: BTEX/MTBE (8260)	Analyses Requested: 26140 VPDES List
										Preservation Codes: H	H
Influent	10/5/15	1125	X			X			3		X
Air Stripper Effluent	10/5/15	1120	X			X			3	X	
LGAC1 Effluent	10/5/15	1115	X			X			3	X	
LGAC2 Effluent	10/5/15	1110	X			X			3	X	
LGAC3 Effluent	10/5/15	1105	X			X			3		X

For Lab Use Only
FSC:
SCR#:

Preservation Codes: H=HCl T=Thiosulfate N=HNO3 B=NaOH S=H2SO4 O=Other

Remarks

Temperature of samples upon receipt (if requested)

Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: mcsteele@kleinfelder.com

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplecate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
	10/5/15	1400	Bottle Storage	10/5/15	1400
	10/6/15	1211		10/6/15	1211
	10/6/15	1755			
				10/6/15	1755

Lancaster Laboratories, Inc. 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 717-656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client

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)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

<	less than
>	greater than
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 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.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and the < Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, ISO17025) 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.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

October 28, 2015

Project: Fairfax 26140

Submittal Date: 10/16/2015
Group Number: 1601697
PO Number: 51141-315335
State of Sample Origin: VA

Client Sample Description	Lancaster Labs (LL) #
Influent Grab Water	8093223
Air Stripper Effluent Grab Water	8093224
LGAC1 Effluent Grab Water	8093225
LGAC2 Effluent Grab Water	8093226
LGAC3 Effluent Grab Water	8093227

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

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ELECTRONIC COPY TO	Kleinfelder	Attn: Jennifer Kozak
ELECTRONIC COPY TO	Kleinfelder	Attn: Venelda Williams
ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

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Analysis Report

Sample Description: Influent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8093223
LL Group # 1601697
Account # 12152

Project Name: Fairfax 26140

Collected: 10/15/2015 11:50 by DS

Submitted: 10/16/2015 17:50
Reported: 10/28/2015 22:02

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFVIN

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 5	5	5
10945	Ethylbenzene	100-41-4	< 5	5	5
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**2,600**	5	5
10945	Toluene	108-88-3	< 5	5	5
10945	Xylene (Total)	1330-20-7	< 5	5	5

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	F152993AA	10/27/2015 04:53	Hu Yang	5
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152993AA	10/27/2015 04:53	Hu Yang	5

Sample Description: Air Stripper Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8093224
LL Group # 1601697
Account # 12152

Project Name: Fairfax 26140

Collected: 10/15/2015 11:45 by DS

Submitted: 10/16/2015 17:50
Reported: 10/28/2015 22:02

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFVEF

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**180**	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	F152993AA	10/27/2015 00:30	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152993AA	10/27/2015 00:30	Hu Yang	1

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Analysis Report

Sample Description: LGAC1 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8093225
LL Group # 1601697
Account # 12152

Project Name: Fairfax 26140

Collected: 10/15/2015 11:40 by DS

Submitted: 10/16/2015 17:50
Reported: 10/28/2015 22:02

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFVL1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**9**	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	F152993AA	10/27/2015 00:52	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152993AA	10/27/2015 00:52	Hu Yang	1

Sample Description: LGAC2 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8093226
LL Group # 1601697
Account # 12152

Project Name: Fairfax 26140

Collected: 10/15/2015 11:35 by DS

Submitted: 10/16/2015 17:50
Reported: 10/28/2015 22:02

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFVL2

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	F152993AA	10/27/2015 01:14	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152993AA	10/27/2015 01:14	Hu Yang	1

Sample Description: LGAC3 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8093227
LL Group # 1601697
Account # 12152

Project Name: Fairfax 26140

Collected: 10/15/2015 11:30 by DS

Submitted: 10/16/2015 17:50
Reported: 10/28/2015 22:02

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFVL3

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	F152993AA	10/27/2015 01:36	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	F152993AA	10/27/2015 01:36	Hu Yang	1

Quality Control Summary

Client Name: Kleinfelder Group Number: 1601697
Reported: 10/28/2015 22:02

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: F152993AA	Sample number(s): 8093223-8093227							
Benzene	< 1	1.	ug/l	90	88	78-120	2	30
Ethylbenzene	< 1	1.	ug/l	90	90	78-120	0	30
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	90	88	75-120	2	30
Toluene	< 1	1.	ug/l	93	92	80-120	2	30
Xylene (Total)	< 1	1.	ug/l	91	92	80-120	1	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.

Analysis Name: UST BTEX, MTBE in Water
Batch number: F152993AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8093223	99	95	102	90
8093224	94	93	104	91
8093225	98	95	101	91
8093226	97	92	102	90
8093227	97	92	103	90
Blank	97	92	102	90
LCS	94	93	102	92
LCSD	94	92	102	93
Limits:	80-116	77-113	80-113	78-113

*- 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.

Lancaster Laboratories

Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152
Group #: _____ Sample #: 8043223-27
1601697

Client:	Fairfax Petroleum	Acct. #:	
Project Name/#:	Great Falls	PWSID #:	
Project Manager:	Mark C. Steele	P.O. #:	51141-315335
Sampler:	Dave Seaman	Quote #:	
Name of State where samples were collected:	Virginia		

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water (Potable)	Matrix: Water (NPDES)	Matrix: Other	Total # of Containers	Analyses Requested: BTEX/MTBE (8260)	Analyses Requested: 26140 VPDES List	Preservation Codes: H	Preservation Codes: H
Influent	10-15-15	1150	X			X			3	X			
Air Stripper Effluent	10-15-15	1145	X			X			3	X			
LGAC1 Effluent	10-15-15	1140	X			X			3	X			
LGAC2 Effluent	10-15-15	1135	X			X			3	X			
LGAC3 Effluent	10-15-15	1130	X			X			3	X			

For Lab Use Only
FSC: _____
SCR#:

Preservation Codes
H=HCl T=Thiosulfate
N=HNO3 B=NaOH
S=H2SO4 O=Other

Remarks

Temperature of samples upon receipt (if requested)

Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: 410 850-0404 Fax #: _____
E-mail address: mcsteele@kleinfelder.com

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplecate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
Dave Sea	10-15-15	1900	[illegible]	10/15	1900
[illegible]	10/16/15	1750			
			[illegible]	10/16/15	1750

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Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client

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)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than

> greater than

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 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.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) 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.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

November 12, 2015

Project: Great Falls, VA

Submittal Date: 11/03/2015
Group Number: 1606108
PO Number: 51141-315335
State of Sample Origin: VA

Client Sample Description	Lancaster Labs (LL) #
Influent Grab Water	8116701
Air Stripper Effluent Grab Water	8116702
LGAC1 Effluent Grab Water	8116703
LGAC2 Effluent Grab Water	8116704
LGAC3 Effluent Grab Water	8116705

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

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ELECTRONIC COPY TO	Kleinfelder	Attn: Venelda Williams
ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: Influent Grab Water
Great Falls, VA

LL Sample # WW 8116701
LL Group # 1606108
Account # 12152

Project Name: Great Falls, VA

Collected: 11/02/2015 08:45 by DS

Submitted: 11/03/2015 17:20
Reported: 11/12/2015 15:34

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFLIN

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Benzene	71-43-2	< 5	5	5
10335	Carbon Tetrachloride	56-23-5	< 5	5	5
10335	Chlorobenzene	108-90-7	< 5	5	5
10335	Chloroethane	75-00-3	< 5	5	5
10335	Chloroform	67-66-3	< 5	5	5
10335	1,2-Dichlorobenzene	95-50-1	< 25	25	5
10335	1,1-Dichloroethane	75-34-3	< 5	5	5
10335	1,2-Dichloroethane	107-06-2	< 5	5	5
10335	1,1-Dichloroethene	75-35-4	< 5	5	5
10335	**cis-1,2-Dichloroethene**	156-59-2	**71**	5	5
10335	trans-1,2-Dichloroethene	156-60-5	< 5	5	5
10335	Ethylbenzene	100-41-4	< 5	5	5
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**1,800**	50	50
10335	Methylene Chloride	75-09-2	< 20	20	5
10335	**Tetrachloroethene**	127-18-4	**11**	5	5
10335	Toluene	108-88-3	< 5	5	5
10335	1,1,1-Trichloroethane	71-55-6	< 5	5	5
10335	1,1,2-Trichloroethane	79-00-5	< 5	5	5
10335	Trichloroethene	79-01-6	< 5	5	5
10335	Trichlorofluoromethane	75-69-4	< 5	5	5
10335	Vinyl Chloride	75-01-4	< 5	5	5
10335	Xylene (Total)	1330-20-7	< 5	5	5

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	8260 VOCs	SW-846 8260B	1	E153152AA	11/12/2015 04:24	Kevin A Sposito	5
10335	8260 VOCs	SW-846 8260B	1	E153152AA	11/12/2015 04:44	Kevin A Sposito	50
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E153152AA	11/12/2015 04:24	Kevin A Sposito	5
01163	GC/MS VOA Water Prep	SW-846 5030B	2	E153152AA	11/12/2015 04:44	Kevin A Sposito	50

Sample Description: Air Stripper Effluent Grab Water
Great Falls, VA

LL Sample # WW 8116702
LL Group # 1606108
Account # 12152

Project Name: Great Falls, VA

Collected: 11/02/2015 08:40 by DS

Submitted: 11/03/2015 17:20
Reported: 11/12/2015 15:34

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFLAI

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**190**	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	Z153121AA	11/08/2015 20:26	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z153121AA	11/08/2015 20:26	Hu Yang	1

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Analysis Report

Sample Description: LGAC1 Effluent Grab Water
Great Falls, VA

LL Sample # WW 8116703
LL Group # 1606108
Account # 12152

Project Name: Great Falls, VA

Collected: 11/02/2015 08:35 by DS

Submitted: 11/03/2015 17:20
Reported: 11/12/2015 15:34

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFLL1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**9**	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	Z153121AA	11/08/2015 20:50	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z153121AA	11/08/2015 20:50	Hu Yang	1

Sample Description: LGAC2 Effluent Grab Water
Great Falls, VA

LL Sample # WW 8116704
LL Group # 1606108
Account # 12152

Project Name: Great Falls, VA

Collected: 11/02/2015 08:30 by DS

Submitted: 11/03/2015 17:20
Reported: 11/12/2015 15:34

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFLL2

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	Z153121AA	11/08/2015 21:14	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z153121AA	11/08/2015 21:14	Hu Yang	1

Sample Description: LGAC3 Effluent Grab Water
Great Falls, VA

LL Sample # WW 8116705
LL Group # 1606108
Account # 12152

Project Name: Great Falls, VA

Collected: 11/02/2015 08:25 by DS

Submitted: 11/03/2015 17:20
Reported: 11/12/2015 15:34

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFLL3

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	
10335	Benzene	71-43-2	< 1	1	1
10335	Carbon Tetrachloride	56-23-5	< 1	1	1
10335	Chlorobenzene	108-90-7	< 1	1	1
10335	Chloroethane	75-00-3	< 1	1	1
10335	Chloroform	67-66-3	< 1	1	1
10335	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10335	1,1-Dichloroethane	75-34-3	< 1	1	1
10335	1,2-Dichloroethane	107-06-2	< 1	1	1
10335	1,1-Dichloroethene	75-35-4	< 1	1	1
10335	cis-1,2-Dichloroethene	156-59-2	< 1	1	1
10335	trans-1,2-Dichloroethene	156-60-5	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10335	Methylene Chloride	75-09-2	< 4	4	1
10335	Tetrachloroethene	127-18-4	< 1	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	1,1,1-Trichloroethane	71-55-6	< 1	1	1
10335	1,1,2-Trichloroethane	79-00-5	< 1	1	1
10335	Trichloroethene	79-01-6	< 1	1	1
10335	Trichlorofluoromethane	75-69-4	< 1	1	1
10335	Vinyl Chloride	75-01-4	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	8260 VOCs	SW-846 8260B	1	E153152AA	11/12/2015 01:23	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E153152AA	11/12/2015 01:23	Kevin A Sposito	1

Quality Control Summary

Client Name: Kleinfelder Group Number: 1606108
Reported: 11/12/2015 15:34

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: E153152AA	Sample number(s): 8116701,8116705							
Benzene	< 1	1.	ug/l	96	95	78-120	1	30
Carbon Tetrachloride	< 1	1.	ug/l	101	103	74-130	2	30
Chlorobenzene	< 1	1.	ug/l	99	99	80-120	0	30
Chloroethane	< 1	1.	ug/l	95	92	56-120	4	30
Chloroform	< 1	1.	ug/l	99	98	80-120	1	30
1,2-Dichlorobenzene	< 5	5.	ug/l	102	102	80-120	0	30
1,1-Dichloroethane	< 1	1.	ug/l	94	96	80-120	2	30
1,2-Dichloroethane	< 1	1.	ug/l	97	97	72-127	0	30
1,1-Dichloroethene	< 1	1.	ug/l	89	88	76-124	1	30
cis-1,2-Dichloroethene	< 1	1.	ug/l	98	98	80-120	0	30
trans-1,2-Dichloroethene	< 1	1.	ug/l	98	92	80-120	6	30
Ethylbenzene	< 1	1.	ug/l	101	101	78-120	0	30
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	96	97	75-120	0	30
Methylene Chloride	< 4	4.	ug/l	91	89	77-121	2	30
Tetrachloroethene	< 1	1.	ug/l	104	102	80-122	3	30
Toluene	< 1	1.	ug/l	101	101	80-120	1	30
1,1,1-Trichloroethane	< 1	1.	ug/l	97	98	66-126	0	30
1,1,2-Trichloroethane	< 1	1.	ug/l	101	102	80-120	1	30
Trichloroethene	< 1	1.	ug/l	101	98	80-120	4	30
Trichlorofluoromethane	< 1	1.	ug/l	102	100	60-142	2	30
Vinyl Chloride	< 1	1.	ug/l	95	93	69-120	1	30
Xylene (Total)	< 1	1.	ug/l	101	100	80-120	1	30
Batch number: Z153121AA	Sample number(s): 8116702-8116704							
Benzene	< 1	1.	ug/l	90		78-120		
Ethylbenzene	< 1	1.	ug/l	91		78-120		
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	92		75-120		
Toluene	< 1	1.	ug/l	91		80-120		
Xylene (Total)	< 1	1.	ug/l	94		80-120		

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1606108
Reported: 11/12/2015 15:34

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: Z153121AA	Sample number(s): 8116702-8116704 UNSPK: P116684								
Benzene	98	100	78-120	2	30				
Ethylbenzene	99	101	78-120	2	30				
Methyl Tertiary Butyl Ether	92	94	75-120	2	30				
Toluene	102	104	80-120	2	30				
Xylene (Total)	104	106	80-120	2	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.

Analysis Name: 8260 VOCs
Batch number: E153152AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8116701	100	101	100	99
8116705	98	100	100	99
Blank	100	99	101	99
LCS	100	103	100	99
LCSD	100	102	101	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: UST BTEX, MTBE in Water
Batch number: Z153121AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8116702	106	102	96	93
8116703	106	99	97	93
8116704	106	102	95	92
Blank	105	99	97	94
LCS	105	102	96	96
MS	105	101	98	96
MSD	104	104	98	97
Limits:	80-116	77-113	80-113	78-113

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Lancaster Laboratories

Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152 /
Group #: _____ Sample #: _____
1606108 8116701-05

Client:	Fairfax Petroleum	Acct. #:	
Project Name/#:	Great Falls	PWSID #:	
Project Manager:	Mark C. Steele	P.O. #:	51141-315335
Sampler:	Dave Seaman	Quote #:	
Name of State where samples were collected:	Virginia		

Sample Identification	2015 Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	BTEX/MTBE (8260)	26140 VPDES List							
Influent	11/2	0845	X			X		3		X							
Air Stripper Effluent	11/2	0840	X			X		3	X								
LGAC1 Effluent	11/2	0835	X			X		3	X								
LGAC2 Effluent	11/2	0830	X			X		3	X								
LGAC3 Effluent	11/2	0825	X			X		3		X							

Matrix: Potable, NPDES

Analyses Requested / Preservation Codes: H, H

For Lab Use Only
FSC:
SCR#:

Preservation Codes
H=HCl T=Thiosulfate
N=HNO3 B=NaOH
S=H2SO4 O=Other

Remarks

Temperature of samples upon receipt (if requested)

Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: mcsteele@kleinfelder.com

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplicate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
Dave Sea	11/2/15	1600	H Nguyen	11/3/15	1255
H Nguyen	11/3/15	1720			
			G L S	11-3-15	1720

Lancaster Laboratories, Inc. 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 717-656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client

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)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than

> greater than

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 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.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) 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.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

December 02, 2015

Project: Fairfax 26140

Submittal Date: 11/18/2015
Group Number: 1610399
PO Number: 51141-315335
State of Sample Origin: VA

Client Sample Description	Lancaster Labs (LL) #
Influent Grab Water	8139924
Air Stripper Effluent Grab Water	8139925
LGAC1 Effluent Grab Water	8139926
LGAC2 Effluent Grab Water	8139927
LGAC3 Effluent Grab Water	8139928

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO	Kleinfelder	Attn: Paxton Wertz
ELECTRONIC COPY TO	Kleinfelder	Attn: Nathan Stevens
ELECTRONIC COPY TO	Kleinfelder	Attn: Jennifer Kozak
ELECTRONIC COPY TO	Kleinfelder	Attn: Venelda Williams
ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: Influent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8139924
LL Group # 1610399
Account # 12152

Project Name: Fairfax 26140

Collected: 11/17/2015 09:50 by DS

Submitted: 11/18/2015 14:30
Reported: 12/02/2015 17:43

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFVIN

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 5	5	5
10945	Ethylbenzene	100-41-4	< 5	5	5
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**1,500**	5	5
10945	Toluene	108-88-3	< 5	5	5
10945	Xylene (Total)	1330-20-7	< 5	5	5

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	P153342AA	11/30/2015 10:42	Brett W Kenyon	5
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P153342AA	11/30/2015 10:42	Brett W Kenyon	5

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Analysis Report

Sample Description: Air Stripper Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8139925
LL Group # 1610399
Account # 12152

Project Name: Fairfax 26140

Collected: 11/17/2015 09:45 by DS

Submitted: 11/18/2015 14:30
Reported: 12/02/2015 17:43

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFVEF

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**210**	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	P153342AA	11/30/2015 11:08	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P153342AA	11/30/2015 11:08	Brett W Kenyon	1

Sample Description: LGAC1 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8139926
LL Group # 1610399
Account # 12152

Project Name: Fairfax 26140

Collected: 11/17/2015 09:40 by DS

Submitted: 11/18/2015 14:30
Reported: 12/02/2015 17:43

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFVL1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**40**	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	P153342AA	11/30/2015 11:34	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P153342AA	11/30/2015 11:34	Brett W Kenyon	1

Sample Description: LGAC2 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8139927
LL Group # 1610399
Account # 12152

Project Name: Fairfax 26140

Collected: 11/17/2015 09:35 by DS

Submitted: 11/18/2015 14:30
Reported: 12/02/2015 17:43

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFVL2

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	P153342AA	11/30/2015 12:00	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P153342AA	11/30/2015 12:00	Brett W Kenyon	1

Sample Description: LGAC3 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8139928
LL Group # 1610399
Account # 12152

Project Name: Fairfax 26140

Collected: 11/17/2015 09:30 by DS

Submitted: 11/18/2015 14:30
Reported: 12/02/2015 17:43

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GFVL3

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	P153342AA	11/30/2015 12:27	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	P153342AA	11/30/2015 12:27	Brett W Kenyon	1

Quality Control Summary

Client Name: Kleinfelder Group Number: 1610399
Reported: 12/02/2015 17:43

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: P153342AA	Sample number(s): 8139924-8139928							
Benzene	< 1	1.	ug/l	111	112	78-120	1	30
Ethylbenzene	< 1	1.	ug/l	90	93	78-120	3	30
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	109	112	75-120	3	30
Toluene	< 1	1.	ug/l	93	95	80-120	2	30
Xylene (Total)	< 1	1.	ug/l	93	96	80-120	2	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.

Analysis Name: UST BTEX, MTBE in Water
Batch number: P153342AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8139924	108	101	90	96
8139925	108	102	90	97
8139926	107	100	90	96
8139927	107	101	89	97
8139928	108	103	89	98
Blank	104	100	91	96
LCS	106	102	91	97
LCSD	106	105	90	96
Limits:	80-116	77-113	80-113	78-113

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Lancaster Laboratories

Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct #: 12152
Group #: _____ Sample #: 813994-24
1610399

Client:	Fairfax Petroleum	Acct. #:	
Project Name/#:	Great Falls	PWSID #:	
Project Manager:	Mark C. Steele	P.O. #:	51141-315335
Sampler:	Dave Seaman	Quote #:	

Name of State where samples were collected: Virginia

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Other	Total # of Containers	Analyses Requested: BTEX/MTBE (8260)	Analyses Requested: 26140 VPDES List	Preservation Codes: H	Preservation Codes: H	Remarks
Influent	11-17-15	0950	X			X		3	X				
Air Stripper Effluent	↓	0945	X			X		3	X				
LGAC1 Effluent		0940	X			X		3	X				
LGAC2 Effluent		0935	X			X		3	X				
LGAC3 Effluent	↓	0930	X			X		3	X				

Potable / NPDES

Preservation Codes: H=HCl T=Thiosulfate N=HNO3 B=NaOH S=H2SO4 O=Other

Temperature of samples upon receipt (if requested)

For Lab Use Only
FSC:
SCR#:

Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: mcsteele@kleinfelder.com

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplecate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
Dave Sea	11-17-15	1808	[illegible]	11/18/15	1200
[illegible]	11/18/15	1430	[illegible]		
			[illegible]	11/18/15	1432

Lancaster Laboratories, Inc. 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 717-656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client

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)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than

> greater than

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 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.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) 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.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

December 19, 2015

Project: Fairfax 26140

Submittal Date: 12/03/2015
Group Number: 1614229
PO Number: 51141-315335
State of Sample Origin: VA

Client Sample Description	Lancaster Labs (LL) #
Influent Grab Water	8159787
Air Stripper Effluent Grab Water	8159788
LGAC1 Effluent Grab Water	8159789
LGAC2 Effluent Grab Water	8159790
LGAC3 Effluent Grab Water	8159791

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

ELECTRONIC COPY TO	Kleinfelder	Attn: Nathan Stevens
ELECTRONIC COPY TO	Kleinfelder	Attn: Paxton Wertz
ELECTRONIC COPY TO	Kleinfelder	Attn: Jennifer Kozak
ELECTRONIC COPY TO	Kleinfelder	Attn: Venelda Williams
ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

Sample Description: Influent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159787
LL Group # 1614229
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 08:15

Submitted: 12/03/2015 16:08
Reported: 12/19/2015 14:33

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GVAIN

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Benzene	71-43-2	< 1	1	1
10335	Carbon Tetrachloride	56-23-5	< 1	1	1
10335	Chlorobenzene	108-90-7	< 1	1	1
10335	Chloroethane	75-00-3	< 1	1	1
10335	**Chloroform**	67-66-3	**2**	1	1
10335	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10335	1,1-Dichloroethane	75-34-3	< 1	1	1
10335	1,2-Dichloroethane	107-06-2	< 1	1	1
10335	1,1-Dichloroethene	75-35-4	< 1	1	1
10335	**cis-1,2-Dichloroethene**	156-59-2	**82**	1	1
10335	trans-1,2-Dichloroethene	156-60-5	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**2,400**	10	10
10335	Methylene Chloride	75-09-2	< 4	4	1
10335	**Tetrachloroethene**	127-18-4	**15**	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	1,1,1-Trichloroethane	71-55-6	< 1	1	1
10335	1,1,2-Trichloroethane	79-00-5	< 1	1	1
10335	**Trichloroethene**	79-01-6	**3**	1	1
10335	Trichlorofluoromethane	75-69-4	< 1	1	1
10335	Vinyl Chloride	75-01-4	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	8260 VOCs	SW-846 8260B	1	L153442AA	12/11/2015 04:36	Graham A Goulding	1
10335	8260 VOCs	SW-846 8260B	1	L153451AA	12/11/2015 16:19	Brett W Kenyon	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153442AA	12/11/2015 04:36	Graham A Goulding	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L153451AA	12/11/2015 16:19	Brett W Kenyon	10

Sample Description: Air Stripper Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159788
LL Group # 1614229
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 08:10

Submitted: 12/03/2015 16:08
Reported: 12/19/2015 14:33

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GVAEF

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Benzene	71-43-2	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**250**	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	L153442AA	12/11/2015 03:30	Graham A Goulding	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153442AA	12/11/2015 03:30	Graham A Goulding	1

Sample Description: LGAC1 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159789
LL Group # 1614229
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 08:05

Submitted: 12/03/2015 16:08
Reported: 12/19/2015 14:33

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GVAL1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Benzene	71-43-2	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	**Methyl Tertiary Butyl Ether**	1634-04-4	**22**	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	L153442AA	12/11/2015 03:52	Graham A Goulding	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153442AA	12/11/2015 03:52	Graham A Goulding	1

Sample Description: LGAC2 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159790
LL Group # 1614229
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 08:00

Submitted: 12/03/2015 16:08
Reported: 12/19/2015 14:33

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GVAL2

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Benzene	71-43-2	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	VOCs 8260 BTEX, MTBE	SW-846 8260B	1	L153442AA	12/11/2015 04:14	Graham A Goulding	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153442AA	12/11/2015 04:14	Graham A Goulding	1

Sample Description: LGAC3 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8159791
LL Group # 1614229
Account # 12152

Project Name: Fairfax 26140

Collected: 12/01/2015 07:55

Submitted: 12/03/2015 16:08
Reported: 12/19/2015 14:33

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GVAL3

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10335	Benzene	71-43-2	< 1	1	1
10335	Carbon Tetrachloride	56-23-5	< 1	1	1
10335	Chlorobenzene	108-90-7	< 1	1	1
10335	Chloroethane	75-00-3	< 1	1	1
10335	Chloroform	67-66-3	< 1	1	1
10335	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10335	1,1-Dichloroethane	75-34-3	< 1	1	1
10335	1,2-Dichloroethane	107-06-2	< 1	1	1
10335	1,1-Dichloroethene	75-35-4	< 1	1	1
10335	cis-1,2-Dichloroethene	156-59-2	< 1	1	1
10335	trans-1,2-Dichloroethene	156-60-5	< 1	1	1
10335	Ethylbenzene	100-41-4	< 1	1	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10335	Methylene Chloride	75-09-2	< 4	4	1
10335	Tetrachloroethene	127-18-4	< 1	1	1
10335	Toluene	108-88-3	< 1	1	1
10335	1,1,1-Trichloroethane	71-55-6	< 1	1	1
10335	1,1,2-Trichloroethane	79-00-5	< 1	1	1
10335	Trichloroethene	79-01-6	< 1	1	1
10335	Trichlorofluoromethane	75-69-4	< 1	1	1
10335	Vinyl Chloride	75-01-4	< 1	1	1
10335	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10335	8260 VOCs	SW-846 8260B	1	L153442AA	12/11/2015 04:58	Graham A Goulding	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	L153442AA	12/11/2015 04:58	Graham A Goulding	1

Quality Control Summary

Client Name: Kleinfelder Group Number: 1614229
Reported: 12/19/2015 14:33

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: L153442AA	Sample number(s): 8159787-8159791							
Benzene	< 1	1.	ug/l	107	108	78-120	1	30
Carbon Tetrachloride	< 1	1.	ug/l	105	106	74-130	1	30
Chlorobenzene	< 1	1.	ug/l	109	109	80-120	0	30
Chloroethane	< 1	1.	ug/l	91	97	56-120	7	30
Chloroform	< 1	1.	ug/l	110	112	80-120	1	30
1,2-Dichlorobenzene	< 5	5.	ug/l	106	109	80-120	2	30
1,1-Dichloroethane	< 1	1.	ug/l	105	107	80-120	1	30
1,2-Dichloroethane	< 1	1.	ug/l	107	107	72-127	0	30
1,1-Dichloroethene	< 1	1.	ug/l	108	108	76-124	1	30
cis-1,2-Dichloroethene	< 1	1.	ug/l	109	111	80-120	2	30
trans-1,2-Dichloroethene	< 1	1.	ug/l	112	114	80-120	2	30
Ethylbenzene	< 1	1.	ug/l	108	109	78-120	1	30
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	103	105	75-120	2	30
Methylene Chloride	< 4	4.	ug/l	106	107	77-121	1	30
Tetrachloroethene	< 1	1.	ug/l	113	115	80-122	2	30
Toluene	< 1	1.	ug/l	108	109	80-120	1	30
1,1,1-Trichloroethane	< 1	1.	ug/l	107	110	66-126	3	30
1,1,2-Trichloroethane	< 1	1.	ug/l	104	105	80-120	1	30
Trichloroethene	< 1	1.	ug/l	109	112	80-120	3	30
Trichlorofluoromethane	< 1	1.	ug/l	105	107	60-142	2	30
Vinyl Chloride	< 1	1.	ug/l	98	101	69-120	4	30
Xylene (Total)	< 1	1.	ug/l	110	110	80-120	0	30
Batch number: L153451AA	Sample number(s): 8159787							
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	99	104	75-120	5	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.

Analysis Name: 8260 VOCs
Batch number: L153442AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8159787	102	102	97	94

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1614229
Reported: 12/19/2015 14:33

Surrogate Quality Control

8159788	102	100	98	96
8159789	103	102	96	95
8159790	103	101	97	94
8159791	105	101	97	95
Blank	103	100	97	95
LCS	101	100	100	100
LCSD	102	101	99	99
Limits:	80-116	77-113	80-113	78-113

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Lancaster Laboratories

Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152
Group #: _____ Sample #: 8159782-91
16/4279

Client:	Fairfax Petroleum	Acct. #:	
Project Name/#:	Great Falls	PWSID #:	
Project Manager:	Mark C. Steele	P.O. #:	51141-315335
Sampler:		Quote #:	
Name of State where samples were collected:	Virginia		

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Other	Total # of Containers	Analyses Requested: BTEX/MTBE (8260) [H]	Analyses Requested: 26140 VPDES List [H]	Remarks
Influent	12/1/15	0815	X			X				X	
Air Stripper Effluent	12/1/15	0810	X			X			X		
LGAC1 Effluent	12/1/15	0805	X			X			X		
LGAC2 Effluent	12/1/15	0800	X			X			X		
LGAC3 Effluent	12/1/15	0755	X			X				X	

Matrix: Potable, NPDES
Preservation Codes: H=HCl T=Thiosulfate N=HNO3 B=NaOH S=H2SO4 O=Other
Temperature of samples upon receipt (if requested)

For Lab Use Only
FSC: _____
SCR#: _____

Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: mcsteele@kleinfelder.com

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplicate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/2/15	17:00	cooler room	12/2/15	17:00
Cathy [signature]	12/3/15	1:25	[signature]	12/3/15	1325
[signature]	12-3-15	1608			
			[signature]	12/3/15	1608

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Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client

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)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than

> greater than

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 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.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) 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.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

December 31, 2015

Project: Fairfax 26140

Submittal Date: 12/17/2015
Group Number: 1618558
PO Number: 51141-315335
State of Sample Origin: VA

Client Sample Description	Lancaster Labs (LL) #
Influent Grab Water	8181541
Air Stripper Effluent Grab Water	8181542
LGAC1 Effluent Grab Water	8181543
LGAC2 Effluent Grab Water	8181544
LGAC3 Effluent Grab Water	8181545

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

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

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ELECTRONIC COPY TO	Kleinfelder	Attn: Nathan Stevens
ELECTRONIC COPY TO	Kleinfelder	Attn: Jennifer Kozak
ELECTRONIC COPY TO	Kleinfelder	Attn: Venelda Williams
ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele

Respectfully Submitted,

Amek Carter
Specialist

(717) 556-7252

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Analysis Report

Sample Description: Influent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8181541
LL Group # 1618558
Account # 12152

Project Name: Fairfax 26140

Collected: 12/16/2015 08:45 by EM

Submitted: 12/17/2015 17:40
Reported: 12/31/2015 16:31

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF-IN

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 10	10	10
10945	Ethylbenzene	100-41-4	< 10	10	10
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**2,100**	10	10
10945	Toluene	108-88-3	< 10	10	10
10945	Xylene (Total)	1330-20-7	< 10	10	10

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	Z153631AA	12/30/2015 03:28	Hu Yang	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z153631AA	12/30/2015 03:28	Hu Yang	10

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Analysis Report

Sample Description: Air Stripper Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8181542
LL Group # 1618558
Account # 12152

Project Name: Fairfax 26140

Collected: 12/16/2015 08:50 by EM

Submitted: 12/17/2015 17:40
Reported: 12/31/2015 16:31

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF-EF

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**140**	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	Z153631AA	12/29/2015 19:04	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z153631AA	12/29/2015 19:04	Hu Yang	1

Sample Description: LGAC1 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8181543
LL Group # 1618558
Account # 12152

Project Name: Fairfax 26140

Collected: 12/16/2015 09:00 by EM

Submitted: 12/17/2015 17:40
Reported: 12/31/2015 16:31

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF-L1

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	**Methyl Tertiary Butyl Ether**	1634-04-4	**3**	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	Z153631AA	12/29/2015 20:39	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z153631AA	12/29/2015 20:39	Hu Yang	1

Sample Description: LGAC2 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8181544
LL Group # 1618558
Account # 12152

Project Name: Fairfax 26140

Collected: 12/16/2015 09:10 by EM

Submitted: 12/17/2015 17:40
Reported: 12/31/2015 16:31

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF-L2

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	Z153631AA	12/29/2015 21:04	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z153631AA	12/29/2015 21:04	Hu Yang	1

Sample Description: LGAC3 Effluent Grab Water
Great Falls, VA
Fairfax Petroleum 26140

LL Sample # WW 8181545
LL Group # 1618558
Account # 12152

Project Name: Fairfax 26140

Collected: 12/16/2015 09:15 by EM

Submitted: 12/17/2015 17:40
Reported: 12/31/2015 16:31

Kleinfelder
550 West C Street, Suite 1200
San Diego CA 92101

GF-L3

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10945	Benzene	71-43-2	< 1	1	1
10945	Ethylbenzene	100-41-4	< 1	1	1
10945	Methyl Tertiary Butyl Ether	1634-04-4	< 1	1	1
10945	Toluene	108-88-3	< 1	1	1
10945	Xylene (Total)	1330-20-7	< 1	1	1

General Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

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
10945	UST BTEX, MTBE in Water	SW-846 8260B	1	Z153631AA	12/29/2015 21:28	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z153631AA	12/29/2015 21:28	Hu Yang	1

Quality Control Summary

Client Name: Kleinfelder Group Number: 1618558
Reported: 12/31/2015 16:31

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: Z153631AA	Sample number(s): 8181541-8181545							
Benzene	< 1	1.	ug/l	95		78-120		
Ethylbenzene	< 1	1.	ug/l	94		78-120		
Methyl Tertiary Butyl Ether	< 1	1.	ug/l	92		75-120		
Toluene	< 1	1.	ug/l	96		80-120		
Xylene (Total)	< 1	1.	ug/l	96		80-120		

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: Z153631AA	Sample number(s): 8181541-8181545 UNSPK: 8181542								
Benzene	100	100	78-120	0	30				
Ethylbenzene	101	101	78-120	1	30				
Methyl Tertiary Butyl Ether	109 (2)	100 (2)	75-120	1	30				
Toluene	103	103	80-120	0	30				
Xylene (Total)	102	102	80-120	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.

Analysis Name: UST BTEX, MTBE in Water
Batch number: Z153631AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8181541	103	98	96	92
8181542	103	98	98	93
8181543	104	99	96	91
8181544	103	100	96	92
8181545	104	99	96	91
Blank	102	98	97	93

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1618558
Reported: 12/31/2015 16:31

Surrogate Quality Control

LCS	100	98	97	98
MS	101	98	98	98
MSD	100	99	96	98
Limits:	80-116	77-113	80-113	78-113

*- 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.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Lancaster Laboratories

Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152
Group #: _____ Sample #: 816541-45
1618558

Client:	Fairfax Petroleum	Acct. #:	
Project Name/#:	Great Falls	PWSID #:	
Project Manager:	Mark C. Steele	P.O. #:	51141-315335
Sampler:	Evan McMullen	Quote #:	
Name of State where samples were collected:	Virginia		

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Other	Total # of Containers	Analyses Requested: BTEX/MTBE (8260)	Preservation Codes: H	Remarks
Influent	12/16/15	0945	X			X		3	X		
Air Stripper Effluent		0850	X			X		3	X		
LGAC1 Effluent		0900	X			X		3	X		
LGAC2 Effluent		0910	X			X		3	X		
LGAC3 Effluent	↓	0915	X			X		3	X		

Matrix: Potable, NPDES

For Lab Use Only
FSC: _____
SCR#: _____

Preservation Codes
H=HCl T=Thiosulfate
N=HNO3 B=NaOH
S=H2SO4 O=Other

Temperature of samples upon receipt (if requested)

Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: _____
Rush results requested by (please circle): Phone Fax E-mail
Phone #: _____ Fax #: _____
E-mail address: mcsteele@kleinfelder.com

Data Package Options (please circle if required)
Type I (validation/NJ reg) TX-TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No

State-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicated QC sample and submit triplicate volume)
Internal COC required? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/16/15	1500	cooler room	12/16/15	1500
cooler room	12/17/15	11:30	[signature]	12/17/15	11:30
[signature]	12/17/15	17:40			
			[signature]	12/17/15	17:40

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Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client

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)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than

> greater than

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 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.

Laboratory Data Qualifiers:

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) 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.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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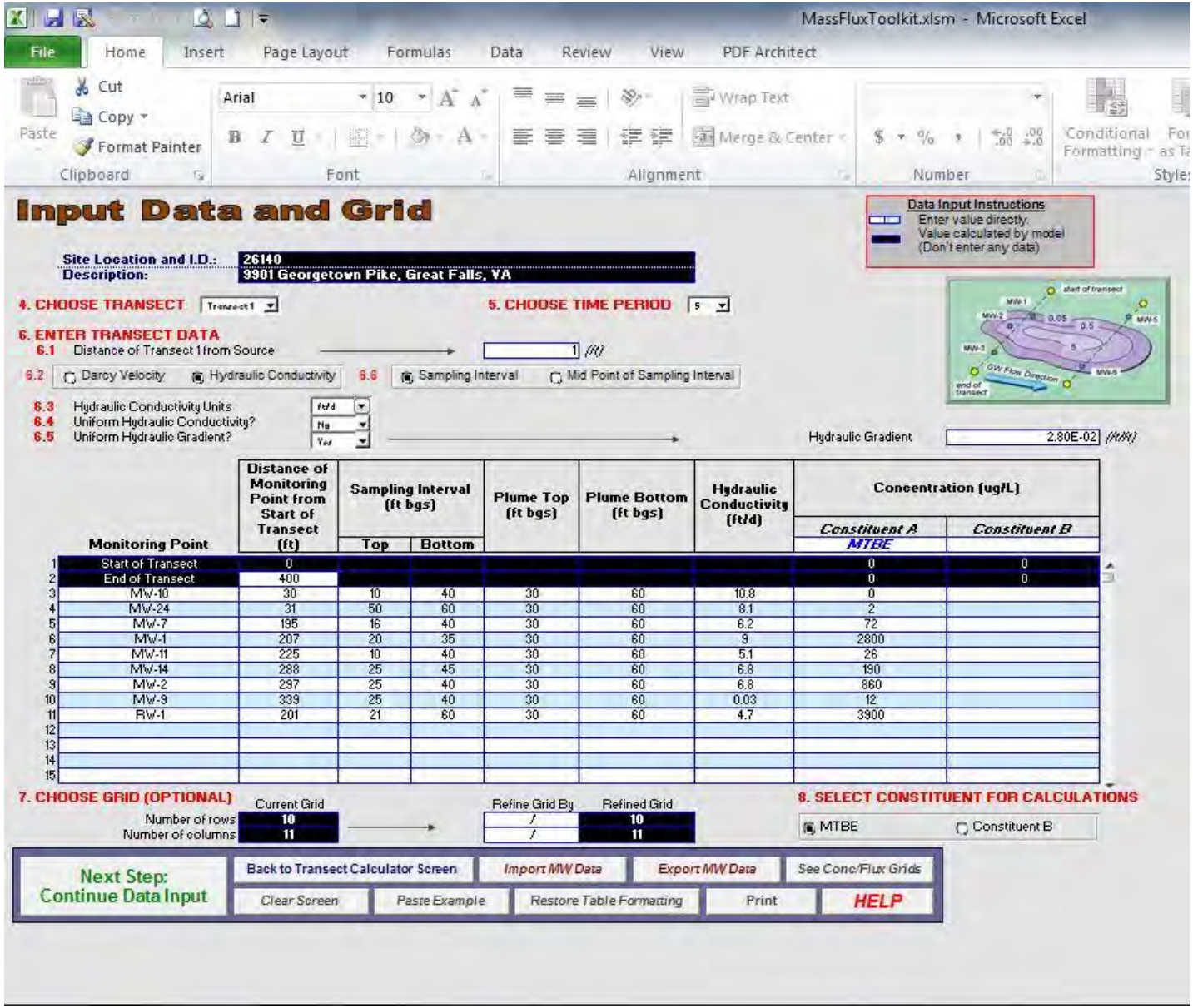
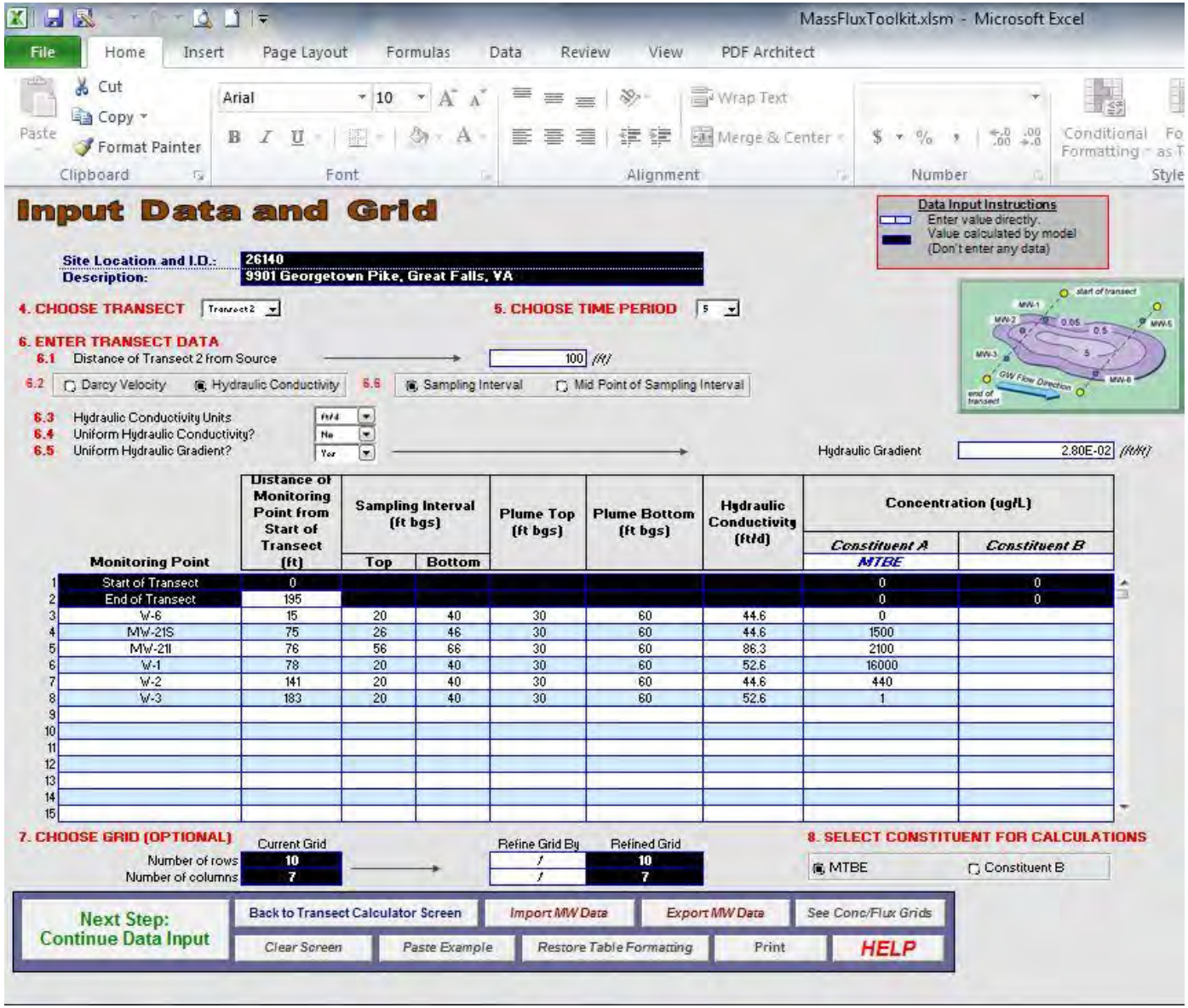
APPENDIX C
Mass Flux Toolkit Results

Transect 1, Time 5 (A-A', December 2015 sampling event. If a well was not sampled, the last recorded analytical result was used.)

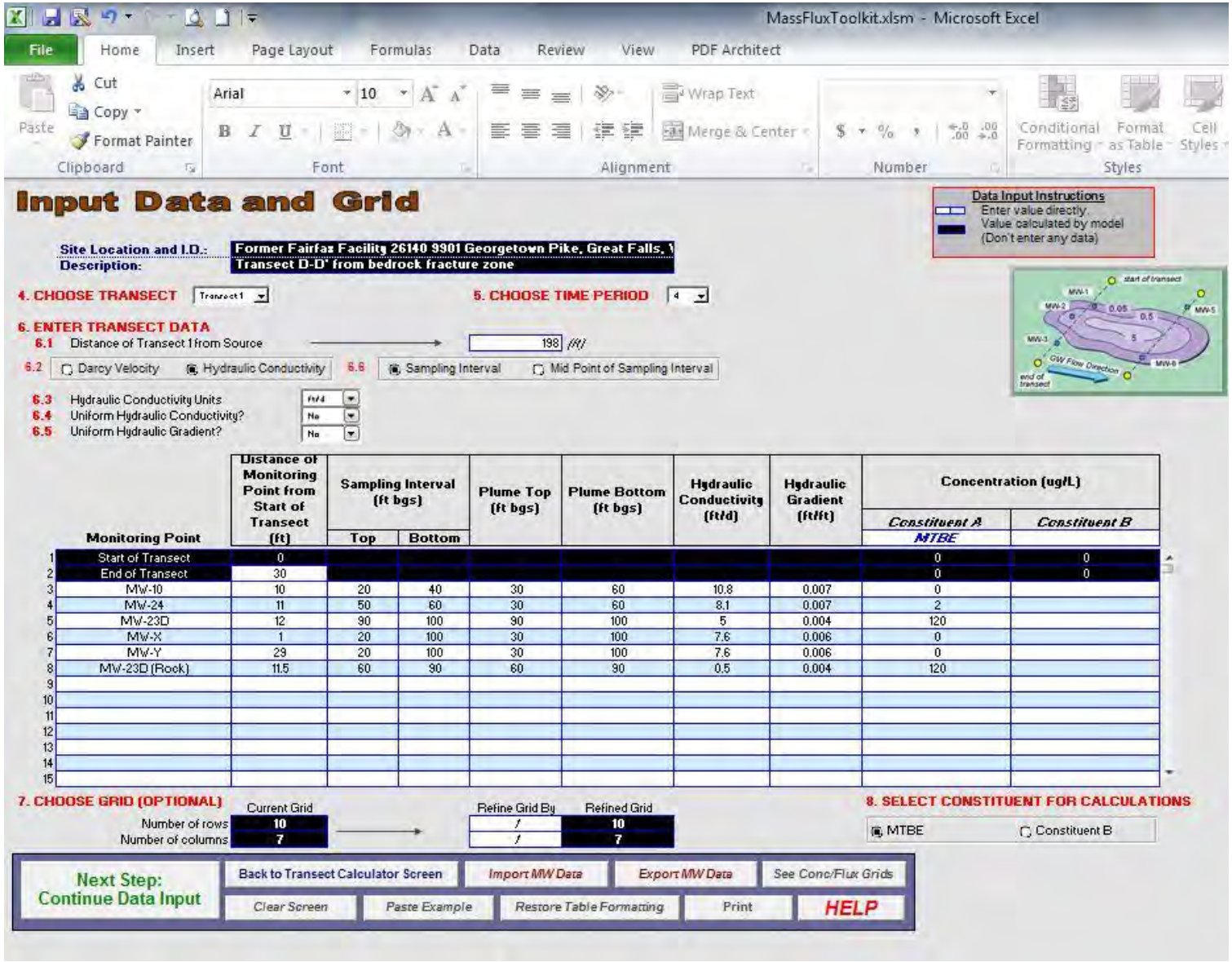


	Monitoring Point	Distance of Monitoring Point from Start of Transect (ft)	Sampling Interval (ft bgs) Top	Sampling Interval (ft bgs) Bottom	Plume Top (ft bgs)	Plume Bottom (ft bgs)	Hydraulic Conductivity (ft/d)	Concentration (ug/L) Constituent A MTBE	Concentration (ug/L) Constituent B
1	Start of Transect	0						0	0
2	End of Transect	400						0	0
3	MW-10	30	10	40	30	60	10.8	0	
4	MW-24	31	50	60	30	60	8.1	2	
5	MW-7	195	16	40	30	60	6.2	72	
6	MW-1	207	20	35	30	60	9	2800	
7	MW-11	225	10	40	30	60	5.1	26	
8	MW-14	288	25	45	30	60	6.8	190	
9	MW-2	297	25	40	30	60	6.8	860	
10	MW-9	339	25	40	30	60	0.03	12	
11	RW-1	201	21	60	30	60	4.7	3900	
12									
13									
14									
15									

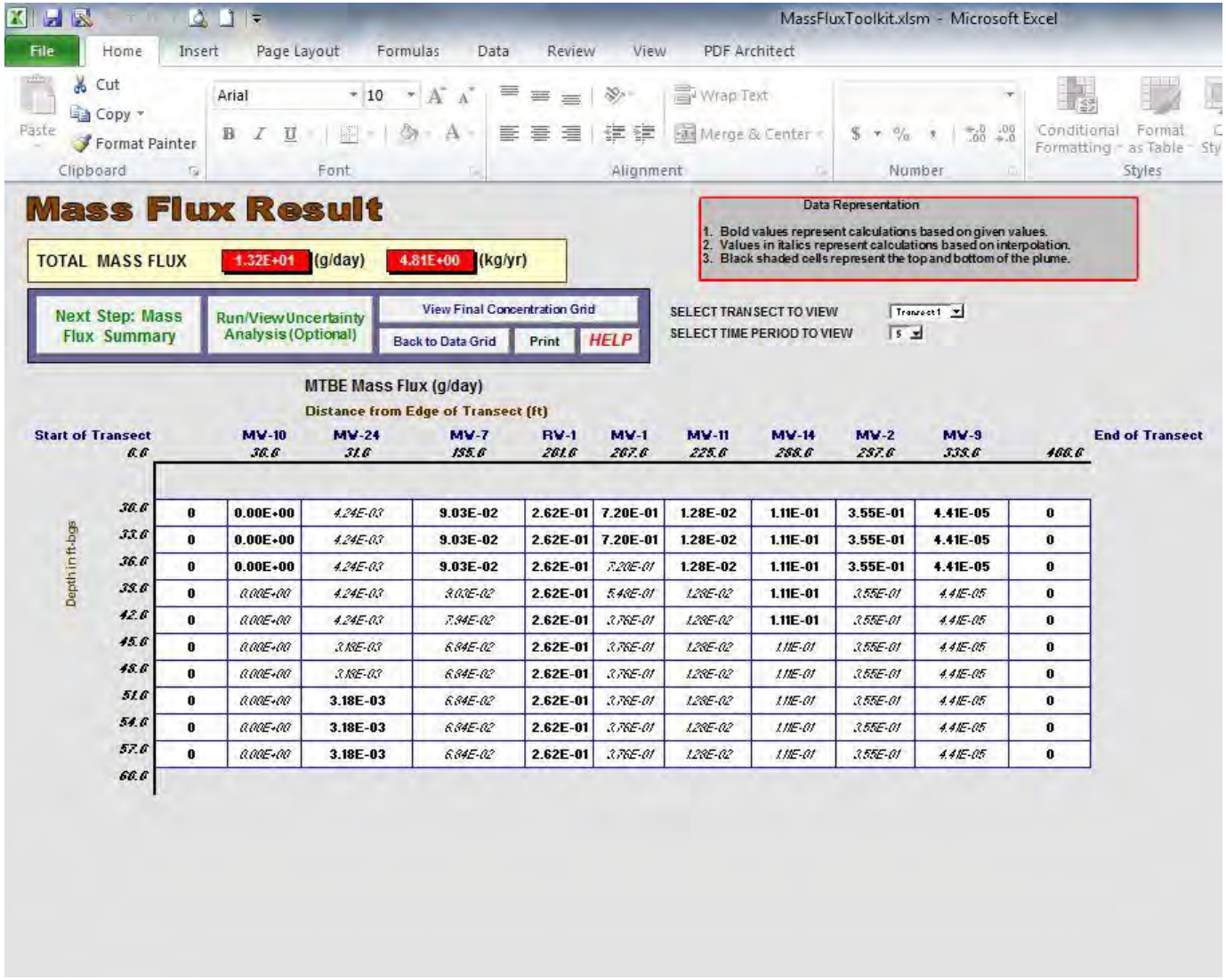
Transect 2, Time 5 (B-B' December 2015 sampling event.)



Transect 1, Time 4 (D-D', December 2015 Sampling Event)

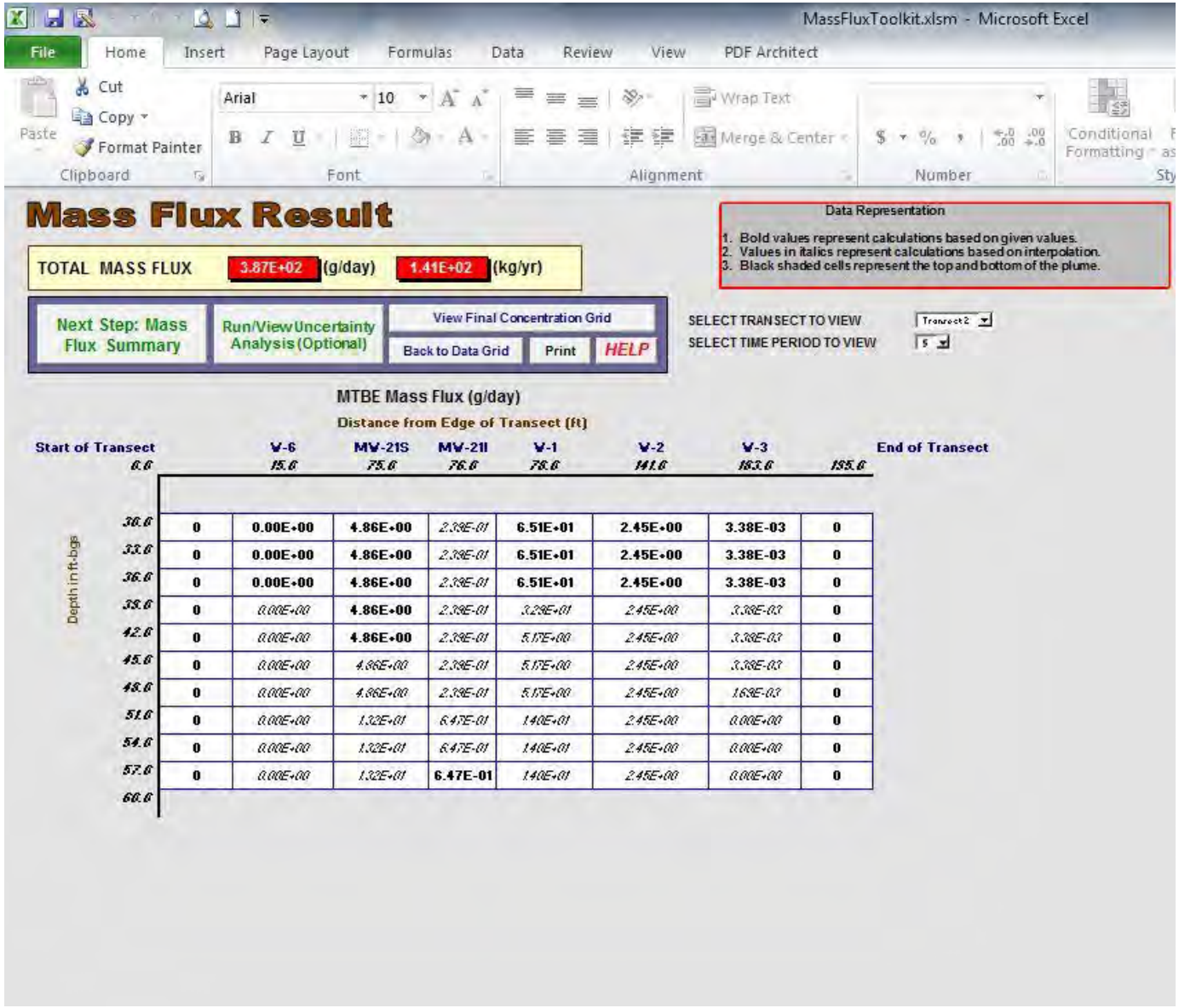


Transect 1, Time 5 (A-A', December 2015 sampling event.)



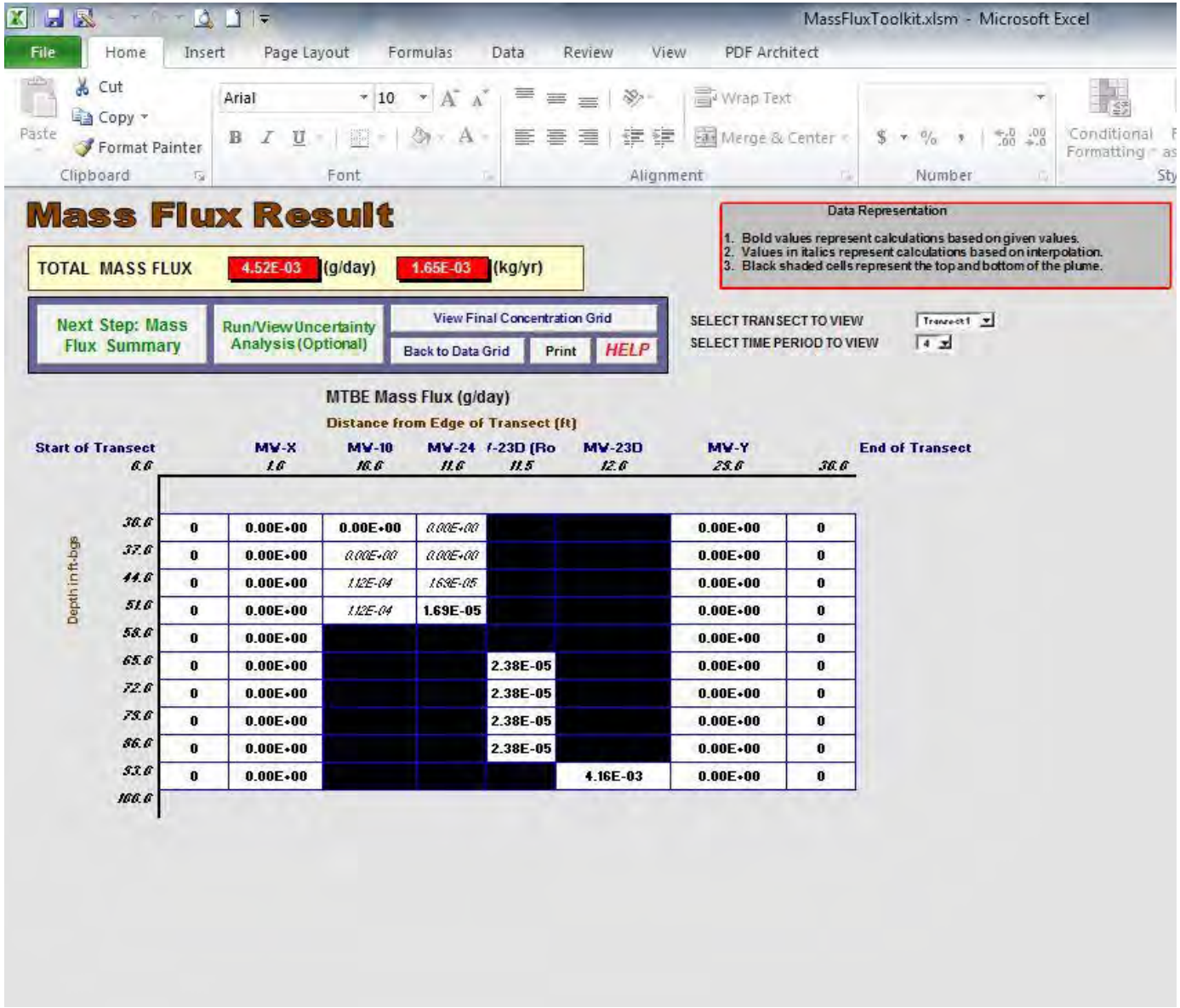
	Start of Transect	MW-10	MW-24	MW-7	RW-1	MW-1	MW-11	MW-14	MW-2	MW-9	End of Transect
	0.0	*30.0*	*31.0*	*155.0*	*261.0*	*267.0*	*225.0*	*268.0*	*297.0*	*333.0*	*460.0*
30.0	0	0.00E+00	*4.24E-03*	9.03E-02	2.62E-01	7.20E-01	1.28E-02	1.11E-01	3.55E-01	4.41E-05	0
33.0	0	0.00E+00	*4.24E-03*	9.03E-02	2.62E-01	7.20E-01	1.28E-02	1.11E-01	3.55E-01	4.41E-05	0
36.0	0	0.00E+00	*4.24E-03*	9.03E-02	2.62E-01	*7.20E-01*	1.28E-02	1.11E-01	3.55E-01	4.41E-05	0
39.0	0	*0.00E+00*	*4.24E-03*	*9.03E-02*	2.62E-01	*5.48E-01*	*1.28E-02*	1.11E-01	*3.55E-01*	*4.41E-05*	0
42.0	0	*0.00E+00*	*4.24E-03*	*7.94E-02*	2.62E-01	*3.76E-01*	*1.28E-02*	1.11E-01	*3.55E-01*	*4.41E-05*	0
45.0	0	*0.00E+00*	*3.18E-03*	*6.84E-02*	2.62E-01	*3.76E-01*	*1.28E-02*	*1.11E-01*	*3.55E-01*	*4.41E-05*	0
48.0	0	*0.00E+00*	*3.18E-03*	*6.84E-02*	2.62E-01	*3.76E-01*	*1.28E-02*	*1.11E-01*	*3.55E-01*	*4.41E-05*	0
51.0	0	*0.00E+00*	3.18E-03	*6.84E-02*	2.62E-01	*3.76E-01*	*1.28E-02*	*1.11E-01*	*3.55E-01*	*4.41E-05*	0
54.0	0	*0.00E+00*	3.18E-03	*6.84E-02*	2.62E-01	*3.76E-01*	*1.28E-02*	*1.11E-01*	*3.55E-01*	*4.41E-05*	0
57.0	0	*0.00E+00*	3.18E-03	*6.84E-02*	2.62E-01	*3.76E-01*	*1.28E-02*	*1.11E-01*	*3.55E-01*	*4.41E-05*	0
60.0											

Transect 2, Time 5 (B-B', December 2015 sampling event.)



	0.0	V-6 15.6	MV-21S 75.6	MV-21I 76.6	V-1 78.6	V-2 141.6	V-3 183.6	195.6
30.6	0	0.00E+00	4.86E+00	2.38E-01	6.51E+01	2.45E+00	3.38E-03	0
33.6	0	0.00E+00	4.86E+00	2.38E-01	6.51E+01	2.45E+00	3.38E-03	0
36.6	0	0.00E+00	4.86E+00	2.38E-01	6.51E+01	2.45E+00	3.38E-03	0
39.6	0	0.00E+00	4.86E+00	2.38E-01	3.29E+01	2.45E+00	3.38E-03	0
42.6	0	0.00E+00	4.86E+00	2.38E-01	5.17E+00	2.45E+00	3.38E-03	0
45.6	0	0.00E+00	4.86E+00	2.38E-01	5.17E+00	2.45E+00	3.38E-03	0
48.6	0	0.00E+00	4.86E+00	2.38E-01	5.17E+00	2.45E+00	1.63E-03	0
51.6	0	0.00E+00	1.32E+01	6.47E-01	1.40E+01	2.45E+00	0.00E+00	0
54.6	0	0.00E+00	1.32E+01	6.47E-01	1.40E+01	2.45E+00	0.00E+00	0
57.6	0	0.00E+00	1.32E+01	6.47E-01	1.40E+01	2.45E+00	0.00E+00	0
60.6								

Transect 1, Time 4 (D-D', December 2015 Sampling Event)



APPENDIX D
DEQ Correspondence

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

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

March 2, 2015

Ms. Megan Tingley
Fairfax Petroleum Realty, LLC
6820-B Commercial Drive
Springfield, VA 22151

PC#2010-3028; Former Great Falls Exxon
9901 Georgetown Pike, Great Falls, Fairfax County 22066
Corrective Action Plan Addendum (CAPA) received October 2, 2014
CAPA Approval, **CAP #505**

Dear Ms. Tingley:

The Northern Regional Office of the Department of Environmental Quality (DEQ) has completed review of the referenced Corrective Action Plan Addendum (CAPA) prepared for Fairfax Petroleum Realty, LLC (Fairfax Petroleum) by Kleinfelder. The proposed remediation strategy complies with the Virginia DEQ Storage Tank Program Technical Manual. Approval of the revised corrective action strategy is hereby granted. CAP Tracking Number 505 still applies for the approved corrective action.

The CAP Monitoring Reports (CMR) are to be submitted to the Remediation Division of the DEQ Northern Regional Office. The effectiveness of the proposed strategy is to be monitored as outlined in the approved CAP and as further clarified below.

This Corrective Action Plan Addendum is approved based on:

1. Monitoring for petroleum contaminants and indicators of natural attenuation in appropriate monitoring wells, as shown on the schedule in the attached modified Table 10 of the CAPA. Annual sampling events need to include analysis for the full "8260" suite of volatile organic contaminants while active remediation is taking place. Dissolved phase MTBE concentrations plans and groundwater elevation contour plans will continue to be included in each monitoring report.

2. If soil vapor extraction system sampling being carried out in the first quarter of 2015 demonstrates no significant recovery is occurring, the soil vapor extraction component of the corrective action plan can be ended.

3. The end point for bedrock monitoring well 23D will be 343 ug/l, rather than the proposed 429 ug/l. Bedrock concentrations in on-site monitoring wells need to reduce to concentrations that achieve an estimated mass flux, leaving the site through the nominal transect D-D', less than 0.01 grams/day. Achieving these concentrations and this mass flux will ensure that groundwater abstracted from a hypothetical bedrock drinking water well in residential areas of Great Falls will not exceed the Virginia DEQ petroleum program risk management level of 12 ug/l. Mass flux estimates for transect D-D' are to be included in, as a minimum, each annual fourth quarter groundwater monitoring report.

4. The proposed end point for the overburden (also referred to as the shallow, or saprolite) on-site groundwater will initially be set at the 5,000 ug/l proposed in the CAPA. The CAPA justifies the proposed 5,000 ug/l by indicating natural biodegradation and attenuation will ensure a mass flux of MTBE beyond the former Great Falls Shell (new Exxon) or south beyond the Crossroads building that is protective of potential shallow drinking water wells in those directions. The CAPA also suggests that mass flux downward, to the fractured bedrock, will also be sufficiently low as a result of natural biodegradation and attenuation to be protective of drinking water wells constructed in fractured bedrock. While the groundwater chemistry and the concentrations of MTBE degradation products are indicative of natural degradation occurring, the amount of degradation has not been quantified, or compared to either observed changes in MTBE and degradation products or the amount of degradation required to achieve proposed mass flux end points (e.g. 0.0049 grams/day in transect C, 0.01 grams/day in fractured bedrock, transect D). By January 31, 2016, Fairfax Petroleum should provide information corroborating that the required rate of degradation is occurring to achieve the predicted protective mass flux rates or propose a lower end point. Mass flux estimates for each transect and estimates of mass reductions from active remediation and from degradation between those transects, will be included in at least each annual fourth quarter monitoring report.

5. By January 31, 2016, Fairfax Petroleum should demonstrate that the remedial objectives (average end point concentrations and mass flux) are being achieved on the former Great Falls Shell service station (new Exxon) or will be achieved using the existing remedial technologies. If Fairfax Petroleum cannot demonstrate this, a corrective action plan addendum should be prepared by March 31, 2016 describing proposals to achieve the remedial objectives on the new Exxon.

6. Active remediation should continue until the average end point concentrations and mass flux objectives are met for two consecutive quarters.

7. Once the remedial objectives (average end point concentrations and mass flux objectives) have been met for two consecutive quarters, active remediation can end and post-remediation monitoring can begin.

8. Post-remediation monitoring should continue for eight quarters.

9. Post-remediation monitoring should demonstrate, with a reasonable degree of statistical certainty, that post remediation concentrations are stable or falling and demonstrate continued degradation and reduction of remaining MTBE and degradation products.

Fairfax Petroleum shall submit monitoring reports no later than **April 31, 2015** and at quarterly intervals thereafter.

Please note: A General VPDES Permit for Discharges from Petroleum Contaminated Sites is required.

Please feel free to contact **Alex Wardle** via e-mail at alexander.wardle@deq.virginia.gov or by telephone at (703) 583-3822 if you have any questions concerning this matter.

Sincerely,

Randy Chapman
Environmental Manager
Remediation

Enc: revised table 10 of the CAPA
Comments and responses review

cc: File
Kleinfelder: MCsteele@kleinfelder.com
GFCA: m.eric.knudsen@gmail.com; gsjoblom@cox.net; what00now@yahoo.com
GFBPA: rlazaro4@gmail.com; g.s.dulaney.bv7f@statefarm.com
Fairfax County: John.Foust@fairfaxcounty.gov; benjamin.wiles@fairfaxcounty.gov

TABLE 10

Proposed Groundwater Monitoring Schedule
Inactive Fairfax Facility #26140
9901 Georgetown Pike
Great Falls, Virginia

Monitoring Well	Monitoring Schedule		Analysis	Comments
	Quarterly	Annually	Annual analysis to include all 8260 VOCs	
RW-1	X		BTEX, MTBE, TBA, TAME and DIPE	
MW-1	X		BTEX, MTBE, TBA, TAME and DIPE	
MW-2	X		BTEX, MTBE, TBA, TAME and DIPE	
SVE-2		X	BTEX, MTBE, TBA, TAME and DIPE	Source area coverage provided by MW-1, 7, and 15
MW-3		X	BTEX, MTBE, TBA, TAME and DIPE	
MW-5		X	BTEX, MTBE, TBA, TAME and DIPE	
MW-6D		X	BTEX, MTBE, TBA, TAME and DIPE	
MW-6S		X	BTEX, MTBE, TBA, TAME and DIPE	
MW-7	X		BTEX, MTBE, TBA, TAME and DIPE	
MW-9		X	BTEX, MTBE, TBA, TAME and DIPE	
MW-10		X	BTEX, MTBE, TBA, TAME and DIPE	
MW-11		X	BTEX, MTBE, TBA, TAME and DIPE	Source area coverage provided by MW-1, 7, and 15
MW-12D		X		~~Well recommended for abandonment~~
MW-13		X	BTEX, MTBE, TBA, TAME and DIPE	Source area coverage provided by MW-1, 7, and 15
MW-14		X	BTEX, MTBE, TBA, TAME and DIPE	Area coverage provided by MW-2
MW-15	X		BTEX, MTBE, TBA, TAME and DIPE	
MW-16D	X		BTEX, MTBE, TBA, TAME and DIPE	
MW-17D	X		BTEX, MTBE, TBA, TAME and DIPE	
MW-18D		X		~~Well recommended for abandonment~~
MW-19D		X	BTEX, MTBE, TBA, TAME and DIPE	
MW-20D	X	X	BTEX, MTBE, TBA, TAME and DIPE	
MW-21S	X		BTEX, MTBE, TBA, TAME DIPE, and Ethanol	
MW-21I	X		BTEX, MTBE, TBA, TAME DIPE, and Ethanol	
MW-22		X	BTEX, MTBE, TBA, TAME and DIPE	~~Well will be sampled only if MTBE detected in W-7~~
MW-23D	X		BTEX, MTBE, TBA, TAME and DIPE	
MW-24	X	X	BTEX, MTBE, TBA, TAME and DIPE	
MW-25D	X		BTEX, MTBE, TBA, TAME and DIPE	
MW-26D		X	BTEX, MTBE, TBA, TAME and DIPE	
MW-27S	X		BTEX, MTBE, TBA, TAME and DIPE	
MW-27I	X		BTEX, MTBE, TBA, TAME and DIPE	
PW-1	X		BTEX, MTBE, TBA, TAME and DIPE	
W-1	X		BTEX, MTBE, TBA, TAME DIPE, and Ethanol	
W-2	X		BTEX, MTBE, TBA, TAME DIPE, and Ethanol	
W-3		X	BTEX, MTBE, TBA, TAME DIPE, and Ethanol	
W-4		X	BTEX, MTBE, TBA, TAME DIPE, and Ethanol	
W-5		X	BTEX, MTBE, TBA, TAME DIPE, and Ethanol	
W-6	X		BTEX, MTBE, TBA, TAME DIPE, and Ethanol	
W-7	X		BTEX, MTBE, TBA, TAME DIPE, and Ethanol	
GFSCMW-2			BTEX, MTBE, TBA, TAME and DIPE	Well will be sampled only if MTBE detected in W-7 or MW-22
GFSCMW-3			BTEX, MTBE, TBA, TAME and DIPE	Well will be sampled only if MTBE detected in W-7 or MW-22
GFGPPMW-4				~~Well recommended for abandonment~~
GFGPMW-5				Well recommended for abandonment

Notes:
BTEX = Benzene, Toluene, Ethylbenzene, and total Xylenes
DIPE = Di-Isopropyl Ether
MTBE = Methyl Tert Butyl Ether
TAME = Tertiary Amyl Methyl Ether
TBA = Tertiary Butyl Alcohol
Samples will be analyzed using EPA Method 8260

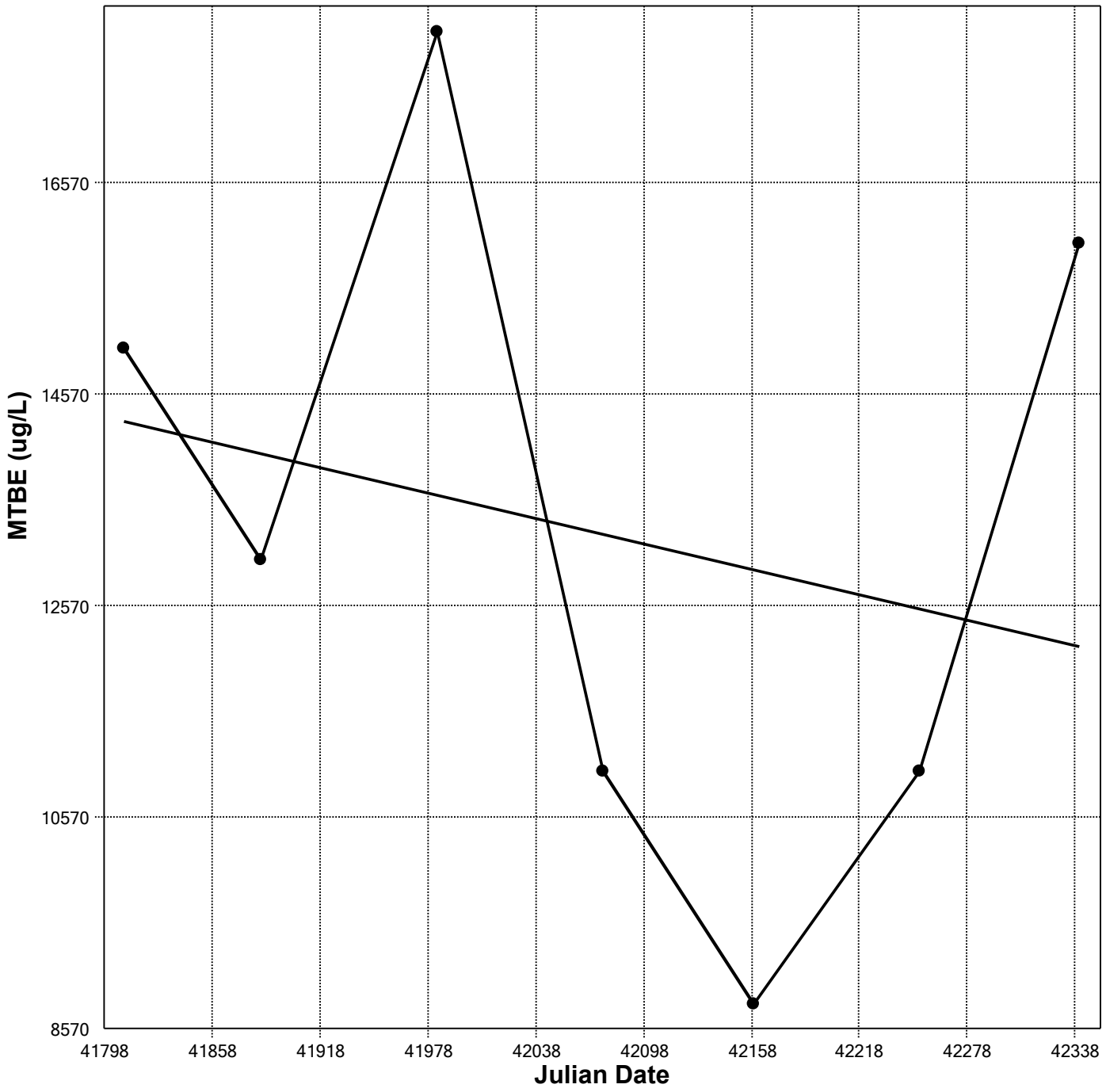
Comment	Comment submitted by/date	DEQ response
We believe from the review of the Addendum, that Kleinfelder and Fairfax Petroleum Realty are attempting to justify a minimal cleanup, which is not acceptable to Great Falls. We believe the cleanup can and should be more complete and to lower levels of residual contamination of Methyl Tertiary Butyl Ether (MTBE) than proposed and will be in consonance with the policy of the DEQ, and in consonance with the risk-based decision criteria of the DEQ.	Great Falls Citizen's Association December 1, 2014 (GFCA)/ Great Falls Business and Professional Association December 1, 2014 (GFPA)	DEQ considers that Fairfax Petroleum Realty has presented information and a methodology to support their corrective action technology and end points that are consistent with DEQ petroleum program guidance, past practice on DEQ cases, and consistent with industry practice. DEQ agrees, however, that further analysis of the "shallow zone" groundwater end point is required before that can be confirmed as protective.
Continue the groundwater pumping from recovery wells on the original site until all the monitoring data on site is below the end point for a period of time. At that time, pump from a monitoring well to the southeast and a monitoring well to the south, near the leading edges of the plume, to more completely recover contamination, until these outer regions are below the end point/	GFCA / GFPA	DEQ agrees that consideration should be given to further action offsite if the offsite end points have not been met or do not appear to be on a path to being met when onsite remediation appears complete, Fairfax Petroleum Realty's consultant, Kleinfelder, suggest a similar approach in section 9.2 of the CAPA.
There should be a single end point used for the entire cleanup, not one for the shallower groundwater and one for the deeper groundwater as proposed, since the groundwater is all interconnected, and because the two proposed end points were not derived using a common methodology and assumptions. The cleanup should also not ignore contamination at any locations, as proposed. Certain questions and irregularities in the derivation of the end point should be explored and resolved in a technical meeting among the parties.	GFCA	In complex groundwater environments, where different units have different capacities to store and transmit water and, therefore, contaminants, a single end point may not be appropriate. That appears to be the situation at the former Great Falls Exxon. DEQ agrees that no locations can be ignored and should be assessed based on an overall potential flow of contaminants, as well as the end point adopted for that interval.
Concerned of possible vapor intrusion to the affected Great	GFPA	Shallow groundwater moving beneath commercial

Comment	Comment submitted by/date	DEQ response
Falls business properties.		properties from the former Exxon contains MTBE either below detectable concentrations or severa l orders of magnitude below concentrations t hat DEQ's voluntary remediation program has indicated would pose a potential risk of vapor intrusion into commercial or residential properties. In addition, on-site shallow vapor sampling shows no detectable concentrations of MTBE. No significant amounts of petroleum va por have be en recovered by the on-sit e vapor extraction remedial system. There are therefore mu ltiple lines of evidence that there is no significant risk of v apor intrusion to off-site commercial or residential properties. DEQ does not require action beyond that already described in the approved CAP eit her on or off-site.
Sensitive sampling and analysis of the soil vapor extraction effluent should be carried out before shutting down the SVE system in order to attempt a qua ntification of recovered vapor.	GFCA February 12, 2015	DEQ agrees
Recommend adopting the 474 ug/l MTBE en d point for shallow and deep groundwater		DEQ proposes a remedial end point for t he intermediate zone bedrock groundwater of 343 ug/l to be pr otective (achieve the DEQ risk management level of 1 2 ug/l) of any h ypothetical well that might connect to the MTBE contaminated bedrock groundwater. DEQ ag rees with the shallow groundwater remediation objective for MTBE of 5, 000 ug/l as an interim objective t hat Fairfax Petroleum will need to demonstrate is protective of the bedrock groundwater objective

Comment	Comment submitted by/date	DEQ response
		and is low enough that natural degradation in the shallow groundwater prevents movement of the contamination beyond the former Shell (current Exxon)
Recommend monitoring a perimeter set of wells semi-annually for five years after remediation shut down.		DEQ will request two years of post-active remediation monitoring to verify the remediation system has achieve the remediation objectives. This period, and number of monitoring events, provides an adequate number of samples to provide a reasonable level of confidence that groundwater concentrations are stable or reducing.

APPENDIX E
Monitoring Well W-1 Mann-Kendal Analysis

Mann-Kendall Trend Test W-1



Mann-Kendall Trend Analysis

n	7
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	6.5828
Standardized Value of S	-0.4557
Test Value (S)	-4
Tabulated p-value	0.2810
Approximate p-value	0.3243

OLS Regression Line (Blue)

OLS Regression Slope	-4.0084
OLS Regression Intercept	181,897.8896

Insufficient statistical evidence of a significant trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis W-1	
User Selected Options		
Date/Time of Computation	1/21/2016 12:27:46 PM	
From File	WorkSheet.xls	
Full Precision	OFF	
Confidence Coefficient	0.95	
Level of Significance	0.05	

C1

General Statistics	
Number of Events Reported (m)	7
Number of Missing Events	0
Number or Reported Events Used	7
Number Values Reported (n)	7
Minimum	8800
Maximum	18000
Mean	13257
Geometric Mean	12911
Median	13000
Standard Deviation	3245

Mann-Kendall Test	
Test Value (S)	-4
Tabulated p-value	0.281
Standard Deviation of S	6.583
Standardized Value of S	-0.456
Approximate p-value	0.324

Insufficient evidence to identify a significant trend at the specified level of significance.