KLEINFELDER
Bright People. Right Solutions.

FEDEX: 793045152208

December 21, 2011

Mr. Chad Widney
Oil Control Program
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

RE: Supplemental Site Assessment Report and Site Conceptual Model
Southside Facility #20025
31 Heather Lane
Perryville, Cecil County, Maryland
MDE Case No. 2006-0489-CE

Dear Mr. Widney,

Kleinfelder, on behalf of Southside Oil, LLC (Southside), is pleased to submit the enclosed Supplemental Site Assessment Report and Site Conceptual Model for the above referenced site. This report provides a summary of site characterization activities conducted throughout the case history, a site conceptual model, and includes a detailed summary of recent subsurface and groundwater monitoring activities completed in accordance with the *Work Plan Approval* letter issued by the MDE on August 9, 2011.

Southside and Kleinfelder appreciate the continued guidance of the MDE in the successful completion of this project. Please contact us at (410) 850-0404 if you have questions or require additional information.

Sincerely,
Kleinfelder East, Inc.

Natalie M. Hendricks

Natalie Morales Hendricks, P.G.
Project Geologist

Mark C. Steele
Program Manager

Enclosures

cc: Ms. Susan Bull – MDE
Mr. Marshall Hare – Southside Oil, LLC (Project File)
Ms. Denise Breder – Town of Perryville (w/o enclosure)
Mr. Charles Smyser – Cecil County Health Department (w/o enclosure)

Supplemental Site Assessment Report and Site Conceptual Model

Southside Facility #20025
31 Heather Lane
Perryville, Cecil County, Maryland
Case No. 2006-0489-CE
Facility I.D. No. 1190

December 21, 2011

Prepared By:
Kleinfelder East, Inc.
1340 Charwood Road, Suite I
Hanover, MD 21076

Prepared For:
Southside Oil, LLC
1011 Boulder Springs Drive, Suite 100
Richmond, VA 23225

Supplemental Site Assessment Report and Site Conceptual Model

Southside Facility #20025
31 Heather Lane
Perryville, Cecil County, Maryland
Case No. 2006-0489-CE
Facility I.D. No. 1190

QUALITY ASSURANCE/QUALITY CONTROL

The following personnel have reviewed this report for accuracy, content and quality of presentation:

Natalie M. Hendricks

Natalie Morales Hendricks, P.G.
Project Geologist

12-21-2011
Date

Mark C. Steele
Program Manager

12/21/11
Date

TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1

1.1 Purpose 1

1.2 Report Organization 2

2.0 SITE BACKGROUND 3

2.1 Site Setting and Features 3

2.2 Underground Storage System Compliance Test Results 4

2.3 Potential Receptors 4

2.3.1 Surface Waters and Wetlands 4

2.3.2 Potable Well Search 5

2.3.3 Utilities 7

2.3.4. Other Potential Receptors 7

2.4 Previous Site Activities 7

2.5 Geology and Hydrogeology 10

3.0 SITE CHARACTERIZATION ACTIVITIES 12

3.1 Soil Investigation 12

3.1.1 Soil Boring Installation 12

3.1.2 Qualitative Soil Screening 13

3.1.3 Soil Sampling Results 14

3.2 Groundwater Investigation 14

3.2.1 Potable Well Sampling 15

3.2.2 Groundwater Monitoring Well Installation 15

3.2.2.1 August-September 2011 Monitoring Well Installation & Soil Boring Advancement 16

4.0 NATURE AND EXTENT OF CONSTITUENTS OF CONCERN 18

4.1 Liquid Phase Hydrocarbon 18

4.2 Adsorbed Phase Hydrocarbon 18

4.3 Dissolved Phase Hydrocarbons 19

4.4 Vapor Phase Hydrocarbons 20

5.0 SITE CONCEPTUAL MODEL SUMMARY 21

6.0 RISK BASED EVALUATION 23

6.1 Liquid Phase Hydrocarbon 23

6.2 Current and Future Site and Surrounding Site Usage 23

6.3 Migration of Contamination 23

6.4 Human Exposure 24

6.5 Environmental and Ecological Exposure 25

6.6. Impact to Utilities and Other Buried Services 25

6.7 Other Potential Receptors 25

7.0 WASTE MANAGEMENT 26

8.0 SUMMARY OF FINDINGS 27

9.0 LIMITATIONS 29

10.0 REFERENCES 30

LIST OF FIGURES AND TABLES

Figure 1 - Regional Area Map
Figure 2 - Local Area Map
Figure 3 - Site Plan
Figure 4 - Soil Boring Location Map
Figure 5 - Potable Well Sampling Location Map
Figure 6 - Cross Section Location Diagram
Figure 7 - Lithologic Cross Section A-A'
Figure 8 - Lithologic Cross Section B-B'
Figure 9 - Hydrocarbon Distribution/Groundwater Contour Map (September 10, 2011)

Table 1 - Potable Well Construction Summary (1,000 Feet)
Table 2 - Groundwater Monitoring and Analytical Data
Table 3 - Off-Site Potable Well and POET Analytical Data
Table 4 - Monitoring Well Construction Summary
Table 5 - Soil Analytical Data

LIST OF APPENDICES

Appendix A - MDE Correspondence
Appendix B - Tank and Line Compliance Testing Results
Appendix C - Potable Well Completion Reports
Appendix D - Boring and Monitoring Well Construction Logs
Appendix E - SHA Right-of-Way Permit and Private Access Agreement
Appendix F - Lancaster Laboratories Technical Report – Soil
Appendix G - Lancaster Laboratories Technical Report – Groundwater
Appendix H - Trend Graphs
Appendix I - Town of Perryville Water Service Map (2011)
Appendix J - Waste Manifest

1.0 INTRODUCTION

Southside Oil, LLC (Southside) retained Kleinfelder East, Inc. (Kleinfelder) to prepare a Supplemental Site Assessment Report (SSAR) and Site Conceptual Model (SCM) for the Southside Facility #20025 located at 31 Heather Lane, Perryville in Cecil County, Maryland (Site). The Site is an open leaking underground storage tank (LUST) site with the Maryland Department of the Environment – Oil Control Program (MDE - OCP) under Case Number 2006-0489-CE. The SSAR was requested by the MDE in a letter dated August 9, 2011 which provided the approval of Kleinfelder's *Work Plan for Supplemental Site Assessment Activities* dated May 13, 2011 (**Appendix A**). The Work Plan outlined the installation of on-site and off-site wells for horizontal and vertical delineation of dissolved phase hydrocarbons, soil and groundwater sampling and continued potable well sampling at two off-site properties.

1.1 Purpose

This report was prepared to document the results of the additional site characterization activities and to summarize and provide a SCM. To date, site characterization activities have been completed for the following objectives:

- Determine if interim remedial actions are necessary to abate an imminent hazard to human health or the environment.
- Determine or confirm the source of impact.
- Provide sufficient physical data through field investigations to determine the regulated substances involved and the extent of migration of those regulated substances into surface water, groundwater, soil, sediment, or vapor.
- Provide sufficient information to draw conclusions as to the need for no further action or to use as a basis for development of a corrective action plan.
- Provide an evaluation of the Site conditions versus the seven risk factors detailed in the MDE Maryland Environmental Assessment Technology for Leaking Underground Storage Tanks (MEAT) document.

1.2 Report Organization

The following Sections describe the contents of this report:

- Section 2.0 contains background information along with the Site setting, chronology and area receptors for the formulation of the SCM.
- Section 3.0 contains a summary of site characterization activities completed to date including soil and groundwater investigation activities.
- Section 4.0 discusses the nature and extent of constituents of concern (COCs).
- Section 5.0 summarizes the SCM.
- Section 6.0 provides a risk-based evaluation of the seven risk factors outlined in the MDE MEAT document.
- Section 7.0 discusses waste management.
- Section 8.0 discusses contains a summary of findings.
- Section 9.0 discusses limitations of the report.
- Section 10.0 contains references.

2.0 SITE BACKGROUND

Background information pertaining to existing Site feature and land use was compiled by Kleinfelder personnel.

2.1 Site Setting and Features

The Site is located on the north side of Heather Lane, southeast of Interstate 95 at Exit 93 in the Town of Perryville, Maryland (**Figures 1 and 2**). The approximate geographical coordinates for the Site are 39 degrees, 35 minutes, 18.7 seconds North (Latitude) by 36 degrees 03 minutes, 51.7 seconds West (Longitude) (**Figure 1**). The Site is comprised of one parcel (Map 29, Grid 16, Parcel 49) that covers a total area of about 2.143 acres and is owned by Pilot Oil Company. Southside leases the Site and shares a convenience store building with the adjacent Pilot Travel Center #290 located north of the Site. A Site plan showing the key site features at the Site is included as **Figure 3**.

The Site is an active Exxon-branded service station with a convenience store, a canopy, four underground storage tanks (USTs) and seven dispenser islands. The Site does not have a private well, and municipal water is supplied to the Site by the Town of Perryville. The UST system was installed in 1990 and is located near the southeast corner of the Site. The UST system is constructed of double walled fiberglass and consists of three 12,000-gallon gasoline USTs and one 6,000-gallon diesel UST with rigid double-walled fiberglass product piping. There are 10 monitoring wells located on the Site, and three tank field observation wells.

The Site is zoned commercial (C2) by the Town of Perryville/Cecil County. The surrounding properties are commercial along the Heather Lane corridor. Residential properties are located along Perryville and Blythdale Roads, which extend north-south near the property. **Figure 2** shows a Local Area Map depicting the half-mile area surrounding the Site.

The immediately adjoining properties are summarized as follows:

North: The Site is bordered to the north by the Pilot #290 Travel Center fuel station. The diesel dispensers and canopy for this facility directly about the Site.

South: The Site is bordered to the south by Heather Lane, beyond which are residential properties, the closest of which is 1825 Perryville Road. An outlet mall is also located southwest of the property

East: The Site is bordered to the east by Perrylawn Drive (Route 222), beyond which are an auto repair facility (Harbold Motor Company), a church, a barber shop, and residential properties along Blythedale Road (Route 824) and Reservoir Road.

West: The Property is bordered to the west by a parking lot for a Denny's Restaurant. Beyond the Denny's Restaurant, there is a Ramada Inn hotel, a fast food restaurant and a water tower. Please note that there are no water supply wells associated with the water tower.

2.2 Underground Storage System Compliance Test Results

Compliance testing of the UST system is conducted according to MDE requirements. Compliance tightness test results for the UST system for February 2010 and January 2011 through November 2011 time period indicate passing and normal results for the tanks, lines and shear valves. Copies of the compliance testing results are provided in **Appendix B**.

2.3 Potential Receptors

The following sections summarize the identification and description of potential receptors in the vicinity of the Site.

2.3.1 Surface Waters and Wetlands

The closest body of surface water to the Site is an unnamed tributary to the Susquehanna River located approximately 1,200 feet west of the Site. Another tributary to the Susquehanna River, Mill Creek, is located approximately 2,300 feet east of the Site. The Susquehanna River is located approximately 1.35 miles southwest of the Site (**Figure 1**).

No wetlands as identified in the National Wetland Inventory are located within one mile of the Site. However, three federal wetlands listed in the National Wetland Inventory are located northeastern bank of the Susquehanna River. These wetlands are designated as a 13.11-acre freshwater forested/shrub wetland (Classification Code PFO1S); a 9.10-acre freshwater emergent wetland (Classification Code REM1R) and a 3.47-acre freshwater forested/shrub wetland (Classification Code RFO1/SS1S) along the northeastern bank of the Susquehanna. The locations of the federal wetlands are depicted on **Figure 1**.

2.3.2 Potable Well Search

A well survey was conducted to verify groundwater use in the area and to identify potential groundwater receptors near the Site. Kleinfelder used public records and visual observations in performing the survey. The survey consisted of a database search for permitted wells in the area with the MDE Groundwater Permits Program, the requesting of hard copy well completion reports for all reports filed for the area around the site, a freedom of information act (FOIA) request with the Cecil County Health Department, and a visual survey of neighboring properties and land uses. Approximately 21 suspected or confirmed potable wells are located within 1,000 feet of the Site (**Figure 2**). No information was available for the majority of potable wells in the area, likely due to the ages of the properties and wells which pre-dates well permitting in Maryland. Although a search of available well and water records has been performed, the accuracy and completeness of these records are the responsibility of the regulatory agency. The possibility exists that unrecorded wells may be located near the Site. Potable well completion reports for area wells as provided by the Cecil County Health Department are provided in **Appendix C.** A tabulated summary of the well records is provided **Table 1**.

Five potable wells in the area of the Site have been sampled per approval with and at the direction of the MDE:

- 1803 Perryville Road
- 1825 Perryville Road
- 1836 Perryville Road
- 1812 Perryville Road, and
- 7 Patterson Avenue

Kleinfelder has confirmed with the Town of Perryville Town Planner (Mary Ann Skilling) that a municipal water line is located west of Perryville Road from St. Marks Church Road through wooded areas to the Perryville Outlet Mall and then extends northward from the Outlet Mall to the Commercial area surrounding the Site including the Site. Residential properties in the vicinity of the Site currently do not have municipal water supply.

2.3.3 Utilities

The on-site building is slab on grade construction. Below grade utilities at or adjacent to the Site include water, storm water, sanitary sewer, and electric lines. The approximate locations of identified utilities are depicted on **Figure 3**.

2.3.4. Other Potential Receptors

Other potential receptors include the Susquehanna Seventh Day Adventist Church and Susquehanna Seventh Day Adventist School which are located approximately 650 feet east of the Site.

2.4 Previous Site Activities

The Site has operated as an Exxon retail service station since 1990 when the current USTs were installed.

In April 2005, a groundwater use survey was completed by Groundwater & Environmental Services (GES), on behalf of Exxon Mobil Corporation (ExxonMobil), for a ½ mile radius surrounding the Site. The survey results indicated that the Exxon service station was supplied with municipal water and private potable wells were identified within a 1,000 feet of the Site. Based on the results of the groundwater use survey, the requirements of COMAR 26.10.02.03-4 for existing gasoline UST systems are applicable to the Site.

In 2005, ExxonMobil installed three monitoring wells (MW-1 through MW-3) in response to High Risk Groundwater Use Areas (HRGUA) regulations. The installation and sampling of these wells was documented in the *Subsurface Investigation Report* dated September 6, 2005. Based on the detection of dissolved phase concentrations of methyl tertiary butyl ether (MTBE) in monitoring well MW-2 above the MDE action level of 20 micrograms per liter (µg/L) (**Table 2**), the MDE-OCP assigned Case Number 2006-0489-CE to ExxonMobil in a letter dated December 7, 2005.

Semi-annual groundwater monitoring and reporting was initiated in compliance with the MDE directive and the first Semi-Annual Groundwater Monitoring Report (GMR) is dated April 28, 2006.

In March 2007, two additional wells (MW-4 and MW-5) were installed for additional site characterization and delineation purposes (**Figure 3**) as reported in the *Monitoring Well Installation* letter report dated June 26, 2007. Semi-annual groundwater sampling and gauging continued through 2009.

ExxonMobil completed a *Phase II Environmental Site Assessment (ESA) Report* dated October 2009. The Phase II ESA was completed by ExxonMobil in preparation for sale of the Site and the field investigation was conducted in August through September 2009 during which five soil borings (SB-1 through SB-5) were advanced for soil assessment. Four of the borings (SB-2 through SB-5) were completed as monitoring wells MW-6, MW-7, MW-8, and MW-9 for groundwater sampling purposes. Locations of the soil borings and wells are depicted on **Figure 4**.

An evaluation of the case for closure was submitted by ExxonMobil on October 30, 2009 in the *Second Half 2009 Groundwater Monitoring Report / Case Closure Request*. The report documented semi-annual groundwater monitoring activities and included a detailed evaluation of the seven risk factors identified in the MEAT guidance document.

On August 6, 2010, the MDE issued a *Site Status* letter documenting the Department's review of the October 2009 *Phase II ESA* and *Case Closure Request* documents. Based on field reconnaissance and interviews conducted by the Department, a private potable well was identified at 1825 Perryville Road immediately south and adjacent to Heather Lane approximately 600 feet south of the Site (**Figure 5**). The MDE denied ExxonMobil's request for case closure and required the continuation of semi-annual groundwater monitoring of the existing monitoring well network and collection of a water sample from the domestic well at 1825 Perryville Road.

On August 25, 2010, Southside assumed ownership and the remedial obligation from ExxonMobil for the Site.

In October 2010, access was obtained from the property owner of 1825 Perryville Road to collect the water sample requested by the MDE. The well was sampled on October 5, 2011 and a confirmation sample was collected on October 21, 2011. Both samples indicated the presence of MTBE at concentrations of 24 and 21 µg/L, respectively, which are above the MDE action level of 20 µg/L (**Table 3**). A point of entry treatment (POET) system consisting of two 50-pound granular activated carbon vessels was installed on the well on November 11, 2011.

Kleinfelder, on behalf of Southside, submitted a *Work Plan for Additional Potable Well Sampling and Well Survey Update* to the MDE on November 11, 2010. The proposed scope of work included the collection of samples from five additional off-site potable wells south of the Site and a well survey update. The Work Plan was approved by the MDE on March 29, 2011 and included a request for additional subsurface delineation for horizontal and vertical delineation of subsurface petroleum impact and an increase in the groundwater monitoring frequency to quarterly. Upon completion of the approved work plan, the MDE outlined requirements for a SCM.

Off-site access and sampling requests for off-site residences were obtained as outlined in the MDE's Work Plan approval letter, except for one property owner at 1811 Perryville Road. Two letters requesting access to sample the well at 1811 Perryville Road were issued to the property owners (James and Judith Clayton) by Kleinfelder on April 5th and September 1st 2011. Additionally, the MDE made a separate request for access in the *Request to Sample Your Drinking Water Well* letter dated August 26th 2011. The property owner at 1811 Perryville Road has refused the multiple access attempts to sample the potable well on the property.

Potable well samples were collected from the remaining proposed properties in April 2011 and reported to each property owner and copied to the MDE under separate cover. Samples were collected from the potable wells located at: 1825 Perryville Road; 1836 Perryville Road; 1803 Perryville Road; 1812 Perryville Road, and 7 Patterson Avenue (**Figure 5** and **Table 3**). The analytical results for the potable well sampling indicated MTBE was detected above the laboratory reporting limits at 1825 and 1836 Perryville Road. An MTBE concentration of 6.8 µg/L was reported for the sample collected at 1836 Perryville Road, which is below the MDE action level of 20 µg/L. The influent MTBE concentration of the POET at 1825 was reported at 24 µg/L and is consistent with previous sampling results. No COCs were detected in the remaining potable well samples.

On May 13, 2011, Kleinfelder, on behalf of Southside Oil, submitted a *Work Plan for Supplemental Site Assessment Activities* which included the installation of three monitoring wells, including one deeper vertical extent well and two off-site monitoring wells to the east and south of the Site. A reduction in the groundwater sampling program was also proposed in the Work Plan.

The MDE approved the Work Plan on August 9, 2011; however, the Department did not approve the reduction in the groundwater monitoring program and provided a directive to continue quarterly groundwater sampling and potable well sampling of two off-site properties (1825 and 1836 Perryville Road).

Off-site access was obtained for the installation of monitoring well MW-12 at 1825 Perryville Road. Access to install a monitoring well on the grass-covered median between Perrylawn Drive and the Site was denied by the State Highway Administration (SHA); however, a permit was granted to advance a direct push boring for the collection of a groundwater sample east of the tank field and Site.

2.5 Geology and Hydrogeology

The Site is located within the Western Shore Lowlands Region of the Coastal Plain Physiographic Province. The Maryland Geologic Survey, Geologic Map Geologic Map of Maryland (1968), was reviewed and the Site lies within the Potomac Group and is also mapped near the late PreCambrian Volcanic Complex of Cecil County and the Paleozoic Port Deposit Gneiss and the Volcanic Complex of Cecil County. The Potomac Group is composed mostly of sands, silts and clays that vary in color. The Raritan and Patapsco Formations of the Potomac Group are indicative of soils encountered during on-site drilling activities; however, granite is logged on well completion reports for nearby potable wells which may suggest the presence of the Port Deposit Gneiss at depths of approximately 35 to 45 feet below grade. The Raritan and Patapsco Formations consist of gray, brown, and red variegated silts and clays. The Volcanic Complex of Cecil County consists of metamorphosed andesitic and dacitic volcanic rocks (greenstone, greenschist, quartz amphibolite, and schistose felsite); amygdules and locally preserved volcano-clastic textures with an unknown thickness. The Port Deposit Gneiss is listed among the granitic series of Eastern Piedmont rocks and is described as a moderately to strongly deformed intrusive complex composed of gneissic biotite quartz diorite, hornblende-biotite quartz diorite, and biotite granodiorite with all rocks foliated and some strongly sheared.

Soils encountered during subsurface investigation activities at the Site consisted of red, brown and gray clays and silts with a discontinuous sand layer within the clays that appears partially confined at the southeastern portion of the Site. Clays of varying sand and silt content dominate the surficial lithology at the Site.

A complete description of the materials encountered during drilling activities is included on the soil boring logs in **Appendix D**. Generalized geologic cross-sections were constructed with the locations shown on **Figure 6**. Cross-sections A-A' and B-B' are included as **Figures 7** and **8**.

Perched water conditions exist in the tank field area with high water levels (between 0 to 3 feet below top of casing (TOC)) observed in the tank field wells. Static groundwater levels have been measured at the Site and range from 18.50 (MW-5) to 33.92 (MW-1) feet below TOC (**Table 2**). The apparent groundwater flow for the central and northern portion of the Site is predominantly north/northwest under a hydraulic gradient of approximately 0.043 foot per foot (ft/ft). The apparent groundwater flow on the southern portion of the Site is semi-radial consistent with topography and toward local drainage features (Mills Creek to the east/southeast, the unnamed creek to west/southwest and south toward the Susquehanna River) under a hydraulic gradient of 0.068 ft/ft to the south/southeast (between MW-6 and MW-12) as calculated from the September 10, 2011 groundwater gauging event. The September 10, 2011 Hydrocarbon Distribution / Groundwater Contour Map is provided as **Figure 9**.

3.0 SITE CHARACTERIZATION ACTIVITIES

3.1 Soil Investigation

Soil samples were collected from unconsolidated overburden soils during each phase of subsurface investigation since 2005 for field screening, laboratory analysis of VOCs and lithologic description. Samples were collected from the well borings of each monitoring well between July 2005 and September 2009. Five well borings (MW-1 through MW-5) were advanced during HRGUA monitoring well installation and subsequent subsurface investigation activities in September 2005 and 2007 respectively. As part of Phase II ESA activities in 2009, Kleinfelder oversaw the advancement of six soil borings (SB-1 though SB-6), four of which were converted to monitoring wells (MW-6 though MW-9). Most recently a seventh soil boring (MW-11) was installed off-site and east of the tank field. This boring was originally scoped as the location of proposed well MW-11; however, SHA denied access to construct a monitoring well and a direct push technology (DPT) boring was advanced instead. A groundwater sample was not collected at this location due to probe refusal before groundwater was reached.

3.1.1 Soil Boring Installation

Soil borings were advanced at each monitoring well location as documented in prior Subsurface Investigation, Monitoring Well Installation and Phase II Reports. Field methodology and sampling procedures are documented in the aforementioned reports. Three additional soil borings were also advanced during Phase II ESA activities in 2009.

In July – August 2005, three boring were advanced at monitoring wells locations MW-1 though MW-3. Each boring location was initially cleared to a minimum of six feet below grade using air knife/vacuum excavation technology. Each well boring was advanced via air rotary drilling method and was advanced to depths of between 30 and 40 feet below grade. Each boring was sampled and soil samples were screened using a photo-ionization detector (PID) for standard headspace analysis for VOCs. Soil samples were collected from monitoring wells MW-1 and MW-2 for laboratory analysis for benzene, toluene, ethylbenzene, and xylenes (BTEX) and MTBE using Environmental Protection Agency (EPA) Method 8260B and total petroleum hydrocarbons – gasoline range organics (TPH-GRO) and total petroleum hydrocarbons – diesel range organics (TPH-DRO) using EPA Method 8015.

In March 2007, well borings for monitoring wells MW-4 and MW-5 were advanced to total depths between 30 and 35 feet below grade using a combination air rotary and hollow stem auger rig. Each boring was sampled and soil samples were screened using a PID for standard headspace analysis for VOCs. Unsaturated soil samples were collected from monitoring wells MW-4 and MW-5 for laboratory analysis for full list VOCs and oxygenates using EPA Method 8260B and TPH-GRO and TPH-DRO using EPA Method 8015.

In August – September 2009, six soil borings (SB-1 through SB-6) were advanced across the Site during Phase II ESA field activities. Each boring location was advanced using a hollow stem auger drill rig and continuous split spoon soil samples were logged and field screened for VOCs using a PID. Monitoring wells MW-6, MW-7, MW-8 and MW-9 were installed through boring locations SB-2, SB-4, SB-5 and SB-6, respectively. The well depths ranged from 36 to 42.5 feet below grade. Soil borings SB-1 and SB-3 were each completed to 28 feet below grade. Soil samples were collected from soil borings for laboratory analysis of VOCs and MTBE using EPA Method 8260B and TPH-GRO and TPH-DRO using EPA Method 8015.

The locations of soil borings and monitoring wells are depicted on **Figures 3** and **4** and the boring logs and construction diagrams are included as **Appendix D**. Soil analytical data are summarized on **Table 5**.

3.1.2 Qualitative Soil Screening

Soil samples from the borings described above were screened for VOCs utilizing a PID with a 10.6 eV lamp calibrated with an isobutylene span gas to yield total VOCs in parts per million (ppm) referenced to benzene. VOCs as determined by a PID were detected in several borings throughout site assessment activities. The highest reading of 62 ppm was detected in well MW-2 at an approximate depth of 25 feet below grade. The PID screening values are qualitative only and are not necessarily indicative of actual concentrations in soil, as determined by laboratory analyses. Screening results are included on the soil boring/well logs completed for these borings and are included in **Appendix D**.

3.1.3 Soil Sampling Results

Soil samples were collected throughout site characterization activities, including soil boring and well installation activities, for both field screening and laboratory analysis for VOCs, TPH-DRO and TPH-GRO. Soil sampling and boring locations are indicated on **Figure 4**. Laboratory analytical data for soil samples are summarized on **Table 5**.

The soil analytical data and exceedances in soil boring samples are noted for MTBE only against the MDE Protection of Groundwater soil standards in three samples:

- SB-1 at 10-12 feet below grade;
- SB-1 at 24-26 feet below grade; and
- SB-3 at 12-14 feet below grade.

The boring log for SB-1 indicates possible surface water intrusion at 10 to 12 feet below grade suggesting the sample collected at 10 to 12 feet below grade may not represent actual vadose zone soil conditions. The samples collected from soil boring SB-1 at 24-26 feet below grade and soil boring SB-3 at 12-14 feet below grade were collected from depths within wet or saturated soil conditions and may not reflect vadose zone soil conditions at those locations near the tank field.

3.2 Groundwater Investigation

Monitoring wells MW-1 through MW-9 were installed during multiple subsurface investigation events to characterize groundwater conditions at the Site. In 2011, two additional monitoring wells (MW-10D and MW-12) were installed for horizontal and vertical delineation of dissolved phase hydrocarbons detected near the tank field and off-site and downgradient of the tank field. A table summarizing the monitoring well construction details is included as **Table 4**.

As documented in previous sections, a well survey of the area was conducted to identify and map area potable wells. Furthermore, six private potable wells in the immediate downgradient area were identified and five were sampled for evaluation of off-site impact to area potable wells. The property owner of 1811 Perryville Road has twice denied access to sample the potable well located on the property.

3.2.1 *Potable Well Sampling*

Sampling of five nearby potable wells was completed for the purpose of off-site delineation of MTBE in potable wells. Access to each well sampled was obtained prior to sampling. Water samples were collected at each property for analysis of full list VOCs plus fuel oxygenates using EPA Method 524.2. Analytical data for the off-site potable wells (and POET system at 1825 Perryville Road) are summarized in **Table 3**. Available potable well construction details are summarized on **Table 1**. The approximate well locations are depicted on **Figure 5**.

Of the potable wells sampled, one potable well (1825 Perryville Road) has had MTBE detected at concentrations above the MDE action level. A POET system was installed at the residence on November 11, 2010 and has been maintained and monitored on a quarterly basis since installation.

3.2.2 *Groundwater Monitoring Well Installation*

A total of 10 on-site monitoring wells (MW-1 through MW-9 and MW-10D) and one off-site monitoring well (MW-12) have been installed since an HRGUA site investigation was initiated in 2005. The well locations are depicted on **Figure 4**. Details of the installation of monitoring wells MW-1 through MW-9 are outlined in previously submitted deliverables including the *Subsurface Investigation Report* dated September 6, 2005 and the *Phase II ESA Report* dated October 2009.

On-site monitoring wells MW-1 through MW-9 were installed to depths intercepting the groundwater interface at depths ranging between 30 and 40 feet below grade, and are screened across unconsolidated overburden material. One deep well, MW-10D, was recently installed to a total depth of 43 feet below grade (at auger refusal) for vertical delineation purposes and has a limited screen interval of 38 to 43 feet below grade and is described in further detail in the following section. Construction and boring logs for each well are provided in **Appendix D**. Construction details for each of the monitoring wells are summarized in **Table 4**.

3.2.2.1 August-September 2011 Monitoring Well Installation & Soil Boring Advancement

Between August 29 and September 6, 2011, well borings (MW-10D, MW-11 and MW-12) were advanced at locations selected for vertical delineation in the tank field area and for horizontal delineation of dissolved phase hydrocarbons east and south of the tank field. Individual well construction diagrams are included in **Appendix D** and well locations are shown on **Figure 4**. Drilling services were provided by Odyssey Environmental Services, Inc. of Harrisburg, Pennsylvania under the direct supervision of Kleinfelder personnel. The monitoring wells (MW-10D and MW-12) were installed using a truck-mounted CME-75 hollow stem auger drill rig equipped with a roller bit.

One off-site soil boring (MW-11) was advanced east of the tank field in the grassy area between the Site and Perrylawn Drive, which is partly maintained by the SHA. This location was originally proposed as a monitoring well per the MDE-approved Work Plan dated May 2011; however, the SHA refused access to install a permanent well and instead permitted the advancement of a boring location for a one-time groundwater sampling opportunity. A copy of the SHA right-of-way obstruction permit is provided in **Appendix E**. This boring was advanced via DPT method on August 31, 2011 and probe refusal was encountered at a depth of 23 feet below grade. The borehole was kept open with a temporary PVC screen for approximately three hours but groundwater did not penetrate the boring. The screen was removed and the boring abandoned.

Monitoring well MW-10D was installed on-site near MW-6 as a vertical extent well to a total depth of 43 feet below grade where hollow stem auger refusal was encountered. The well was constructed with 5 feet of 2-inch diameter, 0.020-inch machine-slotted, schedule 40 polyvinyl chloride (PVC) well screen with an internally-threaded PVC riser. The annular space of the screened interval was filled with #2 moire sand to two feet above the screen interval, sealed with a 3-foot bentonite seal, and Portland cement grout to within one foot of the surface. A locking well cap and watertight manhole cover was installed to protect the wellhead.

Off-site monitoring well MW-12 was installed on private property at 1825 Perryville Road between the potable well and the Site and is located in an unpaved area located adjacent to the driveway to the residence. An access agreement with the property owner (Feazell Management II, LLC) was obtained for the installation of the well prior to drilling. A copy of the access agreement is included in **Appendix E**.

Monitoring well MW-12 was installed to total depth of 38 feet below grade and constructed with 20 feet of 2-inch diameter, 0.020-inch machine-slotted, schedule 40 polyvinyl chloride (PVC) well screen with an internally-threaded PVC riser. The annular space of the screened interval was filled with #2 moire sand to two feet above the screen interval, sealed with a 2-foot bentonite seal, and Portland cement grout to within one foot of the surface. A locking well cap and watertight manhole cover was installed to protect the wellhead.

During advancement of each boring, one soil sample from the unsaturated zone representing the highest PID response for soil samples was submitted for laboratory analysis of VOCs and TPH-DRO and TPH-GRO at the following three locations:

- MW-11 at 22-23 feet below grade
- MW-10D at 16-17 feet below grade
- MW-12 at 19-21 feet below grade

Soil analytical results are included on **Table 5** and the Lancaster Laboratories Analytical Reports for the soil sampling are included in **Appendix F**.

The wells were developed using a submersible pump. The pump was surged inside each well to remove sediments from the sand filter and to remove the sediment lining on the borehole that is inherent in most drilling methods. After each well was surged, the submersible pump was lowered into each well and pumped until at least five well volumes were removed or the well was allowed to be pumped dry and recharged at least three times. Water produced during well development was treated through portable activated carbon filters and discharged to the ground surface.

The vertical elevations of the top of casing (TOC) for each well were measured with standard surveying equipment. Elevations were measured in relation to the TOC elevations for the existing monitoring well network.

4.0 NATURE AND EXTENT OF CONSTITUENTS OF CONCERN

Soil and groundwater COCs have been analyzed in accordance with applicable MDE guidance in effect at the time of site characterization activities. Soil and groundwater concentrations are compared to MDE MEAT Guidance values in the following sub-sections.

4.1 Liquid Phase Hydrocarbon

Liquid phase hydrocarbon has not been detected during the subsurface investigation and monitoring activities. The monitoring well and tank field gauging data are presented in **Table 2**.

4.2 Adsorbed Phase Hydrocarbon

A review of **Table 5** indicates that VOCs, TPH-GRO and TPH-DRO were not detected above the MDE's Non-Residential Cleanup Standards and the Protection of Groundwater Standards, except MTBE in three soil samples collected from soil borings SB-1 and SB-3 which were advanced in 2009 in the vicinity of the tank field. The soil analytical data and exceedances in soil boring samples are noted for MTBE only against the MDE Protection of Groundwater soil standards in three samples:

- SB-1 at 10-12 feet below grade;
- SB-1 at 24-26 feet below grade; and
- SB-3 at 12-14 feet below grade.

The sample at SB-1 at 10-12 feet below grade was collected from a depth interval within the capillary fringe of the groundwater interface and may not represent vadose zone conditions. The samples collected at SB-1 at 24-26 feet below grade and SB-3 at 12-14 feet below grade were collected from depths within wet or saturated soil conditions and do not reflect vadose zone soil conditions at those locations near the tank field. Samples of perched water from the tank field wells have exhibited MTBE concentrations as high as 28,900 µg/L and through infiltration it is likely that the MTBE has leached downward to the groundwater interface in the tank field area. Volatile organic compound concentrations in soil are considered delineated to the north, south, west and east by borings advanced during monitoring well installation and Phase II ESA activities.

4.3 Dissolved Phase Hydrocarbons

Groundwater analytical and gauging data collected from tank field wells and monitoring wells are summarized in **Table 2**. Groundwater samples from monitoring wells MW-1 though MW-10D and MW-12 were collected for the Third Quarter 2011 on September 10, 2011. A tractor trailer truck was parked over MW-9 at that time and a sample was subsequently collected from MW-9 on September 29, 2011. The groundwater samples were analyzed for full list VOCs including fuel oxygenates using EPA Method 8260B and TPH-DRO and TPH-GRO using EPA Method 8015. A review of **Table 2** indicates that MTBE has been detected in groundwater samples collected from monitoring wells MW-2, MW-4, MW- 5, MW-6, MW-10D, and the perched water in the tank field wells TF-1, TF-2 and TF-3 at concentrations above the MDE action level of 20 µg/L. The September 2011 groundwater sampling results indicate that MTBE was not detected in the perched water of the tank field and the maximum detection of MTBE was in monitoring well MW-4 at a concentration of 310 µg/L. Copies of the September 2011 groundwater sampling laboratory analytical reports are provided in **Appendix G**.

Methyl tert-butyl ether concentrations exhibit stable to decreasing trends in monitoring wells MW-2, MW-4, MW- 5, and MW-6. Fuel oxygenates including MTBE have not been detected in the perched water of the tank field since the January 26, 2010 sampling event. Trend graphs depicting MTBE and TBA concentrations over time for certain wells are included in **Appendix H**. No other VOCs have been detected above the respective generic numeric groundwater cleanup standards, with the exception of benzene concentrations above the standard of 5 µg/L in monitoring well MW-2 (February 2007), MW-3 (February and October 2007), MW-4 (June 2007 through September 2011) and the tank field wells.

Five off-site potable wells have been sampled during ongoing site assessment and monitoring events (**Table 3**). Of the potable wells sampled, one off-site potable well (1825 Perryville Road) indicated the presence of MTBE at a concentration above the MDE's action level of 20 µg/L. This well is approximately 250 feet south and downgradient from the Site. A POET system was installed at the residence in November 2010. A second potable well located at 1836 Perryville Road was sampled and MTBE was detected below the MDE action level. This well is located approximately 400 feet southeast of the Site. Analytical results for the remaining three potable wells that were sampled (1803 and 1812 Perryville Road, and 7 Patterson Avenue) indicate VOCs are below laboratory detection limits.

Based on both the monitoring well and potable well network sampling data, MTBE is the only dissolved phase COC which is present above the generic numeric groundwater cleanup standards, with the exception of benzene in wells in close proximity to the tank field. MTBE was detected in monitoring well MW-10D at a concentration of 26 µg/L for the September 2011 sampling event and additional sampling of this well is warranted to establish a trend in concentrations. The dissolved phase MTBE concentrations are considered delineated to the west, north, and south and exhibit stable to decreasing trends.

4.4 Vapor Phase Hydrocarbons

Vapor phase hydrocarbon concentrations have not been directly investigated because the likelihood for vapor phase impact to be present at concentrations of concern to potential exposure pathways is limited due to: 1) the absence of LPH; 2) limited VOC concentrations in soil and groundwater; and 3) the VOC concentrations in the monitoring wells around the existing building are below laboratory detection limits. As such, further evaluation of vapor phase hydrocarbons is not considered warranted.

5.0 SITE CONCEPTUAL MODEL SUMMARY

Site assessment for Southside Facility #20025 including soil, groundwater and off-site potable well sampling has been completed. Three tank field wells are regularly gauged and sampled and 11 monitoring wells have been installed and sampled throughout subsurface investigation activities. Five off-site potable wells have been sampled to assess the presence of dissolved phase hydrocarbons in the locally used aquifer.

Methyl tertiary butyl ether has been identified in the dissolved phase at the Site, and in two off-site potable wells located to the south and southeast of the Site. Subsurface investigation activities began at the Site in 2005 in response to the HRGUA regulations. Methyl tertiary butyl ether was detected in one monitoring well above the MDE action level and the MDE opened Case No. 2006-0489-CE. Subsequent sampling of the perched water in the tank field in 2006 identified BTEX and MTBE concentrations as high as 5,034 and 28,900 µg/L, respectively (**Table 2**). No specific release mechanism or event has been identified for the presence of VOCs and fuel oxygenates in the tank field. Dissolved phase MTBE concentrations have been detected above the MDE action level consistently in the overburden groundwater identified at depths ranging from approximately 19 to 24 feet below grade in the vicinity of the UST system in the southeast portion of the Site. The MTBE detected in the overburden groundwater is likely the result of vertical migration of MTBE from the perched water in the tank field by infiltration. Additionally, the only soil samples which exhibited MTBE concentrations above the Protection of Groundwater Standards were collected within the capillary fringe immediately to the northeast and southwest of the tank field (SB-1 and SB-3), further indicating that the tank field is the source of the MTBE impacts.

A review of the groundwater analytical data since August 2005 indicates MTBE has been historically detected at concentrations ranging from below laboratory detection limits in the monitoring wells to a maximum of 28,900 µg/L in tank field well TF-1 (August 2006). The concentrations of VOCs and fuel oxygenates began decreasing significantly in the perched water of the tank field since June 2007. For the past year, VOCs and fuel oxygenates have been below the laboratory detection limits in the perched water of the tank field with the exception of one detection of benzene at 6 µg/L. Methyl tertiary butyl ether has been detected above the MDE action level of 20 µg/L in up to five monitoring wells which are located in the vicinity of the UST field.

Currently, the maximum MTBE concentration in the monitoring wells is 310 µg/L in monitoring well MW-4 and the MTBE concentrations in this well have steadily decreased from a high of 3,500 µg/L in October 2007. Stable to decreasing trends in fuel oxygenates have been observed in the monitoring wells.

Properties to the east, south, and southeast of the Site obtain water from potable wells. These properties with the exception of 1825 Perryville Road are located within the limits of the Town of Perryville. The construction of the majority of the potable wells is unknown as the wells pre-date permitting in Maryland. Well completion reports for known wells indicate that the wells are open boreholes in bedrock and range in depth from 84 to 300 feet below grade. Surface casings for these wells range from 25 to 61 feet below grade which suggests that the surface casings for some of the potable wells may not be seated within bedrock. Of the five off-site potable wells sampled, analytical results indicate MTBE impact above the MDE action level in one potable well located at 1825 Perryville Road. A POET system has been maintained at the property since November 2010. A second well located at 1836 Perryville Road has been identified with MTBE impacts above laboratory detection limits but below the MDE action level and this well is sampled on a quarterly basis. The most recent MTBE concentrations within these potable wells are 24 and 6.1 µg/L, respectively.

Municipal water supply is available in the vicinity of the Site and is provided by the Town of Perryville Public Works Department. The source of the municipal water is the Susquehanna River. Municipal water is supplied to the Site and adjacent commercial properties to the west and southwest (outlet mall). Municipal water service can be extended to properties within the limits of the Town of Perryville. Existing water main lines and planned water service areas are illustrated in **Appendix I**.

6.0 RISK BASED EVALUATION

An evaluation of the Site conditions in relation to the seven risk factors defined in the MDE MEAT document is presented in the sections below.

6.1 Liquid Phase Hydrocarbon

As previously presented, LPH has not been detected in the monitoring wells at the Site. Groundwater gauging and sampling of monitoring wells was initiated in 2005.

6.2 Current and Future Site and Surrounding Site Usage

The Site is an active retail service station with a convenience store. Land use in the vicinity of the Site consists of a mix of commercial and residential properties. The Site is bordered to the north by a Pilot Travel Center. To the south of the Site is Heather Lane, across which is a wooded area and a rental residence (1825 Perryville Road). 1825 Perryville Road is commercially zoned and is located within the limits of the Town of Perryville. To the east of the Site is Perrylawn Drive and an auto repair facility. The Site is bordered to the west by a parking lot and a Denny's Restaurant. The Site is zoned commercial and to our understanding there is no current plan to change the property usage. The Site is a service station and convenience store and expected to remain a service station in the foreseeable future.

6.3 Migration of Contamination

A review of the groundwater monitoring well and potable well sampling data indicate that that concentrations of dissolved phase hydrocarbon consistently have not been detected above laboratory reporting limits for the majority of the sampled wells. Methyl tertiary butyl ether is the primary COC and MTBE has been detected above the MDE action level in up to five monitoring wells, which are located in the vicinity of the UST field, and the concentrations are considered stable. The highest MTBE concentrations have been detected in the perched water of the tank field and these concentrations have significantly decreased over time (**Table 2** and **Appendix H**). For the past year, VOCs and fuel oxygenates including MTBE have been below the laboratory detection limits in the perched water of the tank field with the exception of one detection of benzene at 6 µg/L. As such there is no evidence of an ongoing release within the tank field.

Dissolved phase MTBE has been detected above the MDE action level in one off-site potable well and the concentrations range between 21 and 24 µg/L. Additionally, off-site potable wells further downgradient from the Site do not exhibit VOC or fuel oxygenate concentrations above action levels or laboratory reporting limits. Therefore, off-site dissolved phase impacts are considered delineated to the south, with the exception of the potable well at 1811 Perryville Road for which access to sample has been denied by the property owner.

6.4 Human Exposure

Potential exposure pathways consist of ingestion, inhalation, or adsorption associated with different environmental media, such as air, soil, surface water and groundwater. The Site is paved with asphalt and concrete pavement with landscaped areas surrounding the perimeter. The station building is a one-story structure constructed on a concrete slab and is located upgradient of the apparent source area. The soil impact identified at the Site is limited to the tank field area at depths of 10 feet or greater, below MDE non-residential standards, and the Site is paved which limits exposure. Based on these conditions, the on-site vapor intrusion and dermal exposure pathways are considered incomplete.

The Site is supplied with municipal water from the Town of Perryville, which obtains its water supply from the Susquehanna River. Therefore, the risk for the on-site ingestion of groundwater pathway is incomplete.

Dissolved phase MTBE has been detected in the potable well of 1825 Perryville Road. The MTBE concentration in the raw (POET influent) samples are above the MDE action level and the well is equipped with a POET which is maintained and monitored on a quarterly basis, thereby mitigating the ingestion of impacted groundwater exposure pathway at 1825 Perryville Road.

The MTBE concentration in the water samples collected at 1836 Perryville Road have remained below MDE action level since monitoring of the well was initiated in April 2011. Because the concentrations are below the MDE action level of 20 µg/L and the MDE trigger level of 10 µg/L, the risk of ingestion of groundwater is considered to be within MDE guidelines for acceptable drinking water.

6.5 Environmental and Ecological Exposure

The closest body of surface water to the Site is an unnamed tributary to the Susquehanna River located approximately 1,200 feet west of the Site. Another tributary to the Susquehanna River, Mill Creek, is located approximately 2,300 feet east of the Site. The Susquehanna River is located approximately 1.35 miles southwest of the Site (**Figure 1**). No wetlands as identified in the National Wetland Inventory are located within one mile of the Site.

6.6. Impact to Utilities and Other Buried Services

The on-site subsurface utilities include water, sanitary sewer, electric, and telephone. The approximate locations of the utilities are depicted on **Figure 3**. The sanitary sewer lines are located approximately 10 feet below grade. The utility lines are not considered a potential receptor as they do not intersect the groundwater interface which was encountered at depths greater than 20 feet below grade.

6.7 Other Potential Receptors

Other potential receptors include the Susquehanna Seventh Day Adventist Church and Susquehanna Seventh Day Adventist School located approximately 650 feet east of the Site.

7.0 WASTE MANAGEMENT

Waste management of soil cuttings generated in previous subsurface investigations is documented in prior deliverables. Most recently, six 55-gallon steel Department of Transportation (DOT) drums of drill cuttings were generated during the installation of monitoring wells MW-10D and MW-12 and were transported for disposal at the RECO Biotechnology facility in Richmond, Virginia. The non-hazardous waste manifest is included in **Appendix J**.

Water produced during well development as well as purge water resulting from the September 2011 groundwater sampling event was treated on-site with portable granular activated carbon filters and discharged to a landscaped area on-Site.

8.0 SUMMARY OF FINDINGS

Kleinfelder, on behalf of Southside, has completed site characterization and groundwater monitoring activities at the Southside Facility at 31 Heather Lane in Perryville, Maryland. The information collected during the course of this investigation is summarized below:

- The Site has been an active service station since 1990 and consists of a convenience store, a canopy, three 12,000-gallon gasoline USTs, one 6,000-gallon diesel UST, and six dispenser islands with associated piping. The UST system at the Site is constructed of double-walled fiberglass. The operation of the service station was transferred from ExxonMobil to Southside in late August 2010.

- Due to the proximity of potable wells to the Site, three monitoring wells were installed in 2005 to satisfy the requirements of High Risk Groundwater Use Areas. Methyl tertiary butyl ether was detected in one monitoring well above the MDE action level and the MDE assigned Case No. 2006-0489-CE to the Site.

- A total of 14 soil borings have been advanced as part of the site characterization activities. Nineteen soil samples have been collected for laboratory analysis and MTBE has been detected in three soil samples at concentrations above the MDE Protection of Groundwater soil standard. These soil samples were collected from intervals which were either influenced by surface water infiltration or below the groundwater interface and do not represent vadose zone conditions.

- Eleven monitoring wells have been installed and sampled for VOCs and fuel oxygenates. Two apparent groundwater flow directions are present across the Site with most wells exhibiting a northerly groundwater flow direction, except monitoring wells located near the tank field which exhibit a semi-radial groundwater flow direction. The semi-radial flow direction appears topographically influenced toward local drainage features to the southeast, south and southwest. The apparent groundwater flows towards the northeast under a gradient of 0.023 ft/ft and toward the southeast under a gradient of 0.070 ft/ft.

- Groundwater analytical data indicates MTBE concentrations above MDE action level have been detected in the vicinity of the UST field in the southeast portion of the Site with off-site migration as evidenced by the detection of MTBE in off-site well MW-12 at a concentration of 6 µg/L.

- Sampling of five area private potable wells to the south and southeast of the Site indicates two potable wells with the detection of MTBE above the laboratory reporting limits. Methyl tertiary butyl ether was detected above the MDE action level in the potable well located at 1825 Perryville Road and a POET system was installed on this well. Both wells are sampled on a quarterly basis.

9.0 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.

This report may be used only by the Client and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than two years from the date of the report.

Kleinfelder offers various levels of investigative and engineering services to suit the varying needs of different clients. It should be recognized that definition and evaluation of geologic and environmental condition are a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions present. Although risk can never be eliminated, more-detailed and extensive investigations yield more information, which may help understand and manage the level of risk. Since detailed investigation and analysis involves greater expense, our clients participate in determining levels of service that provide adequate information for their purposes at acceptable levels of risk. More extensive studies, including subsurface investigations or field tests, may be performed to reduce uncertainties. Acceptance of this report will indicate that Client has reviewed the document and determined that it does not need or want a greater level of service than provided.

10.0 REFERENCES

1968 Geologic Map of Maryland, Maryland Geologic Survey compiled by Emery T. Cleaves, Jonathon Edwards, Jr., John D. Glaser; prepared under the supervision of Kenneth N. Weaver.

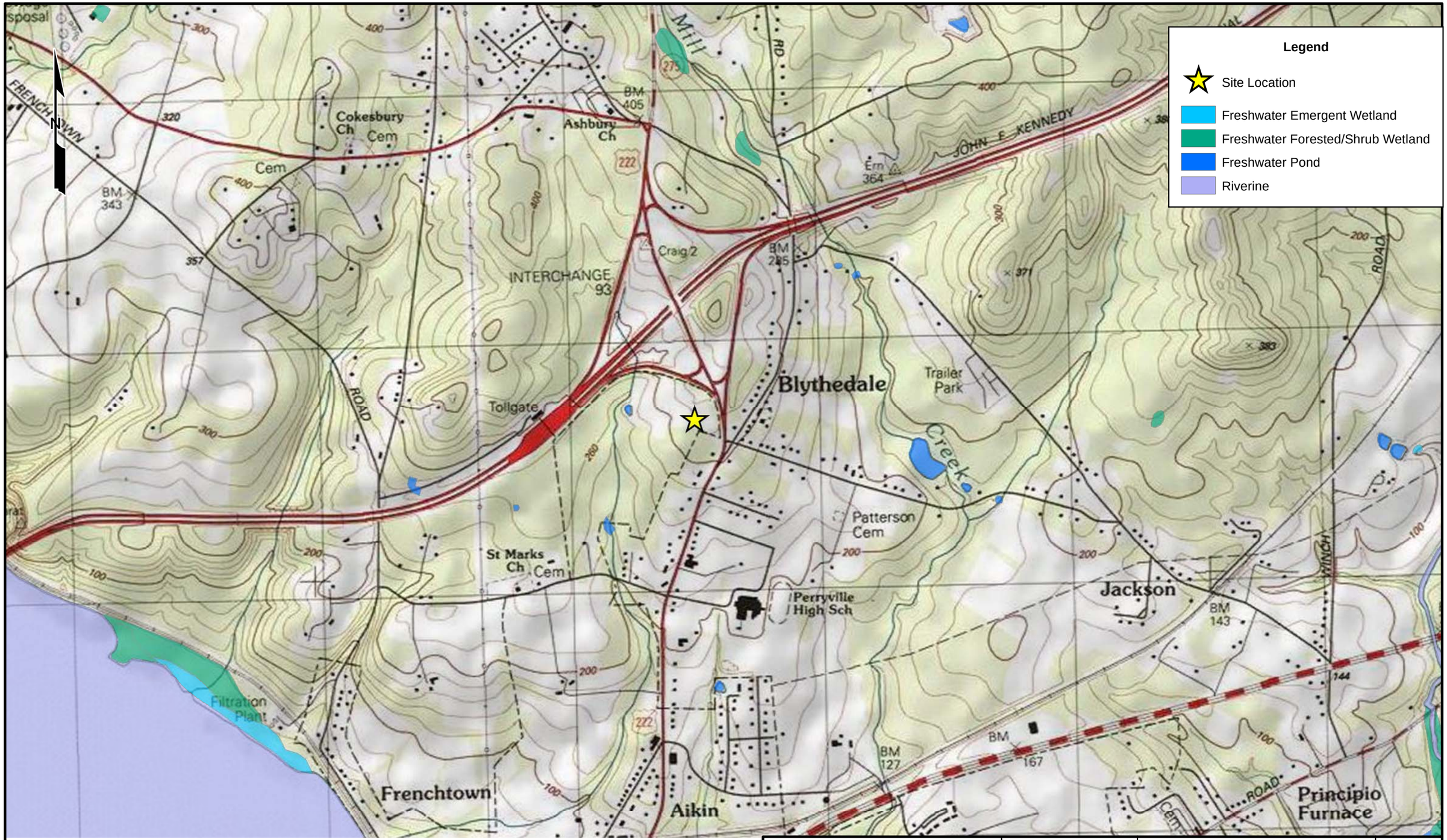
GSC/Kleinfelder East Inc, *Subsurface Investigation Results,* September 6, 2005.

Kleinfelder East, Inc., *Monitoring Well Installation* letter report, June 26, 2007.

Kleinfelder East, Inc., *Phase II Environmental Site Assessment Report*, October 2009.

Kleinfelder East, Inc., *Groundwater Monitoring Reports*, 2006-2011.

FIGURES



0 500 1,000 2,000 Feet

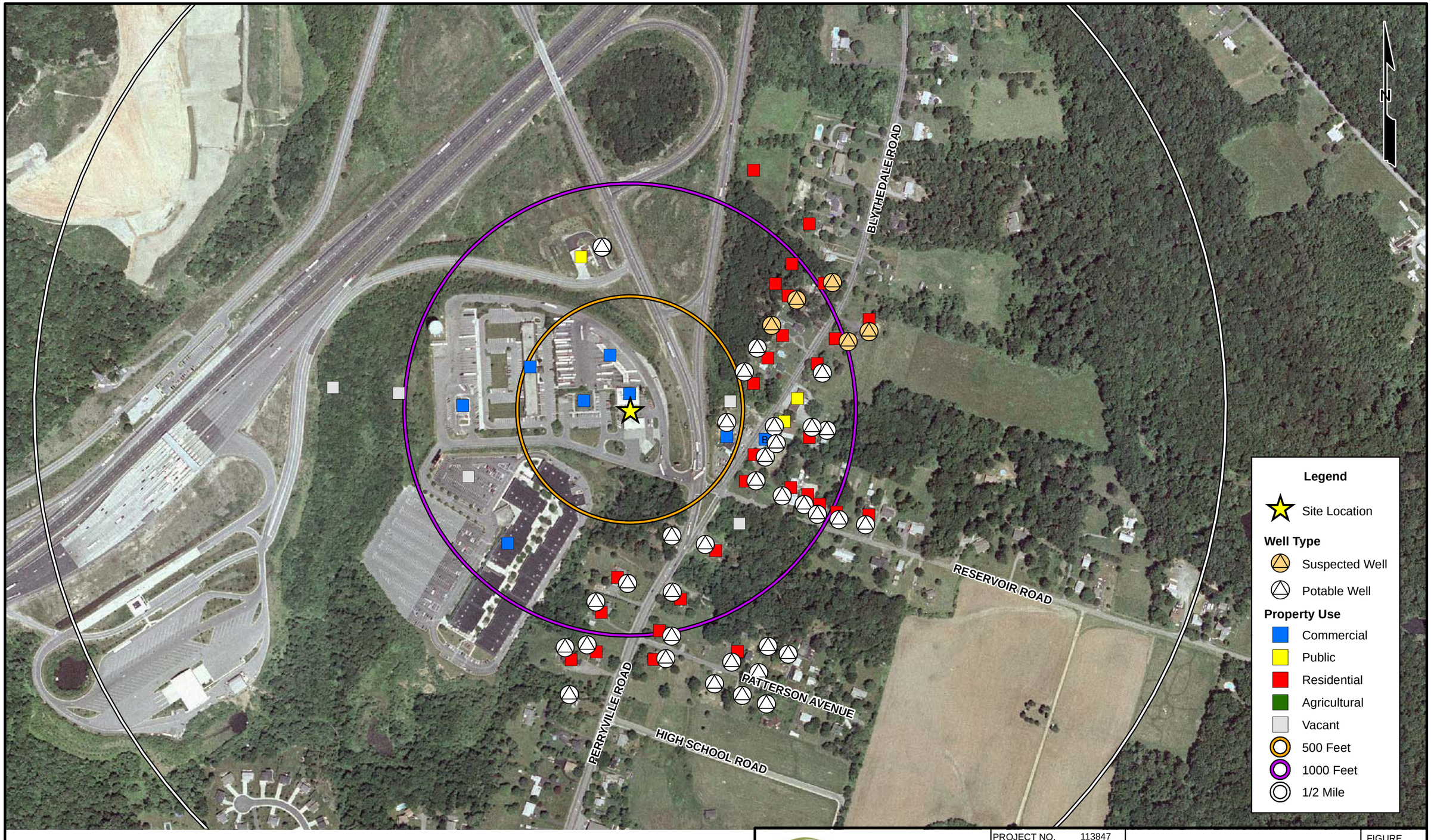
KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	113847
DRAWN:	11/09/11
DRAWN BY:	JR
CHECKED BY:	NH
FILE NAME:	20025 RAM 102511.mxd

REGIONAL AREA MAP

SOUTHSIDE FACILITY #20025
31 HEATHER LANE
PERRYVILLE, MARYLAND
CECIL COUNTY

FIGURE
1



400 200 0 400 Feet

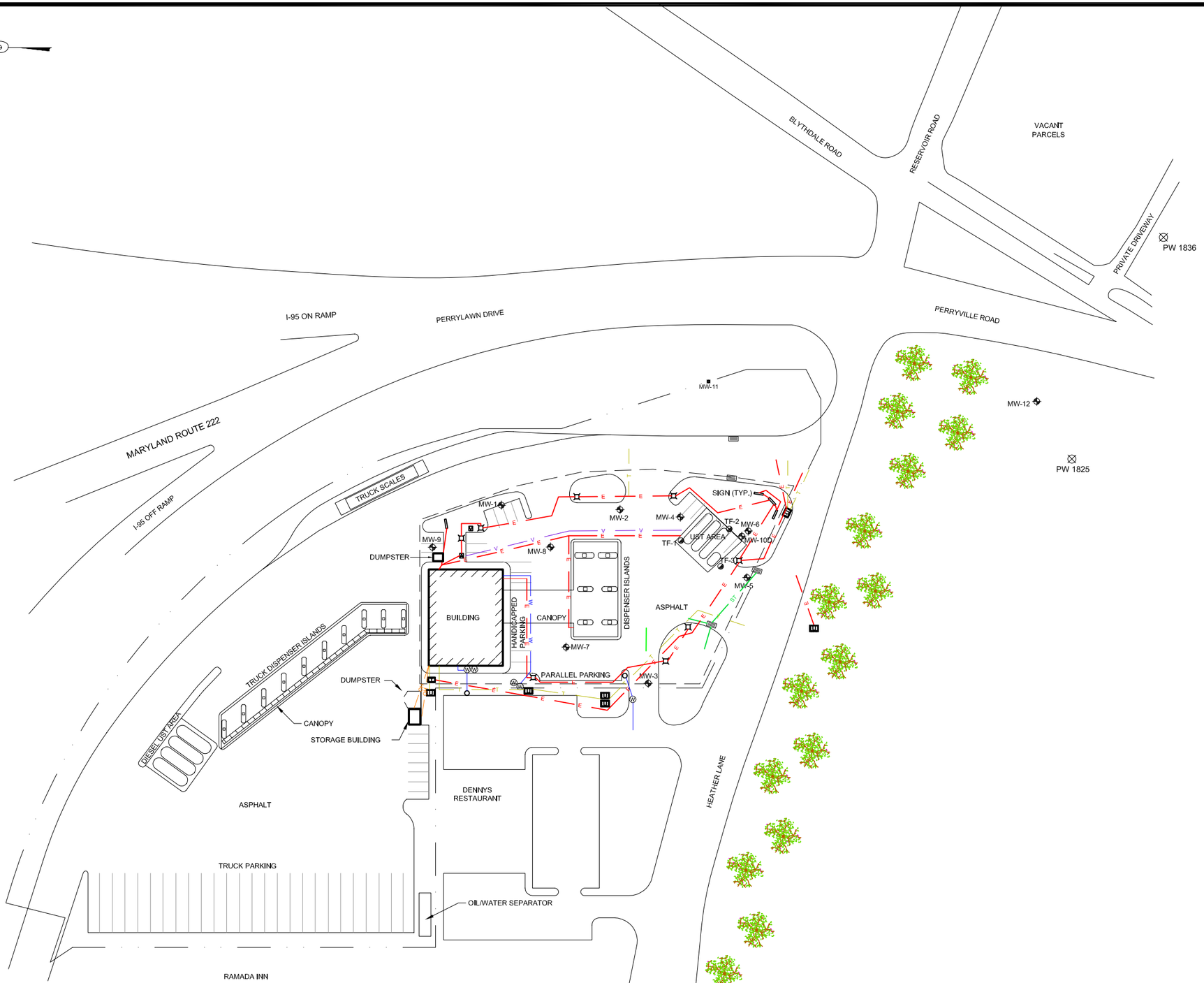
KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	113847
DRAWN:	12/8/11
DRAWN BY:	JR
CHECKED BY:	NMH
FILE NAME:	20025 FIG2 LAM .mxd

LOCAL AREA MAP

SOUTHSIDE FACILITY # 20025
31 HEATHER LANE
PERRYVILLE, MARYLAND
CECIL COUNTY

FIGURE
2



LEGEND

- SOUTHSIDE AREA
- PROPERTY BOUNDARY
- MONITORING WELL
- TANK PAD WELL
- SOIL BORING
- POTABLE WELL
- HYDRANT
- VACUUM
- AIR TOWER
- UTILITY LIGHT
- WATER MANHOLE
- TRANSFORMER
- STORM SEWER INLET
- OH — OVERHEAD ELECTRIC/TELEPHONE LINE
- E — UNDERGROUND ELECTRIC LINE
- W — WATER LINE
- SS — SANITARY SEWER LINE
- ST — STORM SEWER LINE
- T — TELEPHONE LINE
- V — VEEDER ROOT
- UST — UNDERGROUND STORAGE TANK

0 50 100 200

SCALE : 1 INCH EQUALS 100 FEET

DRAWING SOURCE :
EXXONMOBIL SITE PLAN, ORIGINAL DRAWING DONE BY SMO, KLEINFELDER, HANOVER, MD, DATED APRIL 17, 2007 AND KLEINFELDER FIELD RECONNAISSANCE.

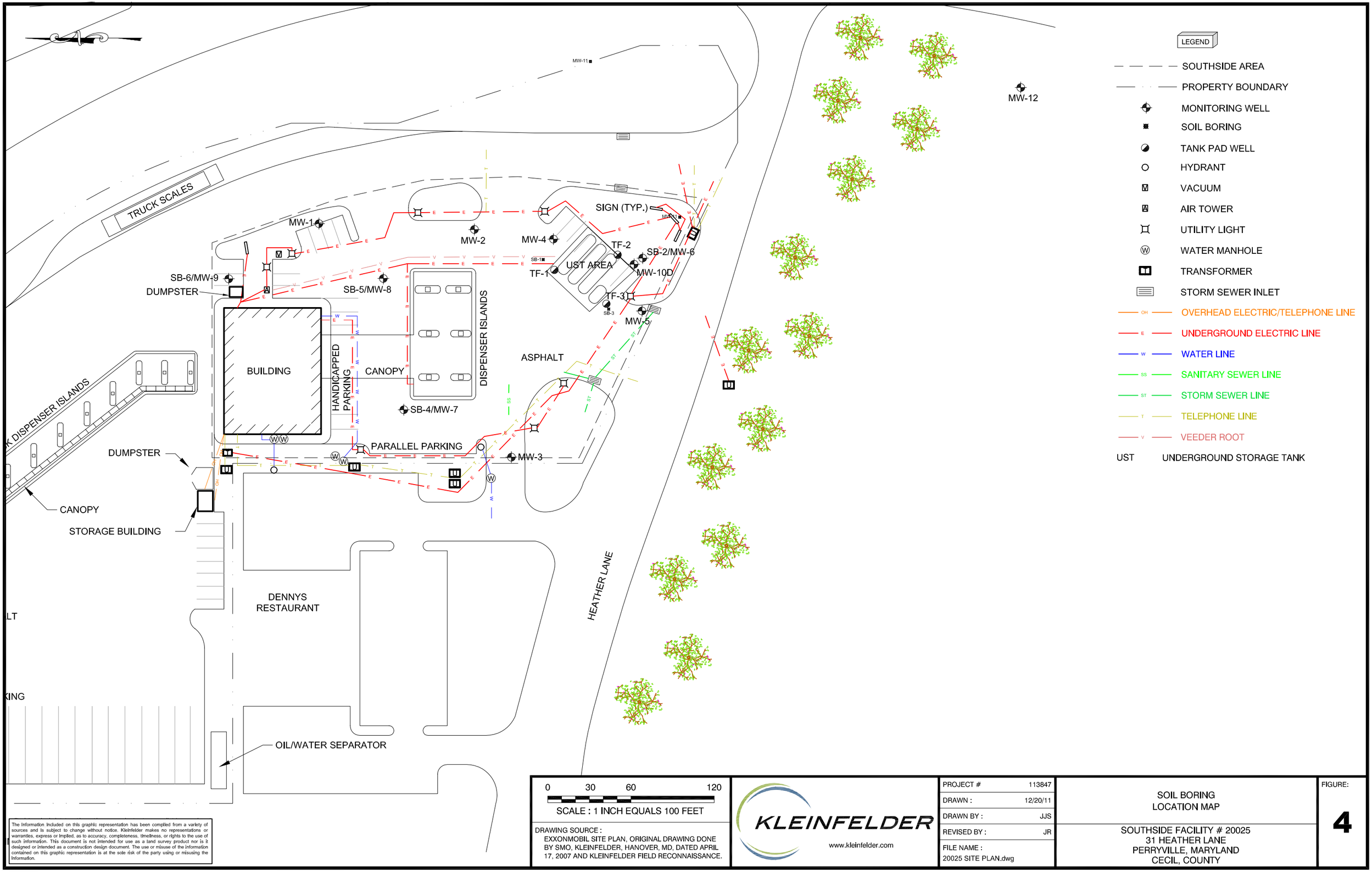
KLEINFELDER
www.kleinfelder.com

PROJECT #	113847
DRAWN :	12/07/11
DRAWN BY :	JJS
REVISED BY :	JR
FILE NAME :	20025 SITE PLAN.dwg

SITE PLAN

SOUTHSIDE FACILITY # 20025
31 HEATHER LANE
PERRYVILLE, MARYLAND
CECIL, COUNTY

FIGURE:
3



0 30 60 120

SCALE : 1 INCH EQUALS 100 FEET

DRAWING SOURCE :
EXXONMOBIL SITE PLAN, ORIGINAL DRAWING DONE BY SMO, KLEINFELDER, HANOVER, MD, DATED APRIL 17, 2007 AND KLEINFELDER FIELD RECONNAISSANCE.

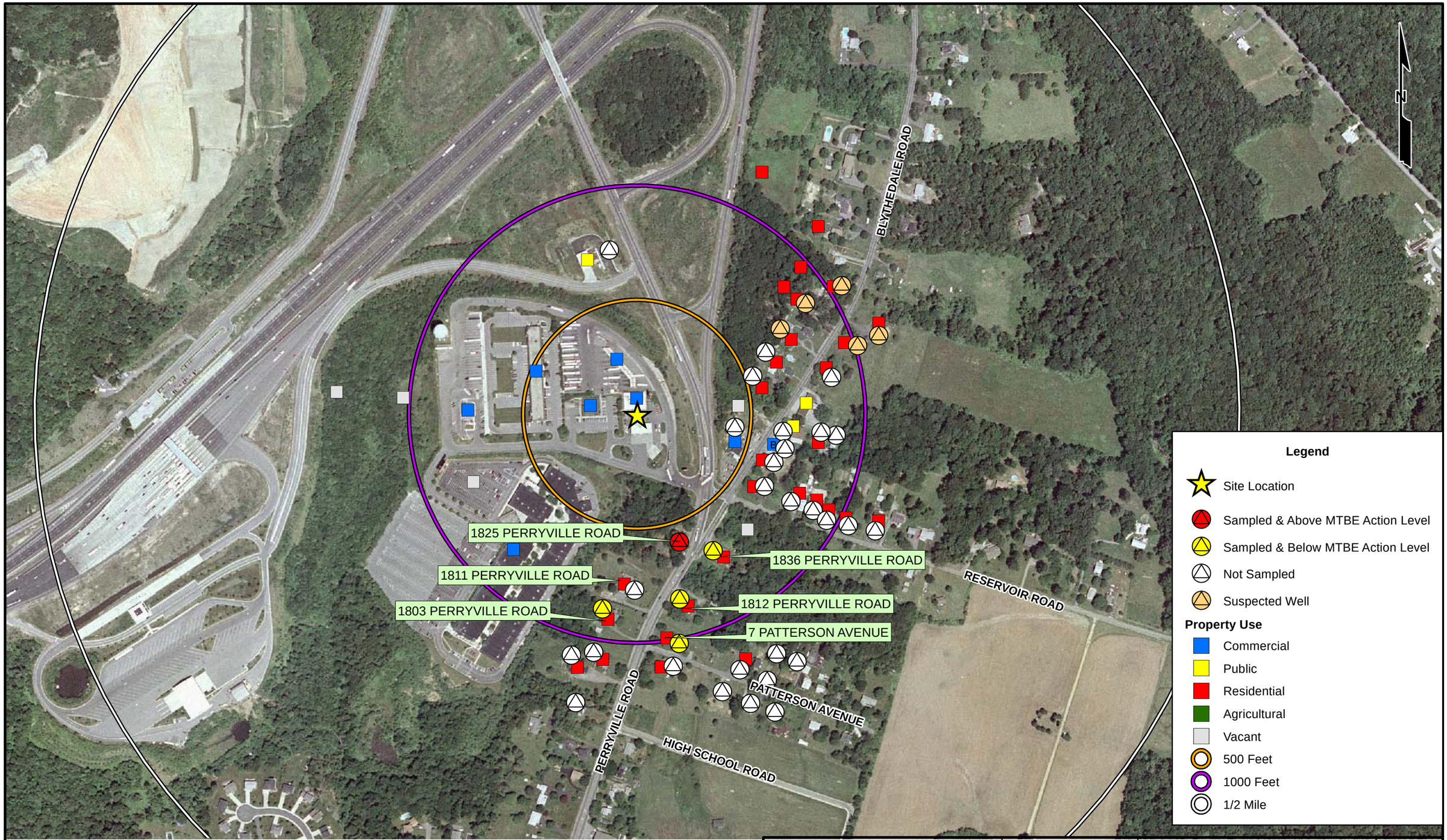
KLEINFELDER
www.kleinfelder.com

PROJECT #	113847
DRAWN :	12/20/11
DRAWN BY :	JJS
REVISED BY :	JR
FILE NAME :	20025 SITE PLAN.dwg

SOIL BORING
LOCATION MAP

SOUTHSIDE FACILITY # 20025
31 HEATHER LANE
PERRYVILLE, MARYLAND
CECIL, COUNTY

FIGURE:
4



400 200 0 400 Feet

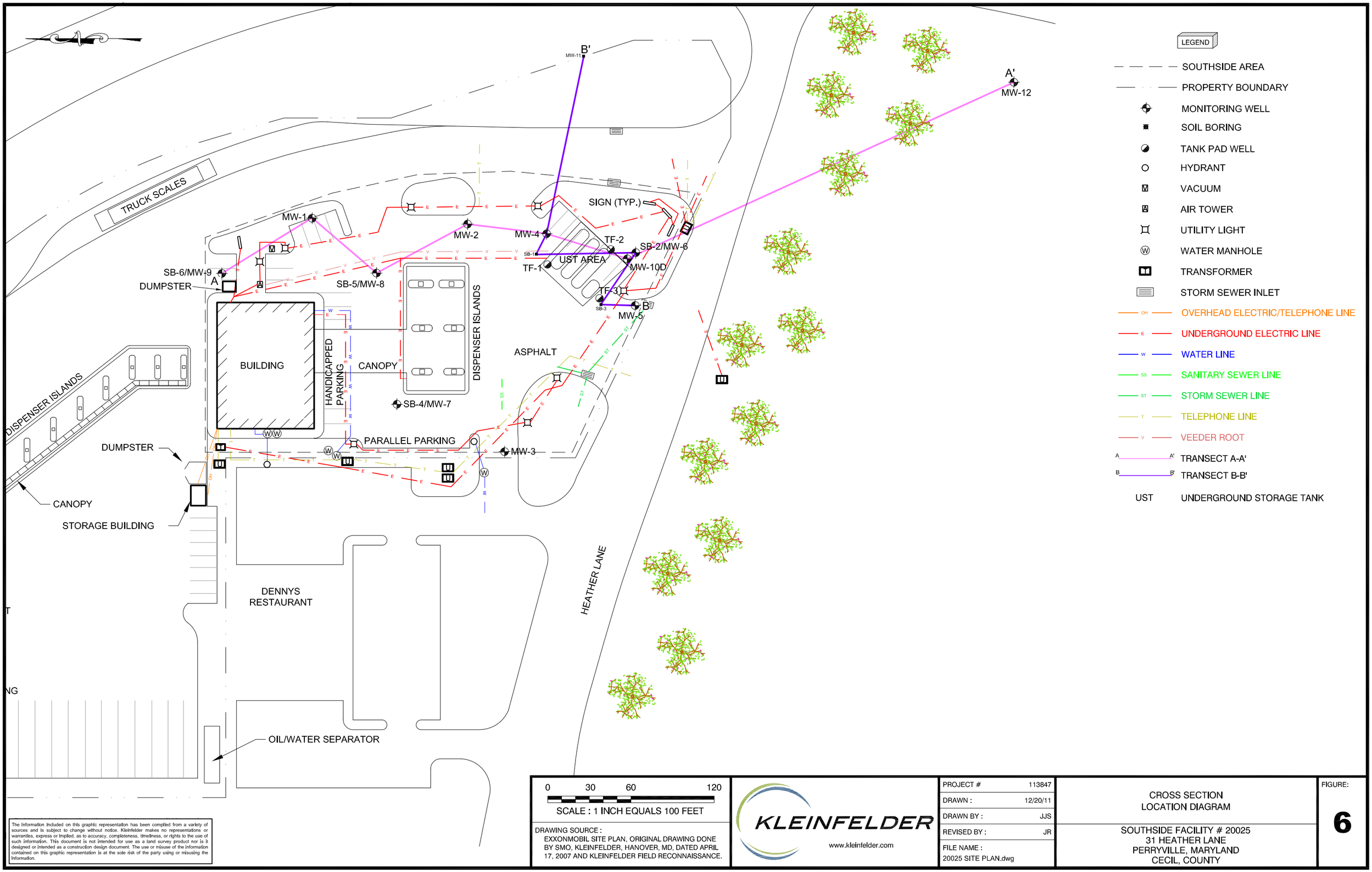
KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	113847
DRAWN:	12/8/11
DRAWN BY:	JR
CHECKED BY:	NMH
FILE NAME:	20025 PW Sample Loc Map.mxd

POTABLE WELL SAMPLING LOCATION MAP

SOUTHSIDE FACILITY # 20025
31 HEATHER LANE
PERRYVILLE, MARYLAND
CECIL COUNTY

FIGURE
5



0 30 60 120

SCALE : 1 INCH EQUALS 100 FEET

DRAWING SOURCE :
EXXONMOBIL SITE PLAN, ORIGINAL DRAWING DONE BY SMO, KLEINFELDER, HANOVER, MD, DATED APRIL 17, 2007 AND KLEINFELDER FIELD RECONNAISSANCE.

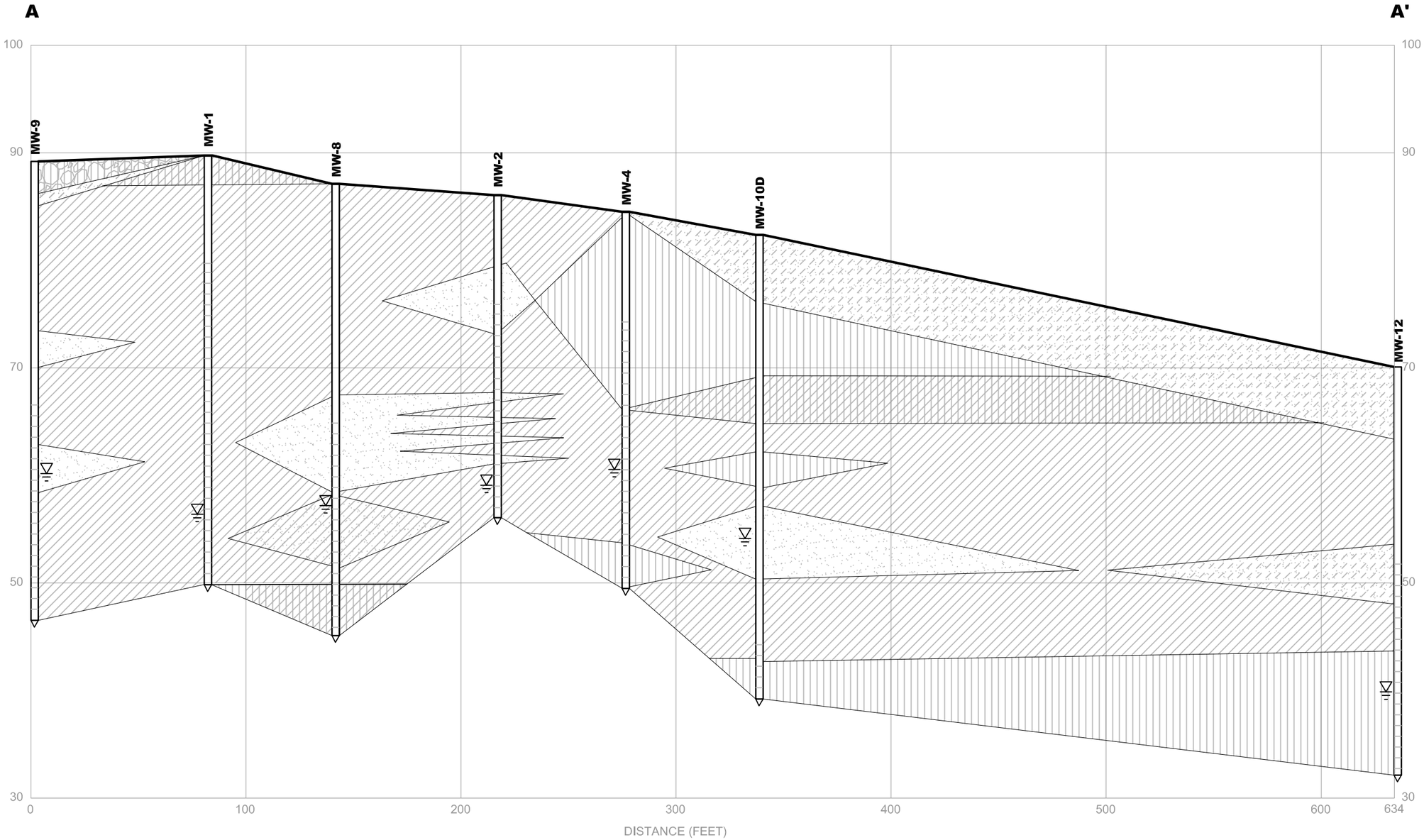
KLEINFELDER
www.kleinfelder.com

PROJECT #	113847
DRAWN :	12/20/11
DRAWN BY :	JJS
REVISED BY :	JR
FILE NAME :	20025 SITE PLAN.dwg

CROSS SECTION
LOCATION DIAGRAM

SOUTHSIDE FACILITY # 20025
31 HEATHER LANE
PERRYVILLE, MARYLAND
CECIL, COUNTY

FIGURE:
6



LEGEND

- CLAY w/ SAND
- POORLY SORTED SAND w/ CLAY
- CLAYEY SAND w/ GRAVEL
- SILTY CLAY
- CLAY
- CLAYEY w/ GRAVEL & SAND
- SAND w/ GRAVEL & CLAY
- CLAYEY SILTS
- DEPTH TO WATER (SEPT 2011)

50 25 0 50
HORIZONTAL APPROXIMATE SCALE (feet)

10 5 0 10
VERTICAL APPROXIMATE SCALE (feet)

NOTES:
LOCATIONS ARE APPROXIMATE

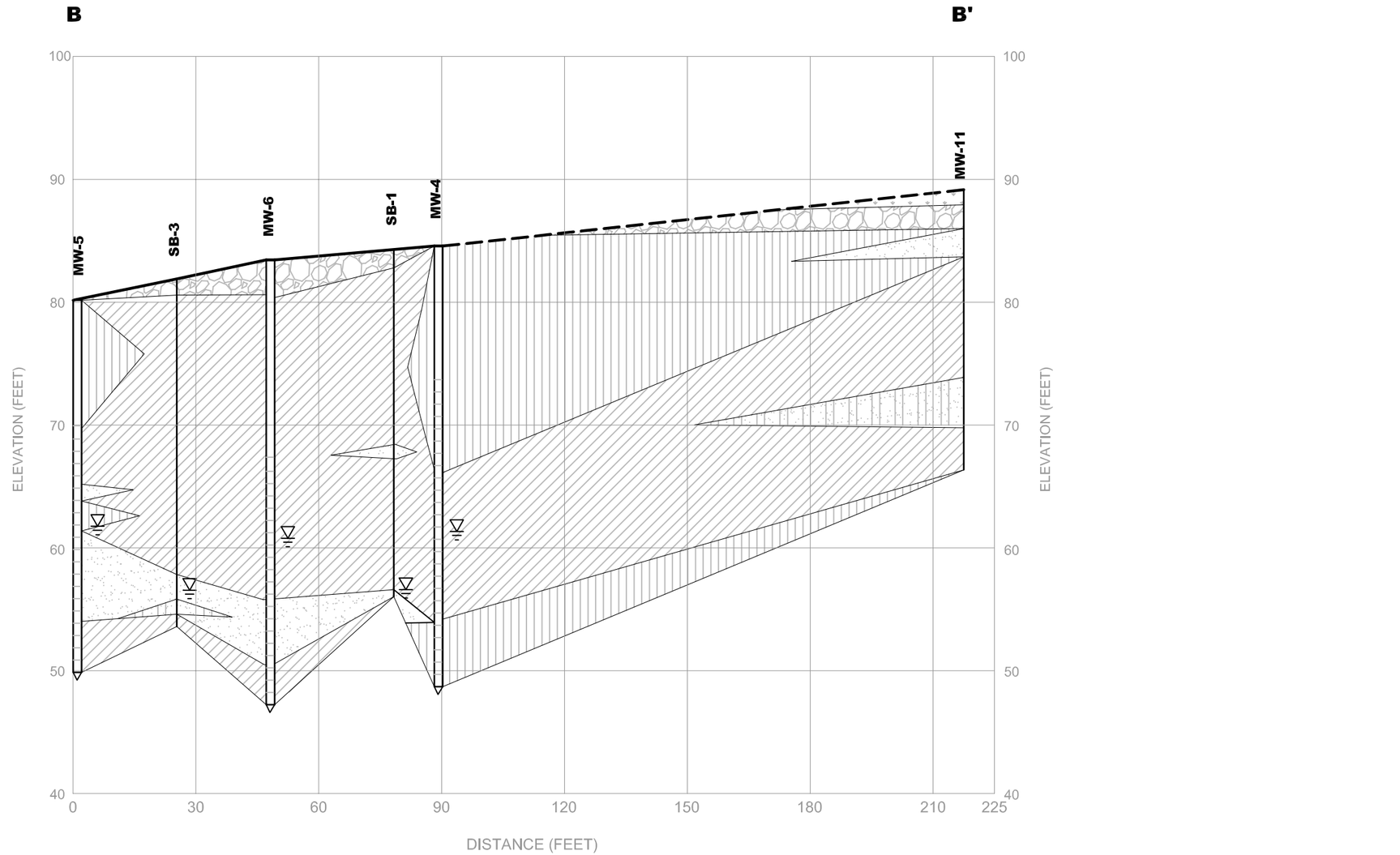
KLEINFELDER
www.kleinfelder.com

PROJECT #	113847
DRAWN :	12/07/11
DRAWN BY :	JDS
REVISED BY :	JR
FILE NAME :	20025 X-SECTIONS.dwg

LITHOLOGIC CROSS-SECTION A-A'

SOUTHSIDE FACILITY # 20025
31 HEATHER LANE
PERRYVILLE, MARYLAND
CECIL, COUNTY

FIGURE:
7



LEGEND

- CLAYEY SILTS
- SILTY SAND
- SAND w/ CLAY
- CLAY
- GRAVEL w/ SILT, CLAY OR SAND
- ORGANIC
- DEPTH TO WATER (SEPT 2011)

30 15 0 30
HORIZONTAL APPROXIMATE SCALE (feet)

10 5 0 10
VERTICAL APPROXIMATE SCALE (feet)

NOTES:
LOCATIONS ARE APPROXIMATE

KLEINFELDER
www.kleinfelder.com

PROJECT #	113847
DRAWN :	12/07/11
DRAWN BY :	JDS
REVISED BY :	JR
FILE NAME :	20025 X-SECTIONS.dwg

LITHOLOGIC CROSS-SECTION B-B'

SOUTHSIDE FACILITY # 20025
31 HEATHER LANE
PERRYVILLE, MARYLAND
CECIL, COUNTY

FIGURE:
8

Legend

- Monitoring Well
- Tank Field Well
- Soil Boring
- Potable Well
- Southside Area
- Property Boundary
- Groundwater Contours
- Apparent Groundwater Flow Direction

Contour Interval = 1.0 feet

Well ID
Groundwater Elevation (ft.)
Benzene (µg/L)
Toluene (µg/L)
Ethybenzene (µg/L)
Total Xylenes (µg/L)
Methyl Tertiary Butyl Ether (MTBE) (µg/L)
Tert Butyl Alcohol (TBA) (µg/L)
Tert Amyl Methyl Ether (TAME) (µg/L)
Ethyl Tert Butyl Ether (ETBE) (µg/L)
Di-Isopropyl Ether (DIPE) (µg/L)
Naphthalene (µg/L)
Total Petroleum Hydrocarbon-Gasoline Range Organics (TPH-GRO) (mg/L)
Total Petroleum Hydrocarbon-Diesel Range Organics (TPH-DRO) (mg/L)

ND = Not Detected (Reporting Limit)
NSVD = Not Surveyed to Vertical Datum
J = Estimated Value
µg/L = Micrograms per Liter
mg/L = Milligrams per Liter

NOTES:
1. MW-10D NOT INCLUDED IN GROUNDWATER CONTOURS.
2. MW-9 WAS SAMPLED ON 9/29/11.

MW-9
NM
ND(5)
ND(5)
ND(5)
ND(5)
ND(5)
ND(80)
ND(5)
ND(5)
ND(5)
ND(5)
ND(0.095)
ND(0.050)

MW-7
57.21
ND(5)
ND(5)
ND(5)
ND(5)
ND(5)
ND(80)
ND(5)
ND(5)
ND(5)
ND(5)
ND(0.050)
0.16

MW-8
58.19
ND(5)
ND(5)
ND(5)
ND(5)
ND(5)
ND(80)
ND(5)
ND(5)
ND(5)
ND(5)
ND(0.050)
ND(0.096)

MW-1
57
ND(5)
ND(5)
ND(5)
ND(5)
ND(5)
ND(80)
ND(5)
ND(5)
ND(5)
ND(5)
ND(0.050)
0.36

MW-2
59.31
ND(5)
ND(5)
ND(5)
ND(5)
39
ND(80)
ND(5)
ND(5)
ND(5)
ND(0.050)
0.13

TF-1
NSVD
ND(5)
ND(5)
ND(5)
ND(5)
ND(5)
ND(80)
ND(5)
ND(5)
ND(5)
ND(5)
ND(0.05)
0.69

MW-4
61.49
20
ND(5)
9
24
310
1200
16
ND(5)
11
ND(5)
0.55
ND(0.095)

MW-11

TF-2
NSVD
ND(5)
ND(5)
ND(5)
ND(5)
ND(5)
ND(80)
ND(5)
ND(5)
ND(5)
ND(5)
ND(0.05)
0.95

MW-3
60.58
ND(5)
ND(5)
ND(5)
ND(5)
ND(5)
ND(80)
ND(5)
ND(5)
ND(5)
ND(5)
ND(0.050)
1.1

TF-3
NSVD
ND(5)
ND(5)
ND(5)
ND(5)
ND(5)
ND(80)
ND(5)
ND(5)
ND(5)
ND(5)
ND(0.05)
2.1

MW-5
62.02
ND(5)
ND(5)
ND(5)
ND(5)
110
290
ND(5)
ND(5)
ND(5)
ND(5)
0.11
ND(0.095)

MW-10D
54.43
ND(5)
ND(5)
ND(5)
ND(5)
26
ND(80)
ND(5)
ND(5)
ND(5)
ND(5)
0.077
2.0

MW-6
61.49
ND(5)
ND(5)
ND(5)
ND(5)
240
670
11
ND(5)
ND(5)
ND(5)
0.24
ND(1.0)

MW-12
40.05
ND(5)
ND(5)
ND(5)
ND(5)
6
ND(80)
ND(5)
ND(5)
ND(5)
ND(5)
ND(0.050)
ND(1.0)

57.0
58.0
59.0
60.0
61.0
62.0
61.0
60.0
59.0
58.0
57.0
56.0
55.0
54.0
53.0
52.0
51.0
50.0
49.0
48.0
47.0
46.0
45.0
44.0
43.0
42.0
41.0

Perrylawn Drive
Heather Lane
Perryville Road
PW 1825
PW 1836

0 30 60 Feet

KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	113847
DRAWN:	12/20/11
DRAWN BY:	JR
CHECKED BY:	NMH
FILE NAME:	20025 HD MAPS.mxd

HYDROCARBON DISTRIBUTION/
GROUNDWATER CONTOUR MAP
SEPTEMBER 10, 2011

SOUTHSIDE FACILITY # 20025
31 HEATHER LANE
PERRYVILLE, CECIL COUNTY, MARYLAND

FIGURE
9

TABLES

Table 1

Potable Well Construction Summary (1,000 feet)
Southside Facility #20025
31 Heather Lane
Perryville, Cecil County, Maryland

Permit #	Owner	Address	Year Built (property)	Potable Well Installation Date	Well Construction Material	Total Depth (feet)	Screened Interval (feet)
CE-94-4328	Feazell Proprty Management II, LLC	1825 Perryville Road	-	2/2/2001	Plastic	160	55-160
CE-72-0157	Clayton, James L. & Judith	1811 Perryville Road	1973	9/7/1972	Steel	84	25-84 (HO)
No Permit	Dever, George E. Jr & Ruth	1803 Perryville Road	1900	-	-	-	-
No Permit	Anderson, Shiela B.	1836 Perryville Road	1973	-	-	-	-
No Permit	Piazza, Joseph M.	1812 Perryville Road	1900	-	-	-	-
CE-95-0669	Patterson, Ross J. & Hazel M.	2 Patterson Avenue	1932	11/3/2007	Plastic	250	47-250 (HO)
No Permit	Patterson, Wayne E. & Carolyn J.	7 Patterson Avenue	1943	-	-	-	-
No Permit	Lancelotta, Victor J.	1783 Perryville Road	1945	-	-	-	-
No Permit	Owens, Malcolm C. & Mary L.	1759 Perryville Road	1945	-	-	-	-
No Permit	Barrow, Diane L.	72 Patterson Avenue	Yes	1/16/1987	Steel	223	40-223 (HO)
CE-96-0197	Raser Realty, LLC	33 Patterson Avenue	1930	11/22/1993	Plastic	300	35-300 (HO)
No Permit	White, William H. & Catherine	45 Patterson Avenue	1942	-	-	-	-
No Permit	Herpick, Cordelia C & Walter L.	51 Patterson Avenue	1943	-	-	-	-
CE-81-1069	Squires, James L. & Beverly L.	28 Patterson Avenue	1984	6/14/1984	Steel	300	44-300 (HO)
CE-94-1573	Squires, James L. & Beverly L.	28 Patterson Avenue	1984	11/26/1996	Steel	300	41-300 (HO)
CE-95-2731	Streaker, Rebecca A. & Lowder, Matthew Hughston	34 Patterson Avenue	1941	3/24/2009	Plastic	250	40-250 (HO)
No Permit	Logan, George C., IV & Gibson, Donna K.	46 Patterson Avenue	1940	-	-	-	-
No Permit	Triutt, Merle D.	23 Reservoir Road	1940	-	-	-	-
No Permit	Dillon, Douglas M. & Dillon, Florence E.	33 Reservoir Road	1958	-	-	-	-
No Permit	Barr, William E. & Betty A.	8 Blythedale Road	1900	-	-	-	-
No Permit	*No Info Available*	16 Blythedale Road	-	-	-	-	-
No Permit	GWP, LLC	24 Blythedale Road	1930	-	-	-	-
No Permit	Chesapeake Conference Association of Seventh-Day Adv	38A Blythedale Road	1942	-	-	-	-
CE-81-2695	Chesapeake Conference Association of Seventh-Day Adv	38B Blythedale Road	1940	1/7/1987	Steel	246	42-246 (HO)
CE-72-0019	(Harbold Motor Company, Inc.)	9 Blythedale Road	-	-	Steel	120	45-120 (HO)
CE-94-4455	Smith, Susan E.	49 Blythedale Road	1923	5/1/2001	Plastic	300	61-300 (HO)
No Permit	Bossoli, Candice A. & Robert B.	69 Blythedale Road	1927	-	-	-	-

Notes:
HO - Open Hole
Shading indicates potable well was sampled under current MDE OCP Case.
- Unknown

TABLE 2

Groundwater Monitoring & Analytical Data
Southside Facility #20025
31 Heather Lane
Perryville, Cecil County, Maryland

Maugust 15, 2005 through September 29, 2011

		Gauging Data					Analytical Data													
Sample ID	Date	Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Naph-thalene (µg/L)	TPH-DRO (mg/L)	TPH-GRO (mg/L)	Comments
MW-1	8/15/2005	89.87	Dry	Dry	Dry	Dry	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Well dry, not sampled
	3/17/2006	89.87	32.55	ND	ND	57.32	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	8/16/2006	89.87	33.13	ND	ND	56.74	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	NA	ND(0.20)	
	2/28/2007	89.87	32.20	ND	ND	57.67	2.9	0.62 J	29.2	59.4	92.1 J	0.38 J	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	4.8 J	0.231	0.424	
	6/7/2007	89.87	31.95	ND	ND	57.92	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	0.86 J	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	10/2/2007	89.87	33.18	ND	ND	56.69	2.8	0.39 J	18.8	19.8	41.8 J	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	6.7	ND(0.10)	ND(0.20)	
	3/27/2008	89.87	33.16	ND	ND	56.71	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	NA	ND(0.20)	
	9/24/2008	89.87	33.22	ND	ND	56.65	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(1.0)	ND(0.20)	
	3/23/2009	89.87	33.92	ND	ND	55.95	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	NA	ND(0.20)	
	9/5/2009	89.87	33.19	ND	ND	56.68	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	0.220	ND(0.20)	
	1/26/2010	89.87	32.04	ND	ND	57.83	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	10/7/2010	89.87	32.11	ND	ND	57.76	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	0.11	ND(0.05)	
	4/14/2011	89.87	32.46	ND	ND	57.41	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.096)	ND(0.050)	
	9/10/2011	89.87	32.87	ND	ND	57.00	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	0.36	ND(0.050)	
MW-2	8/15/2005	86.17	27.09	ND	ND	59.08	ND(1.0)	ND(1.0)	ND(1.0)	ND(3.0)	BRL	880	NA	NA	NA	NA	NA	NA	NA	
	3/17/2006	86.17	26.45	ND	ND	59.72	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	528	ND(25)	27.6	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	0.560	
	8/16/2006	86.17	27.12	ND	ND	59.05	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	12.0	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	2/28/2007	86.17	26.82	ND	ND	59.35	6.7	1.2	54.1	120	182	33.0	ND(25)	1.3 J	ND(5.0)	ND(5.0)	8.8	0.320	0.878	
	6/7/2007	86.17	28.91	ND	ND	57.26	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	14.0	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	0.219	ND(0.20)	
	10/2/2007	86.17	27.23	ND	ND	58.94	1.2	0.22 J	8.4	9.3	19.1 J	13.1	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	3.1 J	ND(0.10)	ND(0.20)	
	3/27/2008	86.17	26.59	ND	ND	59.58	ND(1.0)	ND(1.0)	ND(1.0)	0.46 J	0.46 J	40.0	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	0.213	ND(0.20)	
	9/24/2008	86.17	27.12	ND	ND	59.05	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	7.5	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	3/23/2009	86.17	26.84	ND	ND	59.33	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	9.4	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	0.294	ND(0.20)	
	9/5/2009	86.17	26.91	ND	ND	59.26	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	4.9	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	1/26/2010	86.17	26.73	ND	ND	59.44	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	7.4	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	10/7/2010	86.17	26.80	ND	ND	59.37	ND(5)	ND(5)	ND(5)	ND(5)	BRL	20	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	0.23	ND(0.05)	
	4/14/2011	86.17	26.66	ND	ND	59.51	ND(5)	ND(5)	ND(5)	ND(5)	BRL	110	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	0.28	0.10	
	9/10/2011	86.17	26.86	ND	ND	59.31	ND(5)	ND(5)	ND(5)	ND(5)	BRL	39	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	0.13	ND(0.050)	
MW-3	8/15/2005	84.83	25.89	ND	ND	58.94	ND(1.0)	ND(1.0)	ND(1.0)	ND(3.0)	BRL	ND(1.0)	NA	NA	NA	NA	NA	NA	NA	
	3/17/2006	84.83	27.15	ND	ND	57.68	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	8/16/2006	84.83	26.75	ND	ND	58.08	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.18)	ND(0.20)	
	2/28/2007	84.83	25.65	ND	ND	59.18	6.8	1.1	43.1	94.9	145.9	0.91 J	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	6.6	0.395	0.765	
	6/7/2007	84.83	25.49	ND	ND	59.34	0.87 J	ND(1.0)	9.3	13.7	23.9 J	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	1.5 J	ND(0.10)	ND(0.20)	
	10/2/2007	84.83	27.44	ND	ND	57.39	5.7	0.65 J	36.7	40.5	83.6 J	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	14.4	2.22	ND(0.20)	
	3/27/2008	84.83	27.69	ND	ND	57.14	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	0.219	ND(0.20)	
	9/24/2008	84.83	27.37	ND	ND	57.46	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	3/23/2009	84.83	29.06	ND	ND	55.77	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	9/5/2009	84.83	27.50	ND	ND	57.33	2.4	0.50 J	ND(1.0)	0.62 J	3.5 J	0.60 J	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	1.5 J	ND(0.10)	ND(0.20)	
	1/26/2010	84.83	24.26	ND	ND	60.57	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	10/7/2010	84.83	24.36	ND	ND	60.47	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.095)	ND(0.05)	
	4/14/2011	84.83	25.43	ND	ND	59.40	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.096)	ND(0.050)	
	9/10/2011	84.83	24.25	ND	ND	60.58	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	1.1	ND(0.050)	
[1]MDE Cleanup Standards- Groundwater							5	1000	700	10000	--	20	--	--	--	--	0.65	0.047	0.047	

TABLE 2

Groundwater Monitoring & Analytical Data
Southside Facility #20025
31 Heather Lane
Perryville, Cecil County, Maryland

Maugust 15, 2005 through September 29, 2011

		Gauging Data					Analytical Data													
Sample ID	Date	Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Naph-thalene (µg/L)	TPH-DRO (mg/L)	TPH-GRO (mg/L)	Comments
MW-4	6/7/2007	84.65	23.11	ND	ND	61.54	16.9 J	10.7 J	ND(20)	ND(20)	27.6 J	2640	7300	90.0 J	ND(100)	14.3 J	ND(100)	ND(0.10)	2.14	
	10/2/2007	84.65	23.89	ND	ND	60.76	27.3	9.1	3.2 J	9.0	48.6 J	3500	8570	117	3.8 J	17.5 J	ND(25)	ND(0.10)	4.51	
	3/27/2008	84.65	24.47	ND	ND	60.18	36.3	8.8	2.0	5.0	52.1	2760	6560	103	2.8 J	19.0	ND(5.0)	ND(0.10)	2.89	
	9/24/2008	84.65	23.71	ND	ND	60.94	30.1	4.9 J	3.1 J	10.8	48.9 J	2020	7520	74.0	4.6 J	16.8 J	ND(25)	ND(0.10)	3.53	
	3/23/2009	84.65	24.16	ND	ND	60.49	24.6	2.0 J	3.4	7.2	37.2 J	1870	6940	62.7	5.3 J	16.4	ND(13)	ND(0.10)	2.48	
	9/5/2009	84.65	24.07	ND	ND	60.58	31.2	0.99 J	5.0	9.6	46.8 J	1240	4920	44.6	5.0	16.8	ND(5.0)	ND(0.10)	1.73	
	1/26/2010	84.65	23.40	ND	ND	61.25	29.6	1.2	8.8	13.1	52.7	826	3890	32.9	5.2	17.8	ND(5.0)	ND(0.10)	1.20	
	10/7/2010	84.65	23.80	ND	ND	60.85	27	ND(5)	12	30	69	510	2300	25	ND(5)	14	ND(5)	0.31	0.68	
	4/14/2011	84.65	22.93	ND	ND	61.72	19	ND(5)	8	23	50	360	1500	17	ND(5)	10	ND(5)	0.25	0.60	
	9/10/2011	84.65	23.16	ND	ND	61.49	20	ND(5)	9	24	53	310	1200	16	ND(5)	11	ND(5)	ND(0.095)	0.55	
MW-5	6/7/2007	80.81	18.50	ND	ND	62.31	0.52 J	ND(1.0)	9.0	12.5	22.0 J	86.3	ND(25)	1.3 J	ND(5.0)	ND(5.0)	1.6 J	ND(0.10)	ND(0.20)	
	10/2/2007	80.81	19.24	ND	ND	61.57	1.2	ND(1.0)	10.3	11.2	22.7	3.0	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	6.2	ND(0.10)	ND(0.20)	
	3/27/2008	80.81	19.62	ND	ND	61.19	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	5.5	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	9/24/2008	80.81	19.10	ND	ND	61.71	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	24.6	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	3/23/2009	80.81	20.02	ND	ND	60.79	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	3.5	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	9/5/2009	80.81	19.01	ND	ND	61.80	0.81 J	ND(1.0)	ND(1.0)	0.36 J	1.17 J	1.7	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	1.7 J	ND(0.10)	ND(0.20)	
	1/26/2010	80.81	19.03	ND	ND	61.78	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	2.2	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	10/7/2010	80.81	19.09	ND	ND	61.72	ND(5)	ND(5)	ND(5)	ND(5)	BRL	59	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.095)	0.063	
	4/14/2011	80.81	18.80	ND	ND	62.01	ND(5)	ND(5)	ND(5)	ND(5)	BRL	8	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	0.15	ND(0.050)	
	9/10/2011	80.81	18.79	ND	ND	62.02	ND(5)	ND(5)	ND(5)	ND(5)	BRL	110	290	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.095)	0.11	
MW-6	9/5/2009	83.74	22.05	ND	ND	61.69	2.7	0.39 J	ND(1.0)	0.35 J	3.4 J	560	1220	13.7	ND(5.0)	1.1 J	ND(5.0)	ND(0.10)	0.730	
	1/26/2010	83.74	23.93	ND	ND	59.81	1.1	ND(1.0)	ND(1.0)	ND(1.0)	1.1	894	1930	29.3	ND(5.0)	2.7 J	ND(5.0)	ND(0.10)	0.888	
	10/7/2010	83.74	23.30	ND	ND	60.44	ND(5)	ND(5)	ND(5)	ND(5)	BRL	970	2400	32	ND(5)	ND(5)	ND(5)	ND(0.095)	0.73	
	4/14/2011	83.74	23.14	ND	ND	60.60	ND(10)	ND(10)	ND(10)	ND(10)	BRL	950	2600	45	ND(10)	ND(10)	ND(10)	ND(0.095)	1.0	
	9/10/2011	83.74	22.25	ND	ND	61.49	ND(5)	ND(5)	ND(5)	ND(5)	BRL	240	670	11	ND(5)	ND(5)	ND(5)	ND(1.0)	0.24	
MW-7	9/5/2009	87.56	38.47	ND	ND	49.09	2.1	0.42 J	ND(1.0)	0.44 J	3.0 J	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	1.5 J	0.246	ND(0.20)	
	1/26/2010	87.56	29.79	ND	ND	57.77	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	10/7/2010	87.56	28.33	ND	ND	59.23	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	0.14	ND(0.05)	
	4/14/2011	87.56	29.42	ND	ND	58.14	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.095)	ND(0.050)	
	9/10/2011	87.56	30.35	ND	ND	57.21	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	0.16	ND(0.050)	
MW-8	9/5/2009	87.77	30.00	ND	ND	57.77	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	1.8	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	1/26/2010	87.77	29.39	ND	ND	58.38	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	1.7	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	10/7/2010	87.77	28.56	ND	ND	59.21	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.095)	ND(0.05)	
	4/14/2011	87.77	29.40	ND	ND	58.37	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.096)	ND(0.050)	
	9/10/2011	87.77	29.58	ND	ND	58.19	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.096)	ND(0.050)	
[1]MDE Cleanup Standards- Groundwater							5	1000	700	10000	--	20	--	--	--	--	0.65	0.047	0.047	

TABLE 2

Groundwater Monitoring & Analytical Data
Southside Facility #20025
31 Heather Lane
Perryville, Cecil County, Maryland

Maugust 15, 2005 through September 29, 2011

		Gauging Data					Analytical Data													
Sample ID	Date	Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Naph-thalene (µg/L)	TPH-DRO (mg/L)	TPH-GRO (mg/L)	Comments
MW-9	9/5/2009	89.05	30.63	ND	ND	58.42	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	ND(1.0)	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	1/26/2010	89.05	27.48	ND	ND	61.57	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	BRL	0.66 J	ND(25)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)	ND(0.10)	ND(0.20)	
	10/7/2010	89.05	27.56	ND	ND	61.49	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.094)	ND(0.05)	
	4/14/2011	89.05	26.93	ND	ND	62.12	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.095)	ND(0.050)	
	9/10/2011	89.05	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/29/2011	89.05	28.91	ND	ND	60.14	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(0.095)	ND(0.050)	
MW-10D	9/10/2011	82.61	28.18	ND	ND	54.43	ND(5)	ND(5)	ND(5)	ND(5)	BRL	26	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	2.0	0.077	
MW-12	9/10/2011	70.57	30.52	ND	ND	40.05	ND(5)	ND(5)	ND(5)	ND(5)	BRL	6	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	ND(1.0)	ND(0.050)	
TF-1	3/30/2006	NSVD	4.77	ND	ND	NSVD	106	121	ND(10)	ND(10)	227	6900	1120	150	58.1	41.6 J	ND(50)	0.304	6.92	
	8/16/2006	NSVD	1.75	ND	ND	NSVD	323	222	10.8	33.8	590	10400	30300	66.3	64.7	26.6 J	ND(50)	3.09	8.98	
	2/28/2007	NSVD	2.28	ND	ND	NSVD	149	20.0	845	990	2004	3240	18400	ND(25)	ND(25)	34.8	191	6.82	19.8	
	6/7/2007	NSVD	2.71	ND	ND	NSVD	92.2	3.6	65.9	3.6	165.3	151	1410	9.0	ND(5.0)	27.2	ND(5.0)	1.84	2.04	
	10/2/2007	NSVD	3.16	ND	ND	NSVD	137	1.8	92.4	4.3	236	145	8080	ND(5.0)	12.6	29.2	7.2	1.03	1.80	
	3/27/2008	NSVD	2.47	ND	ND	NSVD	10.3	ND(1.0)	1.6	0.56 J	12.5 J	10.1	688	ND(5.0)	1.2 J	1.4 J	ND(5.0)	0.545	0.619	
	9/24/2008	NSVD	2.91	ND	ND	NSVD	14.5	0.65 J	4.1	9.3	28.6 J	8.9	294	ND(5.0)	0.54 J	1.3 J	10.1	1.06	2.17	
	3/23/2009	NSVD	2.85	ND	ND	NSVD	45.7	140	62.8	197	446	11.5	292	3.9 J	3.3 J	9.9	5.4	0.895	2.15	
	9/5/2009	NSVD	2.65	ND	ND	NSVD	0.73 J	ND(1.0)	ND(1.0)	0.34 J	1.07 J	12.1	181	2.0 J	2.2 J	10.2	ND(5.0)	0.474	0.298	
	1/26/2010	NSVD	2.52	ND	ND	NSVD	1.1	ND(1.0)	ND(1.0)	0.35 J	1.5 J	1.9	9.7 J	ND(5.0)	ND(5.0)	0.53 J	ND(5.0)	0.220	0.393	
	10/7/2010	NSVD	2.88	ND	ND	NSVD	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	0.69	ND(0.05)	
	4/14/2011	NSVD	2.07	ND	ND	NSVD	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	1.3	0.53	
	9/10/2011	NSVD	1.86	ND	ND	NSVD	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	1.2	0.081	
TF-2	3/30/2006	NSVD	3.63	ND	ND	NSVD	46.2	ND(1.0)	ND(1.0)	ND(1.0)	46.2	10.1	3120	2.5 J	1.0 J	41.3	ND(5.0)	1.18	0.392	
	8/16/2006	NSVD	2.40	ND	ND	NSVD	207	909	708	3210	5034	28900	5660	146	44.1 J	ND(130)	168	3.15	28.6	
	2/28/2007	NSVD	1.14	ND	ND	NSVD	220	12.0	619	2120	2971	753	29000	10.7 J	51.5	20.7 J	135	3.43	16.7	
	6/7/2007	NSVD	1.55	ND	ND	NSVD	194	ND(10)	717	1130	2041	249	21600	ND(50)	37.4 J	50.9	175	4.49	13.5	
	10/2/2007	NSVD	1.99	ND	ND	NSVD	165	2.6 J	641	655	1464 J	29.1	21900	ND(25)	29.0	25.6	192	2.69	8.67	
	3/27/2008	NSVD	0.31	ND	ND	NSVD	75.5	1.8	218	334	629	40.4	4720	ND(5.0)	9.1	14.0	100	2.66	6.48	
	9/24/2008	NSVD	1.57	ND	ND	NSVD	48.9	7.4	73.1	222	351	18.1	541	ND(5.0)	1.6 J	8.0	87.6	1.34	4.89	
	3/23/2009	NSVD	1.45	ND	ND	NSVD	144	169	27.8	113	454	22.2	417	ND(5.0)	6.2	18.6	59.4	1.37	3.90	
	9/5/2009	NSVD	1.37	ND	ND	NSVD	173	12.2	3.5	13.0	202	19.2	594	ND(5.0)	6.3	20.1	60.5	1.21	2.35	
	1/26/2010	NSVD	1.16	ND	ND	NSVD	28.2	0.59 J	0.63 J	2.7	32.1 J	9.1	135	1.5 J	1.1 J	4.1 J	21.0	0.880	2.01	
	10/7/2010	NSVD	1.70	ND	ND	NSVD	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	0.95	ND(0.05)	
	4/14/2011	NSVD	0.88	ND	ND	NSVD	6	ND(5)	ND(5)	ND(5)	6	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	2.3	0.47	
	9/10/2011	NSVD	0.32	ND	ND	NSVD	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	2.3	0.56	
[1]MDE Cleanup Standards- Groundwater							5	1000	700	10000	--	20	--	--	--	--	0.65	0.047	0.047	

TABLE 2

Groundwater Monitoring & Analytical Data
Southside Facility #20025
31 Heather Lane
Perryville, Cecil County, Maryland

Maugust 15, 2005 through September 29, 2011

		Gauging Data					Analytical Data													
Sample ID	Date	Top of Casing Elevation	Depth to Water (feet)	Depth to Hydro-carbon (feet)	Hydro-carbon Thickness (feet)	Corrected GW Elevation (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Naph-thalene (µg/L)	TPH-DRO (mg/L)	TPH-GRO (mg/L)	Comments
TF-3	3/30/2006	NSVD	4.84	ND	ND	NSVD	14.3	0.81 J	0.61 J	8.9	24.6 J	173	2110	9.5	2.6 J	14.6	ND(5.0)	2.44	0.652	
	8/16/2006	NSVD	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	2/28/2007	NSVD	0.92	ND	ND	NSVD	257	19.8	568	1820	2665	778	27700	ND(25)	ND(25)	8.4 J	98.8	9.42	11.8	
	6/7/2007	NSVD	0.42	ND	ND	NSVD	173	13.8	444	794	1425	423	23600	ND(13)	34.1	7.5 J	110	4.82	6.15	
	10/2/2007	NSVD	1.51	ND	ND	NSVD	97.9	3.6	48.0	157	307	17.5	12400	ND(5.0)	14.0	4.9 J	157	2.71	2.77	
	3/27/2008	NSVD	0.27	ND	ND	NSVD	41.1	6.7	9.3	254	311	60.1	3270	ND(5.0)	5.4	3.6 J	89.2	30.7	1.65	
	9/24/2008	NSVD	0.96	ND	ND	NSVD	23.4	2.0	1.2	17.7	44.3	12.2	1040	ND(5.0)	1.7 J	4.0 J	88.6	1.56	0.727	
	3/23/2009	NSVD	0.77	ND	ND	NSVD	48.7	25.5	7.2	42.1	123.5	21.7	547	3.2 J	2.8 J	7.4	53.7	21.3	0.994	
	9/5/2009	NSVD	1.00	ND	ND	NSVD	106	16.3	1.5	24.9	149	33.0	647	3.3 J	5.1	16.7	62.5	3.11	1.25	
	1/26/2010	NSVD	0.40	ND	ND	NSVD	23.5	2.7	2.3	9.0	37.5	12.4	161	1.1 J	0.62 J	2.1 J	22.3	0.869	1.55	
	10/7/2010	NSVD	1.04	ND	ND	NSVD	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	2.1	ND(0.05)	
	4/14/2011	NSVD	0.67	ND	ND	NSVD	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	1.7	0.46	
	9/10/2011	NSVD	0.02	ND	ND	NSVD	ND(5)	ND(5)	ND(5)	ND(5)	BRL	ND(5)	ND(80)	ND(5)	ND(5)	ND(5)	ND(5)	14	0.059	
						[1]MDE Cleanup Standards- Groundwater	5	1000	700	10000	--	20	--	--	--	--	0.65	0.047	0.047	

Notes:
<1.0 - Not detected at or above the laboratory reporting limit shown
µg/L - micrograms per liter
BRL - Below laboratory reporting limits
BTEX - Benzene, toluene, ethylbenzene, and total xylenes
DIPE - Di-Isopropyl Ether
DRO - Diesel Range Organics
ETBE - Ethyl Tertiary Butyl Ether
GRO - Gasoline Range Organics
GW - Groundwater
J - Indicates an estimated value
mg/L - milligram per liter
MTBE - Methyl Tert Butyl Ether
NA - Not analyzed
ND - Not detected
NM - Not measured
NS - Not sampled
NSVD - Not surveyed to vertical datum
TAME - Tertiary Amyl Methyl Ether
TBA - Tertiary Butyl Alcohol
TPH - Total Petroleum Hydrocarbons

TABLE 3

Off-Site Potable Well and POET Analytical Data
Southside Facility #20025
31 Heather Lane
Perryville, Cecil County, Maryland

October 5, 2010 through July 7, 2011

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Naphthalene (µg/L)
7 Patterson Ave	4/14/2011	<0.5	<0.5	<0.5	<0.5	BRL	<1.0	<25	<0.5	<0.5	<0.5	<0.5
1803 Perryville Rd	4/8/2011	<0.5	<0.5	<0.5	<0.5	BRL	<1.0	<25	<0.5	<0.5	<0.5	<0.5
1812 Perryville Rd	4/8/2011	<0.5	<0.5	<0.5	<0.5	BRL	<1.0	<25	<0.5	<0.5	<0.5	<0.5
1836 Perryville Rd	4/14/2011	<0.5	<0.5	<0.5	<0.5	BRL	6.8	<25	<0.5	<0.5	<0.5	<0.5
	7/7/2011	<0.5	<0.5	<0.5	<0.5	BRL	6.1	<25	<0.5	<0.5	<0.5	<0.5
1825 Perryville Rd - PI	10/5/2010	<0.5	<0.5	<0.5	<0.5	BRL	24	<25	<0.5	<0.5	<0.5	<0.5
	10/21/2010	<0.5	<0.5	<0.5	<0.5	BRL	21	<25	<0.5	<0.5	<0.5	<0.5
	4/11/2011	<0.5	<0.5	<0.5	<0.5	BRL	24	<25	<0.5	<0.5	<0.5	<0.5
	7/7/2011	<0.5	<0.5	<0.5	<0.5	BRL	24	<25	<0.5	<0.5	<0.5	<0.5
1825 Perryville Rd - PM	4/11/2011	<0.5	<0.5	<0.5	<0.5	BRL	<1.0	<25	<0.5	<0.5	<0.5	<0.5
	7/7/2011	<0.5	<0.5	<0.5	<0.5	BRL	<1.0	<25	<0.5	<0.5	<0.5	<0.5
1825 Perryville Rd PE	4/11/2011	<0.5	<0.5	<0.5	<0.5	BRL	<1.0	<25	<0.5	<0.5	<0.5	<0.5
	7/7/2011	<0.5	<0.5	<0.5	<0.5	BRL	<1.0	<25	<0.5	<0.5	<0.5	<0.5
MDE Maximum Contaminant Level (MCL)		5	1000	700	10000	-	20*	-	-	-	-	0.65

Notes:
* - MDE Action Level
µg/L - micrograms per liter (parts per billion)
BRL - Below laboratory reporting limits
BTEX - Benzene, toluene, ethylbenzene, and total xylenes
DIPE - Di-Isopropyl Ether
ETBE - Ethyl Tertiary Butyl Ether
MTBE - Methyl Tert Butyl Ether
TAME - Tertiary Amyl Methyl Ether
TBA - Tertiary Butyl Alcohol

Table 4

Monitoring Well Construction Summary
Southside Facility #20025
31 Heather Lane
Perryville, Cecil County, Maryland

Well Identification	Date Installed	Total Depth (feet)	Screened Interval (feet)	Diameter (inches)	Slot size (inches)	Construction Material
MW-1	8/2/2005	40	10-40	2	0.020	Schedule 40 PVC
MW-2	8/2/2005	30	10-30	2	0.020	Schedule 40 PVC
MW-3	8/2/2005	35	10-35	2	0.020	Schedule 40 PVC
MW-4	3/29/2007	35	10-35	4	0.020	Schedule 40 PVC
MW-5	3/29/2007	30	10-30	4	0.020	Schedule 40 PVC
MW-6	9/1/2009	36	16-36	2	0.020	Schedule 40 PVC
MW-7	8/31/2009	42	22-42	2	0.020	Schedule 40 PVC
MW-8	8/31/2009	42	22-42	2	0.020	Schedule 40 PVC
MW-9	8/27/2009	42.5	22.5-42.5	2	0.020	Schedule 40 PVC
MW-10D	9/1/2011	43	38-43	2	0.020	Schedule 40 PVC
MW-12	9/6/2011	38	18-38	2	0.020	Schedule 40 PVC

Notes

PVC- polyvinyl chloride

Table 5

Soil Analytical Data
Southside Facility #20025
31 Heather Lane
Perryville, Cecil County, Maryland

Sample ID	Sample Date	Depth (feet)	PID (ppmv)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	Naphthalene (mg/kg)	Di-Isopropyl ether (mg/kg)	ETBE (mg/kg)	tert-Amyl Methyl Ether (mg/kg)	Tert-butyl Alcohol (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)
MW-1	8/2/05	15-17	0	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	NA	NA	NA	NA	NA	ND(0.004)	ND(0.005)
MW-2	8/2/05	15-17	0	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	NA	NA	NA	NA	NA	ND(0.004)	ND(0.005)
MW-4	3/29/2007	25-27	0	ND(0.0015)	ND(0.0015)	ND(0.0015)	ND (0.003)	0.0107	NA	NA	ND(0.0075)	ND(0.0075)	ND(0.038)	ND(0.0077)	ND(0.012)
MW-5	3/29/2007	20-22	0	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0026)	ND(0.0013)	NA	NA	ND(0.0065)	ND(0.0065)	ND(0.033)	ND(0.0077)	ND(0.013)
SB01	8/28/2009	10-12	32.9	0.00066 J	0.0017	0.00080 J	0.0046	0.102	NA	NA	NA	NA	NA	NA	NA
SB01	8/28/2009	24-26	22.4	ND(0.0013)	0.0022	ND(0.0013)	ND(0.0027)	0.0158	NA	NA	NA	NA	NA	NA	NA
SB02/MW06	9/1/2009	26	5.2	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0026)	0.00063 J	NA	NA	NA	NA	NA	NA	NA
SB02/MW06	9/1/2009	35	4.7	ND(0.0014)	ND(0.0014)	ND(0.0014)	ND(0.0029)	ND(0.0014)	NA	NA	NA	NA	NA	NA	NA
SB03	8/28/2009	12-14	18.8	0.00083 J	0.0015	ND(0.0013)	0.0014 J	0.763	NA	NA	NA	NA	NA	NA	NA
SB03	8/28/2009	22-24	5.2	ND(0.0013)	0.00039 J	ND(0.0013)	ND(0.0025)	0.00054 J	NA	NA	NA	NA	NA	NA	NA
SB04/MW07	8/31/2009	30	6.8	ND(0.0014)	ND(0.0014)	ND(0.0014)	ND(0.0027)	ND(0.0014)	NA	NA	NA	NA	NA	NA	NA
SB04/MW07	8/31/2009	40	2.0	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0026)	ND(0.0013)	NA	NA	NA	NA	NA	NA	NA
SB05/MW08	8/31/2009	32	4.8	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0026)	ND(0.0013)	NA	NA	NA	NA	NA	NA	NA
SB05/MW08	8/31/2009	40	4.2	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0026)	ND(0.0013)	NA	NA	NA	NA	NA	NA	NA
SB6/MW09	8/27/2009	29	6.0	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0023)	ND(0.0012)	NA	NA	NA	NA	NA	NA	NA
SB6/MW09	8/27/2009	41	5.8	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0025)	ND(0.0013)	NA	NA	NA	NA	NA	NA	NA
MW-10D	8/31/2011	16-17	4.3	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.018	1.2	ND(14)	ND(0.9)
SB-7/MW-11	8/31/2011	22-23	0.4	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.11)	ND(15)	ND(1.1)
MW-12	9/2/2011	19-21	13.1	ND(0.006)	ND(0.006)	ND(0.006)	ND(0.006)	ND(0.006)	ND(0.006)	ND(0.006)	ND(0.006)	ND(0.006)	ND(0.11)	ND(13)	ND(1.2)
*MDE Non Residential Cleanup Standard -Soil				52	8200	10000	20000	720	2000	--	--	--	--	620	620
*MDE Protection of Groundwater Standard -Soil				0.0019	27	15	3	0.012	0.15	--	--	--	--	--	--

Notes:
BRL - Below laboratory reporting limits
BTEX - Benzene, toluene, ethylbenzene, and total xylenes
mg/kg - milligrams per kilogram (parts per million)
NA - Not analyzed
ND(0.0011) - Not detected at or above the laboratory reporting limit, laboratory reporting limit included.
ETBE - Ethyl Tertiary Butyl Ether
ppmv - parts per million by volume
TPH - Total Petroleum Hydrocarbons
GRO - Gasoline Range Organics
DRO - Diesel Range Organics

* MDE Table 1 Generic Numeric Cleanup Standards for Groundwater and Soil, June 2008 (Interim Final Guidance)

-- No applicable cleanup standard

APPENDIX A

MDE Correspondence

MDE

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Oil Control Program, Suite 620, 1800 Washington Blvd., Baltimore MD 21230-1719
410-537-3442 410-537-3092 (fax) 1-800-633-6101, ext. 3442

August 9, 2011

Ms. Jewel Cox
ExxonMobil Environmental Services
Suite 106, #232
1016 West Poplar Avenue
Collierville TN 38017

Mr. Marshall Hare
Director of Facilities & Technology
Southside Oil, LLC
4900 West Hundred Road
Chester VA 23831

RE: APPROVAL FOR SUBSUFACE DELINEATION WORK PLAN
Case No. 2006-0489-CE
Former Exxon #20025
31 Heather Lane, Perryville
Cecil County, Maryland
Facility I.D. No. 1190

Dear Ms. Cox and Mr. Hare:

The Oil Control Program recently completed a review of the case file for the above-referenced property, including the *Work Plan for Supplemental Site Assessment Activities - May 13, 2011*. The Department also received off-site sampling results for 1825 Perryville Road, collected in April 2011. The continued presence of methyl tertiary-butyl ether (MTBE) was detected at 24 parts per billion (ppb), above the State's action level of 20 ppb in the pre-treatment sample. All post-treatment analyses were non-detect for volatile organic compounds (VOCs). Additional off-site supply well VOC sampling results were non-detect or below the State's action level for MTBE.

Based on our review, the Department hereby approves the proposed *Work Plan* for implementation, contingent upon the following modifications:

(1) The Department must receive copies of written access agreements prior to the start of off-site well drilling activities.

(2) The Department reserves the right to modify the general location of the wells based on field observations and may require additional wells based on the outcome of the subsurface investigation. The Department reserves the right to change the depth of the wells and screening intervals based on field conditions.

(3) At a minimum, soil and groundwater samples must be collected from each boring or well. Samples collected must be analyzed for full-suite VOCs, including fuel oxygenates, using EPA Method 8260B and for total petroleum hydrocarbons/diesel-range and gasoline-range organics (TPH/DRO and TPH/GRO) using EPA Method 8015B.

(4) At this time, the Department does not approve the discontinuance of groundwater sampling from select monitoring wells and tank field monitoring pipes, as requested in the proposed *Work Plan for Supplemental Site Assessment Activities - May 13, 2011.*

(5) Continue to monitor the groundwater on a quarterly basis (**every three months**) for full-suite VOCs, including fuel oxygenates, using EPA Method 8260 and for TPH/DRO and TPH/GRO using EPA Method 8015B.

(6) The Department requires quarterly (**every three months**) sampling of the GAC filtration system (pre-, mid- and post-filtration) at 1825 Perryville Road and continued quarterly monitoring of the drinking water supply well at 1836 Perryville Road. All samples collected must be analyzed for full-suite VOCs, including fuel oxygenates, using EPA Method 524.2.

Notify the Oil Control Program at least five (5) working days prior to conducting any field activities associated with the *Work Plan.* If you have any questions, please contact the case manager, Chad Widney, at 410-537-3386 (email: cwidney@mde.state.md.us) or me at 410-537-3499 (email: sbull@mde.state.md.us).

Sincerely,

Susan R. Bull, Eastern Region Section Head
Remediation and State-Lead Division
Oil Control Program

CW/nln

cc: Feazell Property Mgmt. II, LLC (1825 Perryville Road)
Ms. Shiela B. Anderson (1836 Perryville Road)
Ms. Denise Breder (Town of Perryville)
Ms. Natalie Morales Hendricks (Kleinfelder East, Inc.)
Mr. Charles Smyser (Cecil County Health Dept.)
Mr. Christopher H. Ralston

Appendix B

Tank and Line Compliance Testing Results

CERTIFICATE OF UNDER GROUND STORAGE TANK SYSTEM TESTING

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Phone: (610) 278-7203
Fax: (610) 278-7621

Work Order #251056	Client Information	Location #20025
Date: Thu Feb 4th, 2010 **Reason:** Compliance	FM Facility Maintenance(Accounts Payable(Compliance)) **Invoice #**252271 **Permit#** **P.O.#**49955374	Exxon Service Station 31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000 **County:** Cecil **State ID:** 0001190 **VR Air Quality #** 0150155

Testing was conducted in accordance with all applicable portions of Federal, NFPA, and local regulations.

Vapor Recovery - Stage II

Test	Result
Air to Liquid Ratio	Fail
Pressure Decay	Pass

Leak Detectors

Equip #	Grade	Test	Result
001	Regular	Leak Detector	Pass
003	Supreme	Leak Detector	Pass
002	Plus	Leak Detector	Pass
004	Diesel	Leak Detector	Pass

UST Monitor

Test	Result
UST Monitor Inspection	Pass

Miscellaneous Inspections

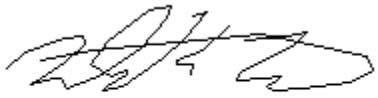
Test	Result
Enhanced LD: Tank Top	Pass
Shear Valve	Pass

Containment

Equip #	Grade	Test	Result
1/2	MPD	Enhanced LD: Containment - Dispenser Pan (Shallow)	Completed
004	Diesel	Enhanced LD: Spill Bucket	Completed
003	Supreme	Enhanced LD: Spill Bucket	Completed
002	Plus	Enhanced LD: Spill Bucket	Completed
001	Regular	Enhanced LD: Spill Bucket	Completed
004	Diesel	Enhanced LD: Sump - STP (2 Piece)	Completed
003	Supreme	Enhanced LD: Sump - STP (2 Piece)	Completed
002	Plus	Enhanced LD: Sump - STP (2 Piece)	Completed
001	Regular	Enhanced LD: Sump - STP (2 Piece)	Completed
13/14	MPD	Enhanced LD: Containment - Dispenser Pan (Shallow)	Completed
11/12	MPD	Enhanced LD: Containment - Dispenser Pan (Shallow)	Completed
9/10	MPD	Enhanced LD: Containment - Dispenser Pan (Shallow)	Completed
		Enhanced LD: Containment	

7/8	**MPD**	**- Dispenser Pan (Shallow)**	**Completed**
5/6	**MPD**	**Enhanced LD: Containment - Dispenser Pan (Shallow)**	**Completed**
3/4	**Diesel**	**Enhanced LD: Containment - Dispenser Pan (Shallow)**	**Completed**
Reg/Dies	**STAGE 1 DRY BREAK**	**Enhanced LD: Containment - Dry Brake**	**Completed**

Comments
-A/L TEST FAILURE DISPENSER 7 AND 8 FUELING POINTS.



Michael Ford
API Worksafe Safety Key #97376533
Veeder Root Certification #B33980
MDE Inspector Certification #MDIC 2008-0056
VMI LDT-890 #2483 and Install/Replace #2482

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon Service Station
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #251056
Thu Feb 4th, 2010

Air / Liquid Test

Check One: ☐ VacuSmart ☐ Roots Meter ☑ TriTester Model 2.96	*****TriTester Model 2.96 ONLY***** **Test equipment passed the bulb test (held vacuum for at least 30 seconds) prior to performing the A/L test.** ☑ Yes ☐ No ☐ N/A **TriTester Serial#:** 0418289 **TriTester Calibration Due Date:** 2010-09-28		
Stage II Manufacturer: Gilbarco / Marconi	**CARB Executive Order:** G-70-150-AE	**Allowable Flow Rate range:** 6 - 10	**Allowable A/L range:** .90 - 1.10, 1.00 - 1.20
Result: ☐ Pass ☑ Fail ☐ Incomplete ☐ Inconclusive	**Failed Fueling Points:** #7 and #8 all grades low vac	**Site-Wide Nozzle Model:** (All, or the majority of the nozzles on site are the make and model listed below. Any deviations will be noted in the results) OPW - 11vai-27	

Fuel Point	Grade	Nozzle Model (if different then the Site-Wide model above)	Flow Rate	A/L Ratio	Result
1	Regular		8.93	1.02	P
1	Plus		6.58	1.19	P
1	Premium		7.50	1.10	P
2	Regular	HUSKY - V34 6250	8.15	1.08	P
2	Plus	OPW - 12vw-0400	8.33	1.01	P
2	Premium	OPW - 12vw-0400	7.98	1.02	P
5	Regular		6.70	1.18	P
5	Plus		8.93	1.19	P
5	Premium		8.72	1.19	P
6	Regular		8.72	1.14	P
6	Plus		8.52	1.20	P
6	Premium		8.93	1.20	P
7	Regular		7.98	0.23	F
7	Plus		8.52	0.80	F
7	Premium		8.15	0.82	F
8	Regular		8.34	0.38	F
8	Plus		7.52	0.90	F
8	Premium		7.81	0.87	F
9	Regular		8.72	1.04	P

9	Plus		9.15	1.00	P
9	Premium		8.53	1.11	P
10	Regular		6.82	1.09	P
10	Plus		9.37	1.01	P
10	Premium		8.72	1.20	P
11	Regular		7.98	1.05	P
11	Plus		7.81	1.03	P
11	Premium		6.52	1.13	P
12	Regular		6.45	1.20	P
12	Plus		8.72	1.20	P
12	Premium		8.93	1.18	P
13	Regular	HUSKY - V34 6250	8.15	1.07	P
13	Plus	Catlow ICVN	8.15	1.01	P
13	Premium	HUSKY - V34 6250	6.58	1.02	P
14	Regular		7.98	1.16	P
14	Plus		6.58	1.20	P
14	Premium		7.65	1.17	P

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon Service Station
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #251056
Thu Feb 4th, 2010

Pressure Decay Test

Result: ☑ Pass ☐ Fail ☐ Inconclusive

System Info

Vapor Recovery Type: ☐ Balance ☑ Vac Assist ☐ Inactive	Manufacturer: Gilbarco / Marconi CARB Executive Order Number: G-70-150-AE Number of Nozzles: 36 Stage 1 Type: Dual Point	Manifolded: ☑ Yes ☐ No

Is swivel/rotatable or locking clamp style equipment installed on all gasoline fill ports? ☑ Yes ☐ No ☐ Unknown	Is swivel/rotatable or locking clamp style equipment installed on all gasoline stage I vapor adapters? ☑ Yes ☐ No ☐ Unknown

					Pressure (in H20)					
Grade	Capacity (gal)	Volume Present (gal)	Ullage (gal)	Init. Pressure (in H20)	1.0 min	2.0 min	3.0 min	4.0 min	5.0 min	Allowable
Regular	11627	5712	5915							
Plus	11627	2289	9338							
Premium	11627	1951	9676							
	34881	9952	24929	2.000	2.00	2.00	2.00	2.00	2.00	1.950

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon Service Station
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #251056
Thu Feb 4th, 2010

Line Leak Detector Test		Line Leak Detector Test	
Leak Detector Number:	001	Leak Detector Number:	003
Grade:	Regular	Grade:	Premium
Dispenser Range:	1/2, 5 - 14	Dispenser Range:	1/2, 5 - 14
Make:	Veeder Root	Make:	Veeder Root
Model:	PLLD	Model:	PLLD
Serial #:	249198	Serial #:	249249
☐ Mechanical	☑ Electronic	☐ Mechanical	☑ Electronic
Test Conducted at Dispenser #:	5/6	Test Conducted at Dispenser #:	5/6
Submersible Pump Operating Pressure (psi):	30	Submersible Pump Operating Pressure (psi):	30
Check Valve Holding Pressure (psi):	20	Check Valve Holding Pressure (psi):	20
Bleedback Check (gal):	.017	Bleedback Check (gal):	.015
Mechanical Line Leak Detector Step-Through Time (seconds): **Note: not applicable for electronic line leak detectors	n/a	Mechanical Line Leak Detector Step-Through Time (seconds): **Note: not applicable for electronic line leak detectors	n/a
During actual testing, when simulated leak is induced . The mechanical line leak detector stays in leak search position or the electronic line leak detector sets off an alarm as required by the manufacturer (Yes = pass), (No = fail):	☑ Yes ☐ No	During actual testing, when simulated leak is induced . The mechanical line leak detector stays in leak search position or the electronic line leak detector sets off an alarm as required by the manufacturer (Yes = pass), (No = fail):	☑ Yes ☐ No
Result: ☑ Pass ☐ Fail ☐ Inconclusive		Result: ☑ Pass ☐ Fail ☐ Inconclusive	
Test is conducted by simulating a calibrated 3.0 GPH at 10 psi leak on the product line.		Test is conducted by simulating a calibrated 3.0 GPH at 10 psi leak on the product line.	

Line Leak Detector Test		Line Leak Detector Test	
Leak Detector Number:	002	Leak Detector Number:	004
Grade:	Plus	Grade:	Diesel
Dispenser Range:	1/2, 5 - 14	Dispenser Range:	3/4
Make:	Veeder Root	Make:	Veeder Root
Model:	PLLD	Model:	PLLD
Serial #:	249213	Serial #:	249195
☐ Mechanical	☑ Electronic	☐ Mechanical	☑ Electronic
Test Conducted at	5/6	Test Conducted at	3/4

Dispenser #:		Dispenser #:	
Submersible Pump Operating Pressure (psi):	30	Submersible Pump Operating Pressure (psi):	28
Check Valve Holding Pressure (psi):	20	Check Valve Holding Pressure (psi):	18
Bleedback Check (gal):	.015	Bleedback Check (gal):	.01
Mechanical Line Leak Detector Step-Through Time (seconds): **Note: not applicable for electronic line leak detectors	n/a	Mechanical Line Leak Detector Step-Through Time (seconds): **Note: not applicable for electronic line leak detectors	n/a
During actual testing, when simulated leak is induced . The mechanical line leak detector stays in leak search position or the electronic line leak detector sets off an alarm as required by the manufacturer (Yes = pass), (No = fail):	☑ Yes ☐ No	During actual testing, when simulated leak is induced . The mechanical line leak detector stays in leak search position or the electronic line leak detector sets off an alarm as required by the manufacturer (Yes = pass), (No = fail):	☑ Yes ☐ No
Result: ☑ Pass ☐ Fail ☐ Inconclusive		Result: ☑ Pass ☐ Fail ☐ Inconclusive	
Test is conducted by simulating a calibrated 3.0 GPH at 10 psi leak on the product line.		Test is conducted by simulating a calibrated 3.0 GPH at 10 psi leak on the product line.	

Crompco, LLC **1815 Gallagher Road** **Plymouth Meeting, PA 19462**	**Exxon Service Station** **Phone:** (610) 278-7203 **FAX:** 610-278-7621	31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000 **State ID:** 0001190	**Facility/Agency Copy** Site #20025 / WO #251056 Thu Feb 4th, 2010

MONITORING SYSTEM CERTIFICATION

This form must be used to document testing and servicing of monitoring equipment. A separate certification or report must be prepared for each monitoring system control panel by the technician who performs the work. A copy of the completed form is to be submitted by the Testing Contractor to Veeder-Root CMS for archiving purposes. If required by applicable law, a copy of the completed form also must be provided by the Testing Contractor to the governing UST agency, tank owner, and tank operator as required by regulation. If not required by regulation, a copy of the completed form is to be submitted only to Veeder-Root CMS for archiving purposes.

A.General Information

Facility Name: Exxon Service Station Bldg. No.: 20025

Site Address: 31 Heather Lane City: Perryville Zip: 21903-0000

Facility Contact Person: Steve Kelley Contact Phone No.: 703-846-5386

Make/Model of Monitoring System: Veeder Root TLS-350 Plus Date of Testing/Servicing: 2010-02-04

B.Inventory of Equipment Tested/Certified

Check the appropriate boxes to indicate specific equipment inspected/serviced.

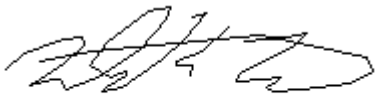
Tank ID: 001 (Regular) ☑ In-Tank Gauging Probe. Model: Magnetostrictive ☑ Annular Space or Vault Sensor. Model: Tri-State ☑ Piping Sump / Trench Sensor(s). Model: SmartSensor ☐ Fill Sump Sensor(s). Model: ☐ Mechanical Line Leak Detector. Model: ☑ Electronic Line Leak Detector. Model: PLLD ☐ Tank Overfill / High-Level Sensor. Model: ☐ Other (specify equipment type and model in Section E).	**Tank ID: 002 (Plus)** ☑ In-Tank Gauging Probe. Model: Magnetostrictive ☑ Annular Space or Vault Sensor. Model: Tri-State ☑ Piping Sump / Trench Sensor(s). Model: SmartSensor ☐ Fill Sump Sensor(s). Model: ☐ Mechanical Line Leak Detector. Model: ☑ Electronic Line Leak Detector. Model: PLLD ☐ Tank Overfill / High-Level Sensor. Model: ☐ Other (specify equipment type and model in Section E).
Tank ID: 003 (Premium) ☑ In-Tank Gauging Probe. Model: Magnetostrictive ☑ Annular Space or Vault Sensor. Model: Tri-State ☑ Piping Sump / Trench Sensor(s). Model: SmartSensor ☐ Fill Sump Sensor(s). Model: ☐ Mechanical Line Leak Detector. Model: ☑ Electronic Line Leak Detector. Model: PLLD ☐ Tank Overfill / High-Level Sensor. Model: ☐ Other (specify equipment type and model in Section E).	**Tank ID: 004 (Diesel)** ☑ In-Tank Gauging Probe. Model: Magnetostrictive ☑ Annular Space or Vault Sensor. Model: Tri-State ☑ Piping Sump / Trench Sensor(s). Model: SmartSensor ☐ Fill Sump Sensor(s). Model: ☐ Mechanical Line Leak Detector. Model: ☑ Electronic Line Leak Detector. Model: PLLD ☐ Tank Overfill / High-Level Sensor. Model: ☐ Other (specify equipment type and model in Section E).
Dispenser ID: 1/2 (MPD) ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).	**Dispenser ID: 3/4 (Diesel)** ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).
Dispenser ID: 5/6 (MPD) ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).	**Dispenser ID: 7/8 (MPD)** ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).
Dispenser ID: 9/10 (MPD) ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s).	**Dispenser ID: 9/10 (MPD)** ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s).

☐ Dispenser Containment Float(s) and Chain(s).	☐ Dispenser Containment Float(s) and Chain(s).
Dispenser ID: 11/12 (MPD) ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).	**Dispenser ID: 13/14 (MPD)** ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).

C.Certification - I certify that the equipment identified in this document was inspected/serviced in accordance with the manufacturers. guidelines. Attached to this Certification is information (e.g. manufacturers' checklists) to verify that this information is correct and a Plot Plan showing the layout of monitoring equipment. For any equipment capable of generating such reports, I have also attached a copy of the report; (check all that apply):
☑ System set-up ☑ Alarm history report

Technician Name (print):
Michael Ford
Certification No.:Veeder Root Certification #B33980
Testing Company Name: Crompco Corporation Phone No.: 610-278-7203
Site Address: 1815 Gallagher Road, Plymouth Meeting, PA 19462
Date of Testing/Servicing: Thu Feb 4th, 2010

Signature:



D. Results of Testing/Servicing
Software Version Installed:

Complete the following checklist:

Yes	Is the audible alarm operational?
Yes	Is the visual alarm operational?
Yes	Were all sensors visually inspected, functionally tested, and confirmed operational?
Yes	Were all sensors installed at lowest point of secondary containment and positioned so that other equipment will not interfere with their proper operation?
Yes	If alarms are relayed to a remote monitoring station, is all communications equipment (e.g. modem) operational?
Yes	For pressurized piping systems, does the turbine automatically shut down if the piping secondary containment monitoring system detects a leak, fails to operate, or is electrically disconnected? If yes: which sensors initiate positive shut-down? (Check all that apply) ☑ Sump/Trench Sensors; ☑ Dispenser Containment Sensors. Did you confirm positive shut-down due to leaks and sensor failure/disconnection? ☑ Yes; ☐ No; ☐ N/A.
N/A	For tank systems that utilize the monitoring system as the primary tank overfill warning device (i.e. no mechanical overfill prevention valve is installed), is the overfill warning alarm visible and audible at the tank fill point(s) and operating properly? If so, at what percent of tank capacity does the alarm trigger? %
Yes	Was any monitoring equipment replaced? If yes, identify specific sensors, probes, or other equipment replaced and list the manufacturer name and model for all replacement parts in Section E, below.
No	Was liquid found inside any secondary containment systems designed as dry systems? (Check all that apply) ☐ Product; ☐ Water If yes, describe causes in Section E, below.
Yes	Was monitoring system set-up reviewed to ensure proper settings? Attach set up reports, if applicable.
Yes	Is all monitoring equipment operational per manufacturer's specifications?

E. Comments

F. In-Tank Gauging / SIR Equipment:
☐ Check this box if tank gauging is used only for inventory control.
☐ Check this box if no tank gauging or SIR equipment is installed.
This section must be completed if in-tank gauging equipment is used to perform leak detection monitoring.

Complete the following checklist:

N/A	Has all input wiring been inspected for proper entry and termination, including testing for ground faults?
Yes	Were all tank gauging probes visually inspected for damage and residue buildup?
Yes	Was accuracy of system product level readings tested?
Yes	Was accuracy of system water level readings tested?
Yes	Were all probes reinstalled properly?
Yes	Were all items on the equipment manufacturer's maintenance checklist completed?

* In the Section H, below, describe how and when these deficiencies were or will be corrected.

G.Line Leak Detectors (LLD):

☐ Check this box if LLDs are not installed.

Complete the following checklist:

Yes	For equipment start-up or annual equipment certification, was a leak simulated to verify LLD performance? (Check all that apply) Simulated leak rate: ☑ 3 g.p.h.; ☐ 0.2 g.p.h.; ☐ 0.1 g.p.h.
Yes	Were all LLDs confirmed operational and accurate within regulatory requirements?
Yes	Was the testing apparatus properly calibrated?
N/A	For mechanical LLDs, does the LLD restrict product flow if it detects a leak?
Yes	For electronic LLDs, does the turbine automatically shut off if the LLD detects a leak?
N/A	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system is disabled or disconnected?
N/A	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system malfunctions or fails a test?
Yes	For electronic LLDs, have all accessible wiring connections been visually inspected?
Yes	Were all items on the equipment manufacturer's maintenance checklist completed?

* In the Section H, below, describe how and when these deficiencies were or will be corrected.

H. Comments:

Did overall monitor system testing pass?
Pass

Crompco, LLC **1815 Gallagher Road** **Plymouth Meeting, PA 19462**	**Exxon Service Station** **Phone:** (610) 278-7203 **FAX:** 610-278-7621	31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000 **State ID:** 0001190	**Facility/Agency Copy** Site #20025 / WO #251056 Thu Feb 4th, 2010

Enhanced LD: Tank Tops

Date and Time of last fuel delivery: 2/3/10 am	**Total Tank Ullage (in gallons):** 24929
Corrections made prior to and during standard MD pressure decay test *(CARB TP-201.3)* Tightened all Jack Screw kits	
After pressurizing the system to 1.0" water column, it has been confirmed that helium is present in all areas to be tested. ☑ Yes ☐ No	
Location and reading (in ppm) of any helium leaks at 1.0" water column pressure and repairs made: none	**Location and reading (in ppm) of any helium leaks at 5.0" water column pressure and repairs made:** none
Starting Pressure: 5.0" water column **Pressure (inches of water column) after 10 minutes:** 5	
Result: P	

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon Service Station
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #251056
Thu Feb 4th, 2010

Dispenser Shear Valve Inspection

Overall Result: P			
Gasoline Shear Valves that do not operate properly:			
Gasoline Shear Valves that are not installed/mounted properly:			
Dispenser #	Product	Operating Properly	Installed/Mounted Properly
1/2	Regular	Yes	Yes
1/2	Plus	Yes	Yes
1/2	Premium	Yes	Yes
1/2	Vapor Shear Valve	N/A	Yes
3/4	Diesel	Yes	Yes
5/6	Regular	Yes	Yes
5/6	Plus	Yes	Yes
5/6	Premium	Yes	Yes
5/6	Vapor Shear Valve	N/A	Yes
7/8	Regular	Yes	Yes
7/8	Plus	Yes	Yes
7/8	Premium	Yes	Yes
7/8	Vapor Shear Valve	N/A	Yes
9/10	Regular	Yes	Yes
9/10	Plus	Yes	Yes
9/10	Premium	Yes	Yes
9/10	Vapor Shear Valve	N/A	Yes
11/12	Regular	Yes	Yes
11/12	Plus	Yes	Yes
11/12	Premium	Yes	Yes
11/12	Vapor Shear Valve	N/A	Yes
13/14	Regular	Yes	Yes
13/14	Plus	Yes	Yes
13/14	Premium	Yes	Yes
13/14	Vapor Shear Valve	N/A	Yes

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon Service Station
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #251056
Thu Feb 4th, 2010

Enhanced LD: Containment

Equipment Number:	**Grade:**	**Containment Type:**	**Containment Manufacturer:**	**Dry Break Location (if applicable):**
1/2	MPD	Containment - Dispenser Pan (Shallow)	Environ (green)	N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number:	**Grade:**	**Containment Type:**	**Containment Manufacturer:**	**Dry Break Location (if applicable):**
004	Diesel	Spill Bucket	OPW 5 gallon	N/A
Is there water or gas present? ☑ Yes ☐ No		**Is it dry?** ☐ Yes ☑ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number:	**Grade:**	**Containment Type:**	**Containment Manufacturer:**	**Dry Break Location (if applicable):**
003	Premium	Spill Bucket	OPW 5 gallon	N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number:	**Grade:**	**Containment Type:**	**Containment Manufacturer:**	**Dry Break Location (if applicable):**
002	Plus	Spill Bucket	OPW 5 gallon	N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number:	**Grade:**	**Containment Type:**	**Containment Manufacturer:**	**Dry Break Location (if applicable):**
001	Regular	Spill Bucket	OPW 5 gallon	N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number:	**Grade:**	**Containment Type:**	**Containment Manufacturer:**	**Dry Break Location (if applicable):**
004	Diesel	Sump - STP (2 Piece)	Environ (green)	N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number: 003	**Grade:** Premium	**Containment Type:** Sump - STP (2 Piece)	**Containment Manufacturer:** Environ (green)	**Dry Break Location (if applicable):** N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon Service Station
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #251056
Thu Feb 4th, 2010

Enhanced LD: Containment

Equipment Number: 002	**Grade:** Plus	**Containment Type:** Sump - STP (2 Piece)	**Containment Manufacturer:** Environ (green)	**Dry Break Location (if applicable):** N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number: 001	**Grade:** Regular	**Containment Type:** Sump - STP (2 Piece)	**Containment Manufacturer:** Environ (green)	**Dry Break Location (if applicable):** N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number: 13/14	**Grade:** MPD	**Containment Type:** Containment - Dispenser Pan (Shallow)	**Containment Manufacturer:** Environ (green)	**Dry Break Location (if applicable):** N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number: 11/12	**Grade:** MPD	**Containment Type:** Containment - Dispenser Pan (Shallow)	**Containment Manufacturer:** Environ (green)	**Dry Break Location (if applicable):** N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number: 9/10	**Grade:** MPD	**Containment Type:** Containment - Dispenser Pan (Shallow)	**Containment Manufacturer:** Environ (green)	**Dry Break Location (if applicable):** N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number: 7/8	**Grade:** MPD	**Containment Type:** Containment - Dispenser Pan (Shallow)	**Containment Manufacturer:** Environ (green)	**Dry Break Location (if applicable):** N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number: 5/6	**Grade:** MPD	**Containment Type:** Containment - Dispenser Pan (Shallow)	**Containment Manufacturer:** Environ (green)	**Dry Break Location (if applicable):** N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Crompco, LLC **1815 Gallagher Road** **Plymouth Meeting, PA 19462**	**Exxon Service Station** **Phone:** (610) 278-7203 **FAX:** 610-278-7621	31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000 **State ID:** 0001190	**Facility/Agency Copy** Site #20025 / WO #251056 Thu Feb 4th, 2010

Enhanced LD: Containment

Equipment Number:	**Grade:**	**Containment Type:**	**Containment Manufacturer:**	**Dry Break Location (if applicable):**
3/4	Diesel	Containment - Dispenser Pan (Shallow)	Environ (green)	N/A
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Enhanced LD: Containment

Equipment Number:	**Grade:**	**Containment Type:**	**Containment Manufacturer:**	**Dry Break Location (if applicable):**
Reg/Dies	STAGE 1 DRY BREAK	Containment - Dry Brake	OPW 5 gallon	Reg/Dies
Is there water or gas present? ☐ Yes ☑ No		**Is it dry?** ☑ Yes ☐ No	**Is it broken?** ☐ Yes ☑ No	

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon Service Station
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #251056
Thu Feb 4th, 2010

Site Diagram Labels

1: Tank - Diesel

2: Block - Exxon Shop

3: Dispenser - MPD 11/12

4: Road - Route 275

5: Dispenser - MPD 5/6 all d/pans discriminating

6: Tank - Plus

7: Dispenser - Diesel 3/4

8: Dispenser - MPD 7/8

9: Dispenser - MPD 9/10

10: Tank - Premium 002 12000 all sumps smart sensors

11: Dispenser - MPD 13/14

12: Tank - Regular

13: Well - MP-1

14: Well - MP-2

15: Well - MP-3

16: Road - Heather Lane

17: Dispenser - MPD 1/2

18: Vent - all tanks dry o/w mag probe and plld

IMPORTANT LEGAL DOCUMENTS

February 23rd, 2010

Exxon Service Station #20025
31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000

Re:
2010 Compliance Test Results
Crompco Work Order #251056
Test Performed on Thu Feb 4th, 2010

Dear Manager (Facility #20025):

Enclosed are the 2010 Compliance Test Results for testing performed by Crompco for Exxon/Mobil. These test results are **important legal documents** that are required to be retained at your facility in the "Environmental Compliance Binder" in case an inspection would occur by a state or local agency. Upon receipt, please put the results in the binder as requested by Exxon/Mobil.

The 2010 compliance tests performed at your facility are indicated below. For specific testing detail, please refer to the enclosed test report.

	Tank(s)
X	Line(s) and/or Leak Detector(s)
	Cathodic Protection
X	Monitor Inspection
X	Vapor Recovery
X	Other (See Report for Details)

If you should have any questions regarding the test results enclosed, please contact Crompco at 1-800-646-3161.

Sincerely,

Francyne Klein
Compliance Administrator

cc: ExxonMobil Houston Records Center

CROMPCO

TEST RESULTS

February 23rd, 2010

Mr. Scott Thompson
Maryland Department of the Environment
Air Quality Compliance Program
Montgomery Park Business Center
1800 Washington Boulevard, Suite 715
Baltimore, MD 21230-1720

Re: Test Results

Dear Mr. Thompson:

Enclosed are copies of the test results performed by Crompco at the location(s) listed below. These results are being submitted to you in accordance with the Maryland Department of the Environment Air Quality Regulations. Copies of the test results were also sent to the facility to be retained at the location in case an inspection would occur by a state or local agency.

Facility #	Address	Test Date	Work Order #
20025	31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000	Thu Feb 4th, 2010	251056

If you should have any questions regarding the test results enclosed, please contact Crompco at 1-800-646-3161.

Sincerely,

Francyne Klein

Francyne Klein
Compliance Administrator

MARYLAND
Stage II Testing Results Summary Page

Facility Information

Facility Number: 20025 ARMA Premise Number: 0150155

Address: 31 Heather Lane, Perryville, MD 21903-0000

Contact: Title: Operator Phone:

Other Contact Information

Name: Cory Sackett Title: M&R - UST Compliance Manager

Address: 8280 Willow Oaks Corporate Drive, RM 7w913, Fairfax, VA 22031

Phone: 310-212-4625

Testing Information

Testing Company: Crompco Phone: 1-800-646-3161

Address: 1815 Gallagher Road, Plymouth Meeting, PA 19462

Contact: Sue Hickey Test Conducted By: Michael Ford

Stage II System Type: ARMA Notification Date:

Test	Date	Result	Comments
Air to Liquid Ratio	Thu Feb 4th, 2010	Fail	
Pressure Decay	Thu Feb 4th, 2010	Pass	

CROMPCO

TEST RESULTS

February 23rd, 2010

Rick Lego, Administrator
Maryland Department of the Environment
Oil Control Program
1800 Washington Blvd. Suite 620
Baltimore MD 21230-1719

Test Results - UST Testing

Dear Sir / Madam:

Enclosed are copies of the test results performed by Crompco at the location listed below. On behalf of our customer, these results are being submitted to you in accordance with local regulations. Copies of the test results were also sent to the facility to be retained at the location in case an inspection would occur by a state or local agency.

ID Numbers	Address	Test Date	Crompco Work Order	Test(s) Performed
Location: 20025 UST: 0001190	31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000	Thu Feb 4th, 2010	251056	Enhanced LD: Tank Top Enhanced LD: Containment Leak Detector UST Monitor Inspection Shear Valve

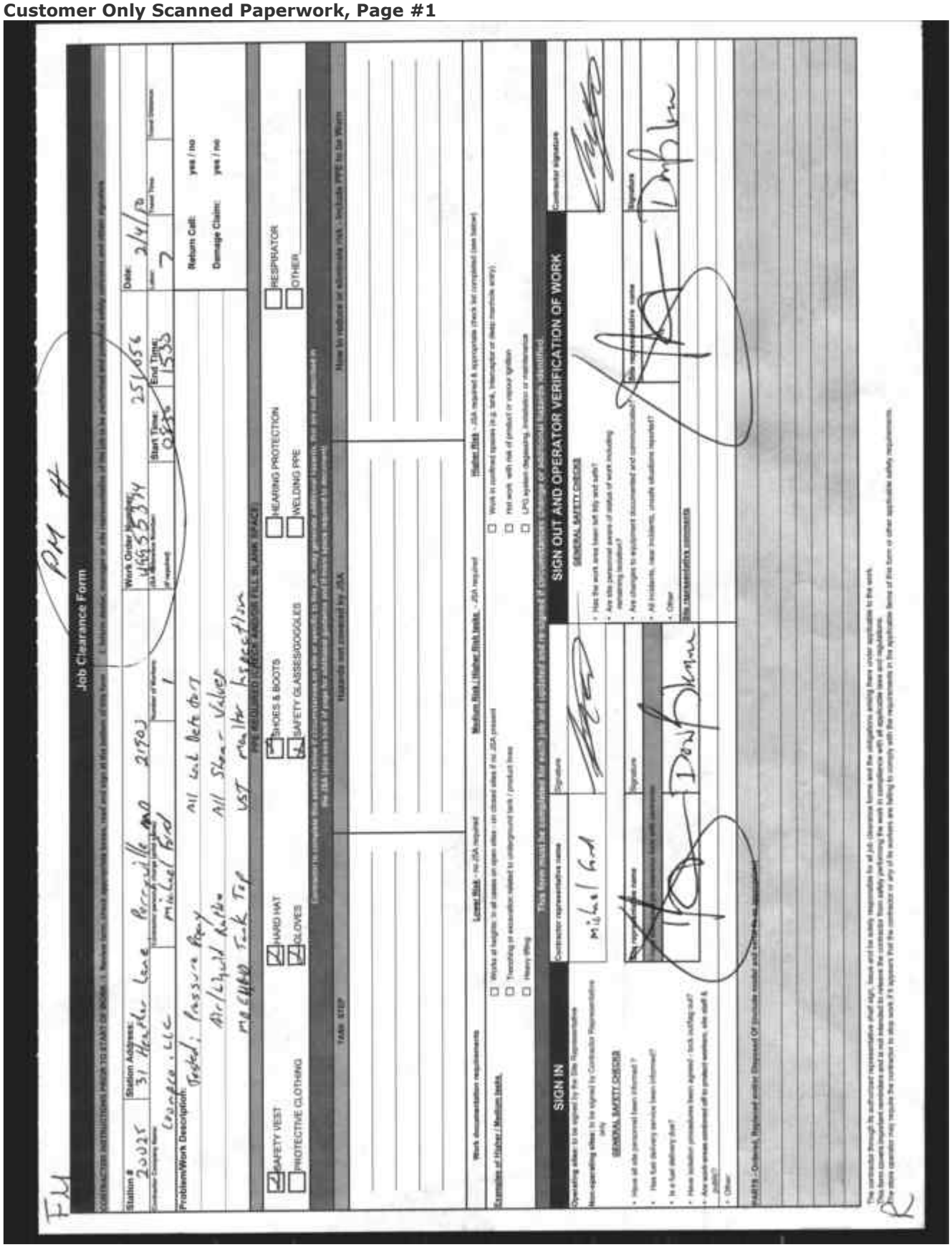
If you should have any questions regarding the tests enclosed, please contact Crompco at 1-800-646-3161.

Sincerely,

Francyne Klein
Compliance Administrator

cc: Exxon-Mobil Records Center

Customer Only Scanned Paperwork, Page #1



St WO 283851, Jan 17th, 2011

CERTIFICATE OF STORAGE TANK SYSTEM TESTING

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Phone: (610) 278-7203
Fax: (610) 278-7621

Work Order #283851	Client Information	Location #20025
Date: Mon Jan 17th, 2011 **Reason:**Compliance	Southside Oil(Marshall Hare) **Invoice #**280995 **Permit#** **P.O.#**	Exxon Service Station 31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000 **County:** Cecil **State ID:** 0001190 **VR Air Quality #** 0150155

Testing was conducted in accordance with all applicable portions of Federal, NFPA, and local regulations.

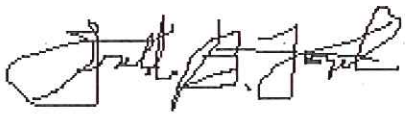
Vapor Recovery - Stage II	
Test	**Result**
Air to Liquid Ratio	**Pass**
Pressure Decay	**Pass**
Pressure/Vacuum Valve	**Pass**

Leak Detectors			
Equip #	**Grade**	**Test**	**Result**
001	Regular	Leak Detector	Pass
002	Plus	Leak Detector	Pass
003	Supreme	Leak Detector	Pass
004	Diesel	Leak Detector	Pass

UST Monitor	
Test	**Result**
UST Monitor Inspection	**Pass**

Miscellaneous Inspections	
Test	**Result**
Shear Valve	**Fail**

Additional Costs
PARTS: Jack Screw Kit, Vent P/V Valve, Gasket / O-Ring, Cap **EXPENSES: COMPLIANCE MANAGEMENT FEE**



Gerry Ford
API Worksafe Safety Key# 99630154
Veeder Root Certification# B38035

Brian Hall
API Worksafe Safety Key #93206430
Veeder Root Certification #B37167
VMI LDT-890 #2487 and Install/Replace #2486

St WO 283851, Jan 17th, 2011

Crompco, LLC **1815 Gallagher Road** **Plymouth Meeting, PA 19462**	**Exxon Service Station** **Phone:** (610) 278-7203 **FAX:** 610-278-7621	31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000 **State ID:** 0001190	**Facility/Agency Copy** Site #20025 / WO #283851 Mon Jan 17th, 2011

Air / Liquid Test

Check One: ☐ VacuSmart ☐ Roots Meter ☑ TriTester Model 2.96	***TriTester Model 2.96 ONLY*** **Test equipment passed the bulb test (held vacuum for at least 30 seconds) prior to performing the A/L test.** ☑ Yes ☐ No ☐ N/A **TriTester Serial#:** 0435076 **TriTester Calibration Due Date:** 2011-08-25		
Stage II Manufacturer: Gilbarco / Marconi	**CARB Executive Order:** G-70-150-AE	**Allowable Flow Rate range:** 6 - 10	**Allowable A/L range:** 0.90 - 1.10, 1.00 - 1.20
Result: ☑ Pass ☐ Fail ☐ Incomplete ☐ Inconclusive	**Failed Fueling Points:**	**Site-Wide Nozzle Model:** (All, or the majority of the nozzles on site are the make and model listed below. Any deviations will be noted in the results) OPW - 11vai-27	

Fuel Point	Grade	Nozzle Model (if different then the Site-Wide model above)	Flow Rate	A/L Ratio	Result
1	Regular	OPW - 11vai-27	8.15	1.08	P
1	Plus	OPW - 11vai-27	8.09	1.15	P
1	Supreme	OPW - 11vai-27	7.94	1.00	P
2	Regular	HUSKY - V34 6250	7.45	1.00	P
2	Plus	OPW - 12vw-0400	7.48	1.04	P
2	Supreme	OPW - 12vw-0400	7.00	1.09	P
5	Regular	OPW - 11vai-27	9.33	1.16	P
5	Plus	OPW - 11vai-27	7.18	1.19	P
5	Supreme	OPW - 11vai-27	7.28	1.14	P
6	Regular	OPW - 11vai-27	9.03	1.13	P
6	Plus	OPW - 11vai-27	9.15	1.14	P
6	Supreme	OPW - 11vai-27	9.03	1.18	P
7	Regular	OPW - 11vai-27	8.03	1.00	P
7	Plus	OPW - 11vai-27	7.14	1.14	P
7	Supreme	OPW - 11vai-27	7.98	1.16	P
8	Regular	OPW - 11vai-27	7.98	1.00	P
8	Plus	OPW - 11vai-27	9.04	1.19	P
8	Supreme	OPW - 11vai-27	9.03	1.18	P
9	Regular	OPW - 11vai-27	9.03	1.02	P
9	Plus	OPW - 11vai-27	8.15	1.04	P
9	Supreme	OPW - 11vai-27	8.15	1.10	P

10	Regular	OPW - 11vai-27	8.15	1.02	P
10	Plus	OPW - 11vai-27	10.00	1.03	P
10	Supreme	OPW - 11vai-27	8.15	1.10	P
11	Regular	Catlow ICVN	8.90	0.90	P
11	Plus	Catlow ICVN	9.04	1.02	P
11	Supreme	Catlow ICVN	8.15	0.96	P
12	Regular	OPW - 11vai-27	7.18	1.14	P
12	Plus	OPW - 11vai-27	6.58	1.10	P
12	Supreme	OPW - 11vai-27	9.03	1.10	P
13	Regular	HUSKY - V34 6250	6.45	1.04	P
13	Plus	Catlow ICVN	7.80	1.07	P
13	Supreme	HUSKY - V34 6250	9.03	1.06	P
14	Regular	OPW - 11vai-27	8.15	1.19	P
14	Plus	OPW - 11vai-27	7.98	1.18	P
14	Supreme	OPW - 11vai-27	8.54	1.20	P

St WO 283851, Jan 17th, 2011

Crompco, LLC **1815 Gallagher Road** **Plymouth Meeting, PA 19462**	**Exxon Service Station** **Phone:** (610) 278-7203 **FAX:** 610-278-7621	31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000 **State ID:** 0001190	**Facility/Agency Copy** Site #20025 / WO #283851 Mon Jan 17th, 2011

Pressure Decay Test

Result: ☑ Pass ☐ Fail ☐ Inconclusive

System Info

Vapor Recovery Type: ☐ Balance ☑ Vac Assist ☐ Inactive	Manufacturer: Gilbarco / Marconi CARB Executive Order Number: G-70-150-AE Number of Nozzles: 36 Stage 1 Type: Dual Point	Manifolded: ☑ Yes ☐ No

Is swivel/rotatable or locking clamp style equipment installed on all gasoline fill ports? ☐ Yes ☐ No ☑ Unknown	Is swivel/rotatable or locking clamp style equipment installed on all gasoline stage I vapor adapters? ☐ Yes ☐ No ☑ Unknown

					Pressure (in H20)					
Grade	Capacity (gal)	Volume Present (gal)	Ullage (gal)	Init. Pressure (in H20)	1.0 min	2.0 min	3.0 min	4.0 min	5.0 min	Allowable
Plus	11627	1572	10055							
Supreme	11627	2270	9357							
Regular	11627	6694	4933							
	34881	10536	24345	2.000	2.00	2.00	2.00	2.00	2.00	1.949

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon Service Station
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #283851
Mon Jan 17th, 2011

Pressure Vacuum Vent Cap Test

Valve #	Grade	Positive Cracking Pressure	Negative Cracking Pressure	Valve Setting	Result	Retest Result
001	N/A	3	-10	2.5" wc - 6.0" wc pressure / 6" - 10" wc vacuum	F	P

St WO 283851, Jan 17th, 2011

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon Service Station
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #283851
Mon Jan 17th, 2011

Line Leak Detector Test		Line Leak Detector Test	
Leak Detector Number:	001	Leak Detector Number:	002
Grade:	Regular	Grade:	Plus
Dispenser Range:	1-2,5-14	Dispenser Range:	1-2,5-14
Make:	Veeder Root	Make:	Veeder Root
Model:	PLLD	Model:	PLLD
Serial #	249198	Serial #	249213
☐ Mechanical	☑ Electronic	☐ Mechanical	☑ Electronic
Equipment Information (where test was conducted):	5/6	Equipment Information (where test was conducted):	5/6
Submersible Pump Operating Pressure (psi):	27	Submersible Pump Operating Pressure (psi):	27
Check Valve Holding Pressure (psi):	18	Check Valve Holding Pressure (psi):	20
Bleedback Check (gal):	.047	Bleedback Check (gal):	.049
During actual testing, when simulated leak is induced . The mechanical line leak detector stays in leak search position or the electronic line leak detector sets off an alarm as required by the manufacturer (Yes = pass), (No = fail):	☑ Yes ☐ No	During actual testing, when simulated leak is induced . The mechanical line leak detector stays in leak search position or the electronic line leak detector sets off an alarm as required by the manufacturer (Yes = pass), (No = fail):	☑ Yes ☐ No
Result: ☑ Pass ☐ Fail ☐ Inconclusive		Result: ☑ Pass ☐ Fail ☐ Inconclusive	
Test is conducted by simulating a calibrated 3.0 GPH at 10 psi leak on the product line.		Test is conducted by simulating a calibrated 3.0 GPH at 10 psi leak on the product line.	

Line Leak Detector Test		Line Leak Detector Test	
Leak Detector Number:	003	Leak Detector Number:	004
Grade:	Supreme	Grade:	Diesel
Dispenser Range:	1-2,5-14	Dispenser Range:	3-4
Make:	Veeder Root	Make:	Veeder Root
Model:	PLLD	Model:	PLLD
Serial #	249249	Serial #	249195
☐ Mechanical	☑ Electronic	☐ Mechanical	☑ Electronic
Equipment Information (where test was conducted):	5/6	Equipment Information (where test was conducted):	3/4
Submersible Pump Operating Pressure (psi):	27	Submersible Pump Operating Pressure (psi):	30
Check Valve Holding Pressure (psi):	20	Check Valve Holding Pressure (psi):	20
Bleedback Check (gal):	.055	Bleedback Check (gal):	.020
During actual testing, when simulated leak is induced . The mechanical line leak detector stays in leak search position or the electronic line leak detector sets off an alarm as required by the manufacturer (Yes = pass), (No = fail):	☑ Yes ☐ No	During actual testing, when simulated leak is induced . The mechanical line leak detector stays in leak search position or the electronic line leak detector sets off an alarm as required by the manufacturer (Yes = pass), (No = fail):	☑ Yes ☐ No
Result: ☑ Pass ☐ Fail ☐ Inconclusive		Result: ☑ Pass ☐ Fail ☐ Inconclusive	
Test is conducted by simulating a calibrated 3.0 GPH at 10 psi leak on the product line.		Test is conducted by simulating a calibrated 3.0 GPH at 10 psi leak on the product line.	

Crompco, LLC **1815 Gallagher Road** **Plymouth Meeting, PA 19462**	**Exxon Service Station** **Phone:** (610) 278-7203 **FAX:** 610-278-7621	31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000 **State ID:** 0001190	**Facility/Agency Copy** Site #20025 / WO #283851 Mon Jan 17th, 2011

MONITORING SYSTEM CERTIFICATION

This form must be used to document testing and servicing of monitoring equipment. A separate certification or report must be prepared for each monitoring system control panel by the technician who performs the work. A copy of this form must be provided to the tank system owner/operator. The owner/operator must submit a copy of this form to the local agency regulating UST systems within 30 days of test date.

A.General Information

Facility Name: Exxon Service Station Bldg. No.: 20025

Site Address: 31 Heather Lane City: Perryville Zip: 21903-0000

Make/Model of Monitoring System: Veeder Root TLS-350 Date of Testing/Servicing: 2011-01-17

B.Inventory of Equipment Tested/Certified

Check the appropriate boxes to indicate specific equipment inspected/serviced.

Tank ID: 001 (Regular) ☑ In-Tank Gauging Probe. Model: Magnetostrictive ☑ Annular Space or Vault Sensor. Model: Tri-State ☑ Piping Sump / Trench Sensor(s). Model: SmartSensor ☐ Fill Sump Sensor(s). Model: ☐ Mechanical Line Leak Detector. Model: ☑ Electronic Line Leak Detector. Model: PLLD ☐ Tank Overfill / High-Level Sensor. Model: ☐ Other (specify equipment type and model in Section E).	**Tank ID: 002 (Plus)** ☑ In-Tank Gauging Probe. Model: Magnetostrictive ☑ Annular Space or Vault Sensor. Model: Tri-State ☑ Piping Sump / Trench Sensor(s). Model: SmartSensor ☐ Fill Sump Sensor(s). Model: ☐ Mechanical Line Leak Detector. Model: ☑ Electronic Line Leak Detector. Model: PLLD ☐ Tank Overfill / High-Level Sensor. Model: ☐ Other (specify equipment type and model in Section E).
Tank ID: 003 (Supreme) ☑ In-Tank Gauging Probe. Model: Magnetostrictive ☑ Annular Space or Vault Sensor. Model: Tri-State ☑ Piping Sump / Trench Sensor(s). Model: SmartSensor ☐ Fill Sump Sensor(s). Model: ☐ Mechanical Line Leak Detector. Model: ☑ Electronic Line Leak Detector. Model: PLLD ☐ Tank Overfill / High-Level Sensor. Model: ☐ Other (specify equipment type and model in Section E).	**Tank ID: 004 (Diesel)** ☑ In-Tank Gauging Probe. Model: Magnetostrictive ☑ Annular Space or Vault Sensor. Model: Tri-State ☑ Piping Sump / Trench Sensor(s). Model: SmartSensor ☐ Fill Sump Sensor(s). Model: ☐ Mechanical Line Leak Detector. Model: ☑ Electronic Line Leak Detector. Model: PLLD ☐ Tank Overfill / High-Level Sensor. Model: ☐ Other (specify equipment type and model in Section E).

Are there dispensers present? ☑ Yes ☐ No

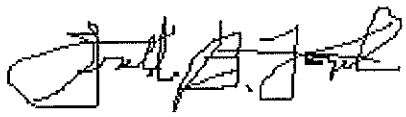
Dispenser ID: 1/2 (MPD) ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).	**Dispenser ID: 3/4 (Diesel)** ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).
Dispenser ID: 5/6 (MPD) ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).	**Dispenser ID: 7/8 (MPD)** ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).
Dispenser ID: 9/10 (MPD) ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).	**Dispenser ID: 11/12 (MPD)** ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).
Dispenser ID: 13/14 (MPD) ☑ Dispenser Containment Sensor(s). Model: Discriminating ☑ Shear Valve(s). ☐ Dispenser Containment Float(s) and Chain(s).	

C.Certification - I certify that the equipment identified in this document was inspected/serviced in accordance with the manufacturers. guidelines. Attached to this Certification is information (e.g. manufacturers' checklists) to verify that this information is correct and a Plot Plan showing the layout of monitoring equipment. For any equipment capable of generating such reports, I have also attached a copy of the report; (check all that apply):

☑ System set-up ☐ Alarm history report

Technician Name (print):
Gerry Ford
Certification No.:Veeder Root Certification# B38035
Testing Company Name: Crompco Corporation Phone No.: 610-278-7203
Site Address: 1815 Gallagher Road, Plymouth Meeting, PA 19462
Date of Testing/Servicing: Mon Jan 17th, 2011

Signature:



D. Results of Testing/Servicing
Software Version Installed:

Complete the following checklist:

Yes	Is the audible alarm operational?
Yes	Is the visual alarm operational?
Yes	Were all sensors visually inspected, functionally tested, and confirmed operational?
Yes	Were all sensors installed at lowest point of secondary containment and positioned so that other equipment will not interfere with their proper operation?
Yes	If alarms are relayed to a remote monitoring station, is all communications equipment (e.g. modem) operational?
Yes	For pressurized piping systems, does the turbine automatically shut down if the piping secondary containment monitoring system detects a leak, fails to operate, or is electrically disconnected? If yes: which sensors initiate positive shut-down? (Check all that apply) ☑ Sump/Trench Sensors; ☑ Dispenser Containment Sensors. Did you confirm positive shut-down due to leaks and sensor failure/disconnection? ☑ Yes; ☐ No; ☐ N/A.
N/A	For tank systems that utilize the monitoring system as the primary tank overfill warning device (i.e. no mechanical overfill prevention valve is installed), is the overfill warning alarm visible and audible at the tank fill point(s) and operating properly? If so, at what percent of tank capacity does the alarm trigger?%
No	Was any monitoring equipment replaced? If yes, identify specific sensors, probes, or other equipment replaced and list the manufacturer name and model for all replacement parts in Section E, below.
No	Was liquid found inside any secondary containment systems designed as dry systems? (Check all that apply) ☐ Product; ☐ Water If yes, describe causes in Section E, below.
Yes	Was monitoring system set-up reviewed to ensure proper settings? Attach set up reports, if applicable.
Yes	Is all monitoring equipment operational per manufacturer's specifications?

E. Comments

F. In-Tank Gauging / SIR Equipment:
☐ Check this box if tank gauging is used only for inventory control.
☐ Check this box if no tank gauging or SIR equipment is installed.
This section must be completed if in-tank gauging equipment is used to perform leak detection monitoring.

Complete the following checklist:

N/A	Has all input wiring been inspected for proper entry and termination, including testing for ground faults?
Yes	Were all tank gauging probes visually inspected for damage and residue buildup?
Yes	Was accuracy of system product level readings tested?
Yes	Was accuracy of system water level readings tested?
Yes	Were all probes reinstalled properly?
Yes	Were all items on the equipment manufacturer's maintenance checklist completed?

* In the Section H, below, describe how and when these deficiencies were or will be corrected.

G.Line Leak Detectors (LLD):
☐ Check this box if LLDs are not installed.
Complete the following checklist:

Yes	For equipment start-up or annual equipment certification, was a leak simulated to verify LLD performance? (Check all that apply) Simulated leak rate: ☑ 3 g.p.h.; ☐ 0.2 g.p.h.; ☐ 0.1 g.p.h.
Yes	Were all LLDs confirmed operational and accurate within regulatory requirements?
Yes	Was the testing apparatus properly calibrated?
N/A	For mechanical LLDs, does the LLD restrict product flow if it detects a leak?
Yes	For electronic LLDs, does the turbine automatically shut off if the LLD detects a leak?
N/A	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system is disabled or disconnected?
N/A	For electronic LLDs, does the turbine automatically shut off if any portion of the monitoring system malfunctions or fails a test?

Yes	For electronic LLDs, have all accessible wiring connections been visually inspected?
Yes	Were all items on the equipment manufacturer's maintenance checklist completed?

* In the Section H, below, describe how and when these deficiencies were or will be corrected.

H. Comments:

Did overall monitor system testing pass?
Pass

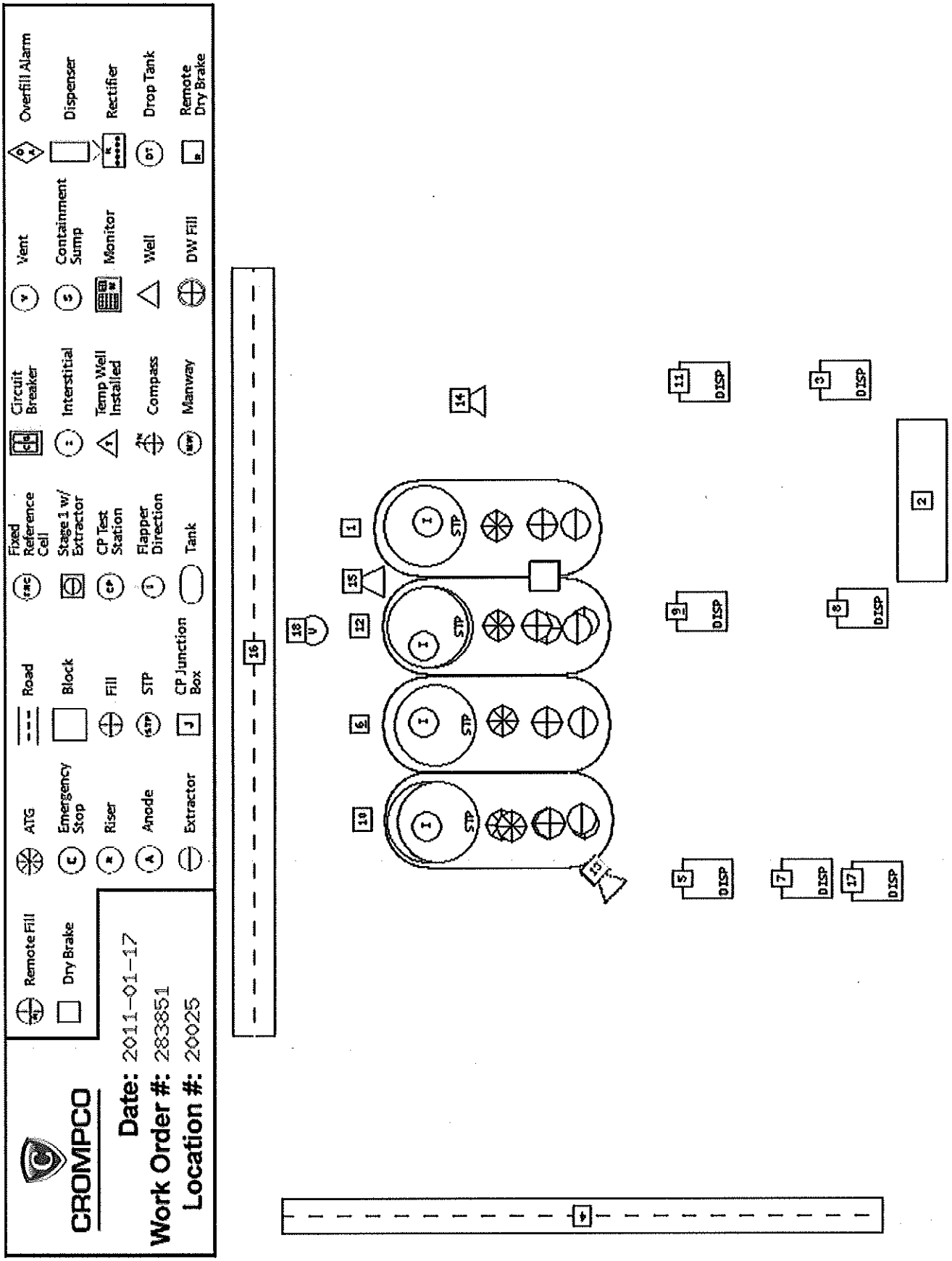
Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon Service Station
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #283851
Mon Jan 17th, 2011

Dispenser Shear Valve Inspection			
Overall Result: F			
Gasoline Shear Valves that do not operate properly: 3/4 Diesel			
Gasoline Shear Valves that are not installed/mounted properly:			
Dispenser #	Product	Operating Properly	Installed/Mounted Properly
1/2	Regular	Yes	Yes
1/2	Plus	Yes	Yes
1/2	Supreme	Yes	Yes
1/2	Vapor Shear Valve	N/A	Yes
3/4	Diesel	No	Yes
5/6	Regular	Yes	Yes
5/6	Plus	Yes	Yes
5/6	Supreme	Yes	Yes
5/6	Vapor Shear Valve	N/A	Yes
7/8	Regular	Yes	Yes
7/8	Plus	Yes	Yes
7/8	Supreme	Yes	Yes
7/8	Vapor Shear Valve	N/A	Yes
9/10	Regular	Yes	Yes
9/10	Plus	Yes	Yes
9/10	Supreme	Yes	Yes
9/10	Vapor Shear Valve	N/A	Yes
11/12	Regular	Yes	Yes
11/12	Plus	Yes	Yes
11/12	Supreme	Yes	Yes
11/12	Vapor Shear Valve	N/A	Yes
13/14	Regular	Yes	Yes
13/14	Plus	Yes	Yes
13/14	Supreme	Yes	Yes
13/14	Vapor Shear Valve	N/A	Yes


CROMPCO
Date: 2011-01-17
Work Order #: 283851
Location #: 20025
Remote Fill
Dry Brake
ATG
Emergency Stop
Riser
Anode
Extractor
Road
Block
Fill
STP
CP Junction Box
Fixed Reference Cell
Stage 1 w/ Extractor
CP Test Station
Flapper Direction
Tank
Circuit Breaker
Interstitial
Temp Well Installed
Compass
Manway
Vent
Containment Sump
Monitor
Well
DW Fill
Overfill Alarm
Dispenser
Rectifier
Drop Tank
Remote Dry Brake
STP
DISP

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon Service Station
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #283851
Mon Jan 17th, 2011

Site Diagram Labels

1: Tank - Diesel

2: Block - Exxon Shop

3: Dispenser - MPD 11/12

4: Road - Route 275

5: Dispenser - MPD 5/6 all d/pans discriminating

6: Tank - Plus

7: Dispenser - Diesel 3/4

8: Dispenser - MPD 7/8

9: Dispenser - MPD 9/10

10: Tank - Premium 002 12000 all sumps smart sensors

11: Dispenser - MPD 13/14

12: Tank - Regular

13: Well - MP-1

14: Well - MP-2

15: Well - MP-3

16: Road - Heather Lane

17: Dispenser - MPD 1/2

18: Vent - all tanks dry o/w mag probe and plld

CROMPCO

IMPORTANT LEGAL DOCUMENTS

January 27th, 2011

Exxon Service Station #20025
31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000

Re:
2011 Compliance Test Results
Crompco Work Order #283851
Test Performed on Mon Jan 17th, 2011

Dear Manager (Facility #20025):

Enclosed are the 2011 Compliance Test Results for testing performed by Crompco for Southside Oil. These test results are **important legal documents** that are required to be retained at your facility in the "Environmental Compliance Binder" in case an inspection would occur by a state or local agency. Upon receipt, please put the results in the binder as requested by Southside Oil.

The 2011 compliance tests performed at your facility are indicated below. For specific testing detail, please refer to the enclosed test report.

	Tank(s)
X	Line(s) and/or Leak Detector(s)
	Cathodic Protection
X	Monitor Inspection
X	Vapor Recovery
X	Other (See Report for Details)

If you should have any questions regarding the test results enclosed, please contact Crompco at 1-800-646-3161.

Sincerely,

Francyne Klein

Francyne Klein
Compliance Administrator

CROMPCO

TEST RESULTS

January 27th, 2011

Mr. Scott Thompson
Maryland Department of the Environment
Air Quality Compliance Program
Montgomery Park Business Center

St WO 283851, Jan 17th, 2011

1800 Washington Boulevard, Suite 715
Baltimore, MD 21230-1720

Re: Test Results

Dear Mr. Thompson:

Enclosed are copies of the test results performed by Crompco at the location(s) listed below. These results are being submitted to you in accordance with the Maryland Department of the Environment Air Quality Regulations. Copies of the test results were also sent to the facility to be retained at the location in case an inspection would occur by a state or local agency.

Facility #	Address	Test Date	Work Order #
20025	31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000	Mon Jan 17th, 2011	283851

If you should have any questions regarding the test results enclosed, please contact Crompco at 1-800-646-3161.

Sincerely,

Francyne Klein
Compliance Administrator

MARYLAND
Stage II Testing Results Summary Page

Facility Information

Facility Number: 20025 ARMA Premise Number: 0150155

Address: 31 Heather Lane, Perryville, MD 21903-0000

Contact: Title: Operator Phone:

Other Contact Information

Name: Marshall Hare Title:

Address: 1011 Boulder Springs Drive, Richmond, VA 23225

CERTIFICATE OF STORAGE TANK SYSTEM TESTING

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Phone: (610) 278-7203
Fax: (610) 278-7621

Work Order #291452	Client Information	Location #20025
Date: Thu Mar 31st, 2011 **Reason:**Compliance Retest **Compliance:**Yes	Mid-Atlantic Convenience Stores, LLC(Marshall Hare) **Invoice** #299324 **Permit#** **P.O.#**	Mid-Atlantic Convenience Stores, LLC Pilot Travel Centers, LLC 31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000 **County:** Cecil **State ID:** 0001190 **VR Air Quality #** 0150155

Testing was conducted in accordance with all applicable portions of Federal, NFPA, and local regulations.

Miscellaneous Inspections	
Test	**Result**
Shear Valve	**Pass**

Comments
Retested Diesel shear valve disp.#3/4

Bob Bower
API Worksafe Safety Key# 17641807

Jon Dunning
API Worksafe Safety Key# 68333387

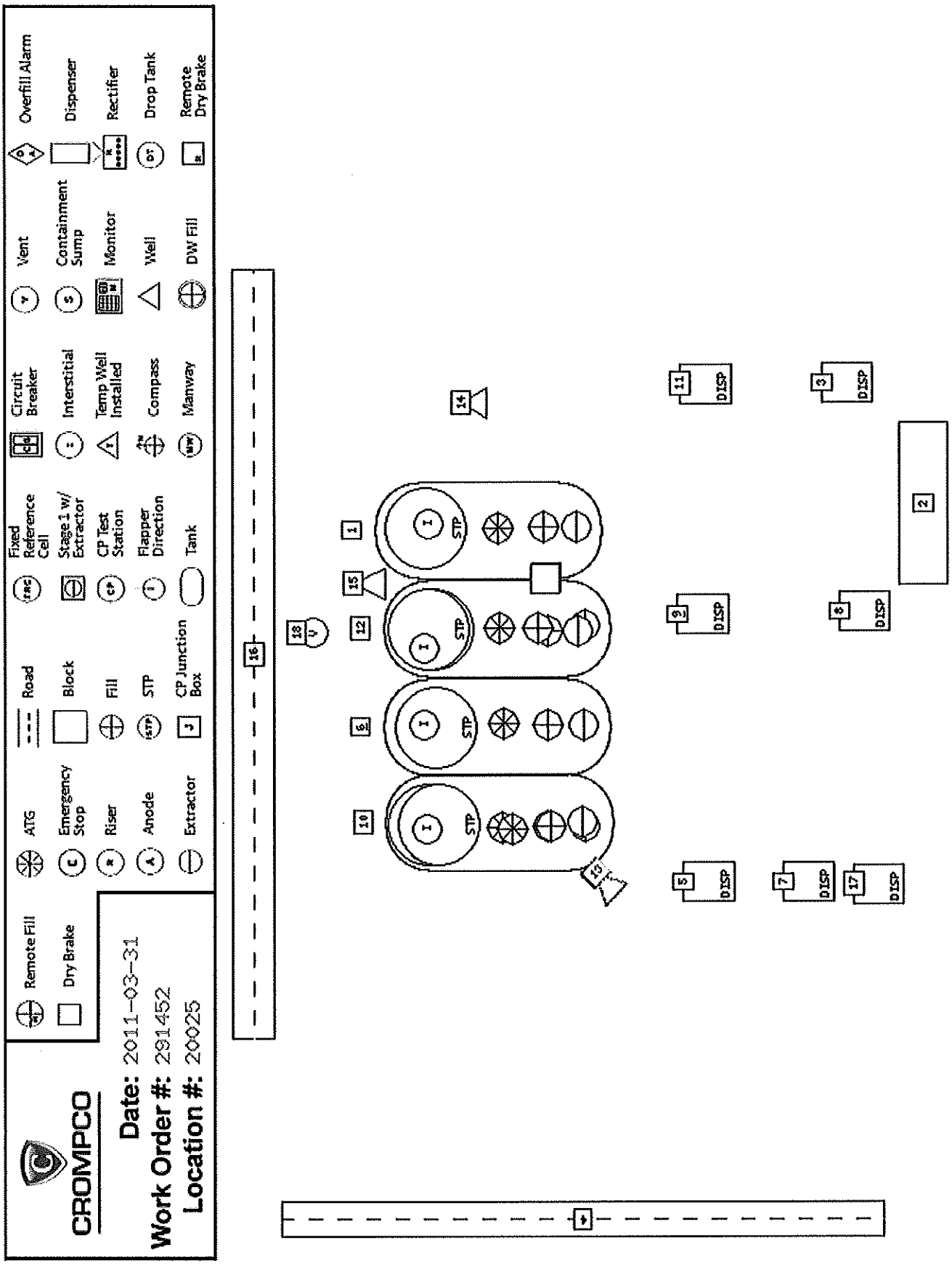
Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Pilot Travel Centers, LLC
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #291452
Thu Mar 31st, 2011

Dispenser Shear Valve Inspection			
Overall Result: P			
Gasoline Shear Valves that do not operate properly:			
Gasoline Shear Valves that are not installed/mounted properly:			
Dispenser #	Product	Operating Properly	Installed/Mounted Properly
3/4	Diesel	Yes	Yes


CROMPCO
Date: 2011-03-31
Work Order #: 291452
Location #: 20025
Remote Fill
Dry Brake
ATG
Emergency Stop
Riser
Anode
Extractor
Road
Block
Fill
STP
CP Junction Box
Fixed Reference Cell
Stage 1 w/ Extractor
CP Test Station
Flapper Direction
Tank
Circuit Breaker
Interstitial
Temp Well Installed
Compass
Manway
Vent
Containment Sump
Monitor
Well
DW Fill
Overfill Alarm
Dispenser
Rectifier
Drop Tank
Remote Dry Brake
STP
DISP

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Pilot Travel Centers, LLC
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #291452
Thu Mar 31st, 2011

Site Diagram Labels

1: Tank - Diesel

2: Block - Exxon Shop

3: Dispenser - MPD 11/12

4: Road - Route 275

5: Dispenser - MPD 5/6 all d/pans discriminating

6: Tank - Plus

7: Dispenser - Diesel 3/4

8: Dispenser - MPD 7/8

9: Dispenser - MPD 9/10

10: Tank - Premium 002 12000 all sumps smart sensors

11: Dispenser - MPD 13/14

12: Tank - Regular

13: Well - MP-1

14: Well - MP-2

15: Well - MP-3

16: Road - Heather Lane

17: Dispenser - MPD 1/2

18: Vent - all tanks dry o/w mag probe and plld

CROMPCO

IMPORTANT LEGAL DOCUMENTS

April 8th, 2011

Pilot Travel Centers, LLC #20025
31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000

Re:
2011 Compliance Test Results
Crompco Work Order #291452
Test Performed on Thu Mar 31st, 2011

Dear Manager (Facility #20025):

Enclosed are the 2011 Compliance Test Results for testing performed by Crompco for Mid-Atlantic Convenience Stores, LLC. These test results are **important legal documents** that are required to be retained at your facility in the "Environmental Compliance Binder" in case an inspection would occur by a state or local agency. Upon receipt, please put the results in the binder as requested by Mid-Atlantic Convenience Stores, LLC.

The 2011 compliance tests performed at your facility are indicated below. For specific testing detail, please refer to the enclosed test report.

	Tank(s)
	Line(s) and/or Leak Detector(s)
	Cathodic Protection
	Monitor Inspection
	Vapor Recovery
X	Other (See Report for Details)

If you should have any questions regarding the test results enclosed, please contact Crompco at 1-800-646-3161.

Sincerely,

Francyne Klein
Compliance Administrator

CROMPCO

TEST RESULTS

April 8th, 2011

Rick Lego, Administrator
Maryland Department of the Environment
Oil Control Program
1800 Washington Blvd. Suite 620

St WO 291452, Mar 31st, 2011

Baltimore MD 21230-1719

Test Results - UST Testing

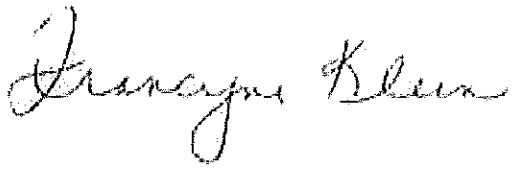
Dear Sir / Madam:

Enclosed are copies of the test results performed by Crompco at the location listed below. On behalf of our customer, these results are being submitted to you in accordance with local regulations. Copies of the test results were also sent to the facility to be retained at the location in case an inspection would occur by a state or local agency.

ID Numbers	Address	Test Date	Crompco Work Order	Test(s) Performed
Location: 20025 UST: 0001190	31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000	Thu Mar 31st, 2011	291452	Shear Valve

If you should have any questions regarding the tests enclosed, please contact Crompco at 1-800-646-3161.

Sincerely,



Francyne Klein
Compliance Administrator

CERTIFICATE OF STORAGE TANK SYSTEM TESTING

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Phone: (610) 278-7203
Fax: (610) 278-7621

Work Order #294402	Client Information	Location #20025
Date: Mon May 16th, 2011 **Reason:**Compliance	Mid-Atlantic Convenience Stores, LLC(Marshall Hare) **Invoice #**302716 **Permit#** **P.O.#**	Southside Oil, LLC Exxon 31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000 **County:** Cecil **State ID:** 0001190 **VR Air Quality #** 0150155

Testing was conducted in accordance with all applicable portions of Federal, NFPA, and local regulations.

Containment			
Equip #	**Grade**	**Test**	**Result**
003	Supreme	Spill Bucket	Pass
002	Plus	Spill Bucket	Pass
Reg/Dies	Stage 1 Dry Break	Spill Bucket - Dry Break	Pass
001	Regular	Spill Bucket	Pass
004	Diesel	Spill Bucket	Pass

Airam Ortiz

Mike Simmons

St WO 294402, May 16th, 2011

Crompco, LLC **1815 Gallagher Road** **Plymouth Meeting, PA 19462**	**Exxon** **Phone:** (610) 278-7203 **FAX:** 610-278-7621	31 Heather Lane I-95 & Rt 222 Perryville, MD 21903-0000 **State ID:** 0001190	**Facility/Agency Copy** Site #20025 / WO #294402 Mon May 16th, 2011

Secondary Containment Test

Containment Type:	Dry Break Location:	Manufacturer:	Equip # / Location:
Spill Bucket	N/A	OPW 5 gallon	003

Method:	Grade:	Result:	Start Time:	Start Date:	Start Level (inches):	Start Pressure (inches w.c.)
☑ Hydro ☐ Vacuum ☐ Caldwell ☐ Pressure	Supreme	P	13:59 End Time: 14:59	2011-05-16 End Date: 2011-05-16	12 End Level (inches): 12	0 End Pressure (inches w.c.) 0

Secondary Containment Test

Containment Type:	Dry Break Location:	Manufacturer:	Equip # / Location:
Spill Bucket	N/A	OPW 5 gallon	002

Method:	Grade:	Result:	Start Time:	Start Date:	Start Level (inches):	Start Pressure (inches w.c.)
☑ Hydro ☐ Vacuum ☐ Caldwell ☐ Pressure	Plus	P	13:59 End Time: 14:59	2011-05-16 End Date: 2011-05-16	12 End Level (inches): 12	0 End Pressure (inches w.c.) 0

Secondary Containment Test

Containment Type:	Dry Break Location:	Manufacturer:	Equip # / Location:
Spill Bucket - Dry Break	Reg/Dies	OPW 5 gallon	Reg/Dies

Method:	Grade:	Result:	Start Time:	Start Date:	Start Level (inches):	Start Pressure (inches w.c.)
☑ Hydro ☐ Vacuum ☐ Caldwell ☐ Pressure	Stage I Dry Break	P	14:01 End Time: 15:01	2011-05-16 End Date: 2011-05-16	12 End Level (inches): 12	0 End Pressure (inches w.c.) 0

Secondary Containment Test

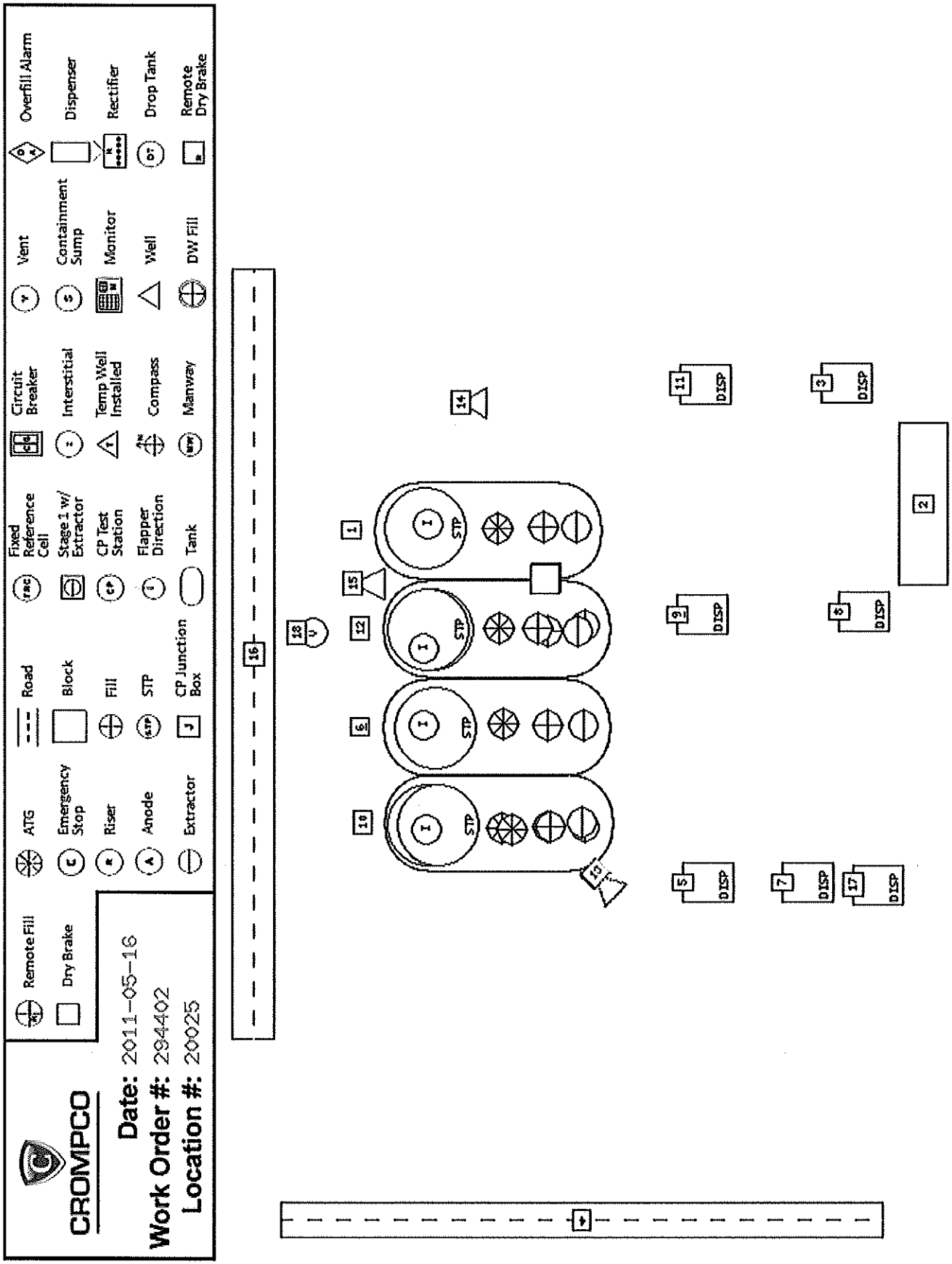
Containment Type:	Dry Break Location:	Manufacturer:	Equip # / Location:
Spill Bucket	N/A	OPW 5 gallon	001

Method:	Grade:	Result:	Start Time:	Start Date:	Start Level (inches):	Start Pressure (inches w.c.)
☑ Hydro ☐ Vacuum ☐ Caldwell ☐ Pressure	Regular	P	14:00 End Time: 15:00	2011-05-16 End Date: 2011-05-16	12 End Level (inches): 12	0 End Pressure (inches w.c.) 0

Secondary Containment Test

Containment Type:	Dry Break Location:	Manufacturer:	Equip # / Location:
Spill Bucket	N/A	OPW 5 gallon	004

Method:	Grade:	Result:	Start Time:	Start Date:	Start Level (inches):	Start Pressure (inches w.c.)
☑ Hydro ☐ Vacuum ☐ Caldwell ☐ Pressure	Diesel	P	14:02 End Time: 15:02	2011-05-16 End Date: 2011-05-16	12 End Level (inches): 12	0 End Pressure (inches w.c.) 0


CROMPCO
Date: 2011-05-16
Work Order #: 294402
Location #: 20025
Remote Fill
Dry Brake
ATG
Emergency Stop
Riser
Anode
Extractor
Road
Block
Fill
STP
CP Junction Box
Fixed Reference Cell
Stage 1 w/ Extractor
CP Test Station
Flapper Direction
Tank
Circuit Breaker
Interstitial
Temp Well Installed
Compass
Manway
Vent
Containment Sump
Monitor
Well
DW Fill
Overfill Alarm
Dispenser
Rectifier
Drop Tank
Remote Dry Brake
DISP
STP

Crompco, LLC
1815 Gallagher Road
Plymouth Meeting, PA 19462

Exxon
Phone: (610) 278-7203
FAX: 610-278-7621

31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000
State ID: 0001190

Facility/Agency Copy
Site #20025 / WO #294402
Mon May 16th, 2011

Site Diagram Labels

1: Tank - Diesel

2: Block - Exxon Shop

3: Dispenser - MPD 11/12

4: Road - Route 275

5: Dispenser - MPD 5/6 all d/pans discriminating

6: Tank - Plus

7: Dispenser - Diesel 3/4

8: Dispenser - MPD 7/8

9: Dispenser - MPD 9/10

10: Tank - Premium 002 12000 all sumps smart sensors

11: Dispenser - MPD 13/14

12: Tank - Regular

13: Well - MP-1

14: Well - MP-2

15: Well - MP-3

16: Road - Heather Lane

17: Dispenser - MPD 1/2

18: Vent - all tanks dry o/w mag probe and plld

CROMPCO

IMPORTANT LEGAL DOCUMENTS

May 19th, 2011

Exxon #20025
31 Heather Lane
I-95 & Rt 222
Perryville, MD 21903-0000

Re:
2011 Compliance Test Results
Crompco Work Order #294402
Test Performed on Mon May 16th, 2011

Dear Manager (Facility #20025):

Enclosed are the 2011 Compliance Test Results for testing performed by Crompco for Southside Oil, LLC. These test results are **important legal documents** that are required to be retained at your facility in the "Environmental Compliance Binder" in case an inspection would occur by a state or local agency. Upon receipt, please put the results in the binder as requested by Southside Oil, LLC.

The 2011 compliance tests performed at your facility are indicated below. For specific testing detail, please refer to the enclosed test report.

	Tank(s)
	Line(s) and/or Leak Detector(s)
	Cathodic Protection
	Monitor Inspection
	Vapor Recovery
	Other (See Report for Details)

If you should have any questions regarding the test results enclosed, please contact Crompco at 1-800-646-3161.

Sincerely,

Francyne Klein

Francyne Klein
Compliance Administrator

FMS Site Compliance Report

GVR ID: 284456 **Period: May 2011 to October 2011**
Site Id: 20025 **Customer: Southside Oil LLC**
1011 Boulder Springs Dr Ste100
Site: SOUTHSIDE OIL LLC **Richmond, VA 23225**
31 HEATHER LANE
PERRYVILLE, MD 21903

Report Created: 11/09/2011 07:57 AM

Tank Release Detection Results

Tank	Product	Test Date	Type	Method	Volume	% Volume	Result
1	REGULAR	05/31/2011	Int. Sensor	N/A	N/A	N/A	Normal
2	PLUS	05/31/2011	Int. Sensor	N/A	N/A	N/A	Normal
3	SUPREME	05/31/2011	Int. Sensor	N/A	N/A	N/A	Normal
4	DIESEL	05/31/2011	Int. Sensor	N/A	N/A	N/A	Normal

Line Release Detection Results

Line	Product	Test Date	Type	Result
1	REGULAR	12/07/2010	0.1 GPH Annual	Passed
2	PLUS	12/03/2010	0.1 GPH Annual	Passed
3	SUPREME	12/02/2010	0.1 GPH Annual	Passed
4	DIESEL	12/05/2010	0.1 GPH Annual	Passed

This report documents tank and line tests performed at the above location for the indicated date and period.
This report and the tests performed are part of the Southside Oil LLC monitoring and reporting program, and
are intended to satisfy federal EPA UST release detection and record keeping requirements Fuel Logistics Services

FMS Site Compliance Report

GVR ID: 284456 **Period: May 2011 to October 2011**
Site Id: 20025 **Customer: Southside Oil LLC**
1011 Boulder Springs Dr Ste100
Site: SOUTHSIDE OIL LLC **Richmond, VA 23225**
31 HEATHER LANE
PERRYVILLE, MD 21903

Report Created: 11/09/2011 07:57 AM

Tank Release Detection Results

Tank	Product	Test Date	Type	Method	Volume	% Volume	Result
1	REGULAR	06/27/2011	Int. Sensor	N/A	N/A	N/A	Normal
2	PLUS	06/27/2011	Int. Sensor	N/A	N/A	N/A	Normal
3	SUPREME	06/27/2011	Int. Sensor	N/A	N/A	N/A	Normal
4	DIESEL	06/27/2011	Int. Sensor	N/A	N/A	N/A	Normal

Line Release Detection Results

Line	Product	Test Date	Type	Result
1	REGULAR	12/07/2010	0.1 GPH Annual	Passed
2	PLUS	12/03/2010	0.1 GPH Annual	Passed
3	SUPREME	12/02/2010	0.1 GPH Annual	Passed
4	DIESEL	12/05/2010	0.1 GPH Annual	Passed

This report documents tank and line tests performed at the above location for the indicated date and period.
This report and the tests performed are part of the Southside Oil LLC monitoring and reporting program, and
are intended to satisfy federal EPA UST release detection and record keeping requirements Fuel Logistics Services

FMS Site Compliance Report

GVR ID: 284456 **Period: May 2011 to October 2011**
Site Id: 20025 **Customer: Southside Oil LLC**
1011 Boulder Springs Dr Ste100
Site: SOUTHSIDE OIL LLC **Richmond, VA 23225**
31 HEATHER LANE
PERRYVILLE, MD 21903

Report Created: 11/09/2011 07:57 AM

Tank Release Detection Results

Tank	Product	Test Date	Type	Method	Volume	% Volume	Result
1	REGULAR	07/26/2011	Int. Sensor	N/A	N/A	N/A	Normal
1	REGULAR	08/04/2011	Int. Sensor	N/A	N/A	N/A	Normal
2	PLUS	07/26/2011	Int. Sensor	N/A	N/A	N/A	Normal
2	PLUS	08/04/2011	Int. Sensor	N/A	N/A	N/A	Normal
3	SUPREME	07/26/2011	Int. Sensor	N/A	N/A	N/A	Normal
3	SUPREME	08/04/2011	Int. Sensor	N/A	N/A	N/A	Normal
4	DIESEL	07/26/2011	Int. Sensor	N/A	N/A	N/A	Normal
4	DIESEL	08/04/2011	Int. Sensor	N/A	N/A	N/A	Normal

Line Release Detection Results

Line	Product	Test Date	Type	Result
1	REGULAR	12/07/2010	0.1 GPH Annual	Passed
2	PLUS	12/03/2010	0.1 GPH Annual	Passed
3	SUPREME	12/02/2010	0.1 GPH Annual	Passed
4	DIESEL	12/05/2010	0.1 GPH Annual	Passed

This report documents tank and line tests performed at the above location for the indicated date and period.
This report and the tests performed are part of the Southside Oil LLC monitoring and reporting program, and
are intended to satisfy federal EPA UST release detection and record keeping requirements Fuel Logistics Services

FMS Site Compliance Report

GVR ID: 284456 **Period: May 2011 to October 2011**
Site Id: 20025 **Customer: Southside Oil LLC**
1011 Boulder Springs Dr Ste100
Site: SOUTHSIDE OIL LLC **Richmond, VA 23225**
31 HEATHER LANE
PERRYVILLE, MD 21903

Report Created: 11/09/2011 07:57 AM

Tank Release Detection Results

Tank	Product	Test Date	Type	Method	Volume	% Volume	Result
1	REGULAR	08/17/2011	Int. Sensor	N/A	N/A	N/A	Normal
2	PLUS	08/17/2011	Int. Sensor	N/A	N/A	N/A	Normal
3	SUPREME	08/17/2011	Int. Sensor	N/A	N/A	N/A	Normal
4	DIESEL	08/17/2011	Int. Sensor	N/A	N/A	N/A	Normal

Line Release Detection Results

Line	Product	Test Date	Type	Result
1	REGULAR	12/07/2010	0.1 GPH Annual	Passed
2	PLUS	12/03/2010	0.1 GPH Annual	Passed
3	SUPREME	12/02/2010	0.1 GPH Annual	Passed
4	DIESEL	12/05/2010	0.1 GPH Annual	Passed

FMS Site Compliance Report

GVR ID: 284456 **Period: May 2011 to October 2011**
Site Id: 20025 **Customer: Southside Oil LLC**
1011 Boulder Springs Dr Ste100
Site: SOUTHSIDE OIL LLC **Richmond, VA 23225**
31 HEATHER LANE
PERRYVILLE, MD 21903

Report Created: 11/09/2011 07:57 AM

Tank Release Detection Results

Tank	Product	Test Date	Type	Method	Volume	% Volume	Result
1	REGULAR	09/12/2011	Int. Sensor	N/A	N/A	N/A	Normal
2	PLUS	09/12/2011	Int. Sensor	N/A	N/A	N/A	Normal
3	SUPREME	09/12/2011	Int. Sensor	N/A	N/A	N/A	Normal
4	DIESEL	09/12/2011	Int. Sensor	N/A	N/A	N/A	Normal

Line Release Detection Results

Line	Product	Test Date	Type	Result
1	REGULAR	07/14/2011	0.1 GPH Annual	Passed
2	PLUS	07/12/2011	0.1 GPH Annual	Passed
3	SUPREME	07/12/2011	0.1 GPH Annual	Passed
4	DIESEL	07/13/2011	0.1 GPH Annual	Passed

This report documents tank and line tests performed at the above location for the indicated date and period.
This report and the tests performed are part of the Southside Oil LLC monitoring and reporting program, and
are intended to satisfy federal EPA UST release detection and record keeping requirements Fuel Logistics Services

FMS Site Compliance Report

GVR ID: 284456 **Period: May 2011 to October 2011**
Site Id: 20025 **Customer: Southside Oil LLC**
1011 Boulder Springs Dr Ste100
Site: SOUTHSIDE OIL LLC **Richmond, VA 23225**
31 HEATHER LANE
PERRYVILLE, MD 21903

Report Created: 11/09/2011 07:57 AM

Tank Release Detection Results

Tank	Product	Test Date	Type	Method	Volume	% Volume	Result
1	REGULAR	10/10/2011	Int. Sensor	N/A	N/A	N/A	Normal
2	PLUS	10/10/2011	Int. Sensor	N/A	N/A	N/A	Normal
3	SUPREME	10/10/2011	Int. Sensor	N/A	N/A	N/A	Normal
4	DIESEL	10/10/2011	Int. Sensor	N/A	N/A	N/A	Normal

Line Release Detection Results

Line	Product	Test Date	Type	Result
1	REGULAR	07/14/2011	0.1 GPH Annual	Passed
2	PLUS	07/12/2011	0.1 GPH Annual	Passed
3	SUPREME	07/12/2011	0.1 GPH Annual	Passed
4	DIESEL	07/13/2011	0.1 GPH Annual	Passed

This report documents tank and line tests performed at the above location for the indicated date and period.
This report and the tests performed are part of the Southside Oil LLC monitoring and reporting program, and
are intended to satisfy federal EPA UST release detection and record keeping requirements Fuel Logistics Services

Appendix C
Potable Well Completion Reports

C1 3118 SEQUENCE NO. (MDE USE ONLY)

THIS NUMBER IS TO BE PLINCHED IN COLS. 3-8 ON ALL CARDS

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 29 Cecil County

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED 02-25-01

Depth of Well 160 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" CE 94 4328

OWNER Blackwell, Donald

STREET OR RFD 1825 Perryville Rd TOWN Perryville Md 21903

SUBDIVISION SECTION LOT

WELL LOG
Not required for driven well

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Clay	0	8	
Sand	8	48	~
Granite	48	160	~
Water Bearing Zones 60-152			
4½" PVC Liner in Well - Packer at 80'			

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes Y no N

CIRCLE APPROPRIATE LETTER
- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E ELECTRIC LOG OBTAINED
- P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 - WELL CONSTRUCTION, AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: MWD 038

Larry A. Bauer
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: MWD038

Larry A. Bauer
SITE SUPERVISOR (sign, of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y no N

TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BG

NO. OF BAGS 12½ NO. OF POUNDS 1440

GALLONS OF WATER 130

DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. (enter 0 if from surface) TOP to 55 ft. BOTTOM

CASING RECORD
casing types: insert appropriate code below

STEEL ST | CONCRETE CO | PLASTIC PL | OTHER OT

MAIN CASING	Nominal diameter of (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	6	55

OTHER CASING (if used)

EACH CASING	material	diameter (inch)	depth (feet) from	depth (feet) to
	PL	4	10	160

SCREEN RECORD
screen type or open hole: insert appropriate code below

STEEL ST | BRASS/BRONZE BR | OPEN HOLE HO | PLASTIC PL | OTHER OT

EACH SCREEN	material	DEPTH (nearest ft.)	
1	PL	10	160
2			

SLOT SIZE 1 .125 2 3

DIAMETER OF SCREEN 4 (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX

	from	to

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (E.R.O.S.) W.Q.

TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST
HOURS PUMPED (nearest hour) 3

PUMPING RATE (gal. per min.) 10

METHOD USED TO MEASURE PUMPING RATE Submers. Pump

WATER LEVEL (distance from land surface)

BEFORE PUMPING 28 ft.

WHEN PUMPING 70 ft.

TYPE OF PUMP USED (for test)

P piston | T turbine | C centrifugal | R rotary | O other (describe below) | J jet | S submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29.

CAPACITY GALLONS PER MINUTE (to nearest gallon)

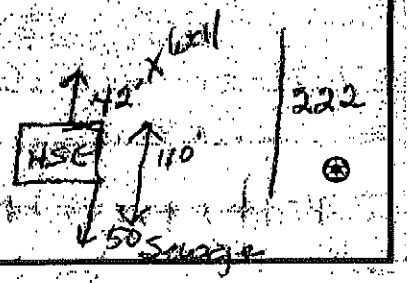
PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

+ above / – below LAND SURFACE (nearest) foot

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



COUNTY Cecil

DENV-CR97

STATE OF MARYLAND
DEPARTMENT OF WATER RESOURCES
STATE OFFICE BLDG. ANNAPOLIS, MARYLAND 21401
WELL COMPLETION REPORT

DATE WELL COMPLETED: 9-7-72

DEPTH OF WELL (TO NEAREST FOOT): 84

OWNER: LAST NAME Clayton, FIRST NAME James

STREET OR RFD: Clayton St. — POST OFFICE Perryville

WELL DESCRIPTION

WELL LOG

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY)	FEET FROM	TO	WATER BEARING
red clay	0		
bank gravel		20	
granite	20	84	✓

RECEIVED

APR 2 1973

COUNTY HEALTH DEPT.

MAP 29 PARCEL 535

GROUTING RECORD

CEMENT — BENTONITE CLAY

NO. OF BAGS — NO. OF POUNDS

GALLONS OF WATER

DEPTH OF GROUT SEAL (TO NEAREST FOOT)

FROM 0 FT. TO 25 FT. (ENTER 0 IF FROM SURFACE)

CASING RECORD

CASING TYPES: INSERT APPROPRIATE CODE BELOW

ST STEEL — CO CONCRETE — PL PLASTIC — OT OTHER

OTHER CASING

SCREEN RECORD

SCREEN TYPE OR OPEN HOLE: INSERT APPROPRIATE CODE BELOW

ST STEEL — BR BRASS OR BRONZE — HO OPEN HOLE — PL PLASTIC — OT OTHER

G 2 (SEQ. NO.)

DEPTH (NEAREST WHOLE FOOT)

EACH SCREEN 1: HO — 5?20 — 84

PUMPING TEST

HOURS PUMPED (TO NEAREST HOUR)

PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON)

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (DISTANCE FROM LAND SURFACE)

BEFORE PUMPING 21

WHEN PUMPING

TYPE OF PUMP USED

A AIR — P — C CENTRIFUGAL

PUMP INSTALLED

CAPACITY: GALLONS PER MINUTE (TO NEAREST GALLON)

PUMP HORSE POWER

PUMP COLUMN LENGTH (NEAREST FOOT)

CASING HEIGHT

+ ABOVE / − BELOW LAND SURFACE 1

LOCATION OF WELL ON LOT

CIRCLE APPROPRIATE BOXES

WELL WAS ABANDONED AND SEALED WHEN THIS (WELL) WAS COMPLETED

SAMPLE ... OBTAINED

[illegible]

C1 7051 SEQUENCE NO (MDE USE ONLY)

THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER: Cee # 68-09

ST/CO USE ONLY — DATE Received MM DD YY

DATE WELL COMPLETED: 03 24 09

Depth of Well: 250 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": CE 95 2731

OWNER: WEAVER Michael
STREET OR RFD: 34 PATTERSON AVE TOWN: PERRYVILLE MD 21903
SUBDIVISION: SECTION: LOT:

MAP 9 PARCEL 161

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Light Brown Sandy Soil	0	12	
Yellow Clay	12	25	
Red Sandy Clay	25	32	
Soft Green Rock	32	37	
Hard Green + Gray Granite	37	250	✓
Water Bearing at 130 Ft. + 220 Ft.			

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: yes Y / no N (circled: N)

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: MWD 047

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION): [signature]

LIC. NO.: _ _ D _ _ _

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes Y / no N (circled: Y)

TYPE OF GROUTING MATERIAL (Circle one): CEMENT CM (circled) BENTONITE CLAY BC

NO. OF BAGS: 12 NO. OF POUNDS: 1128

GALLONS OF WATER: 72

DEPTH OF GROUT SEAL (to nearest foot): from 0 ft. TOP to 40 ft. BOTTOM (enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below: ST STEEL; CO CONCRETE; PL PLASTIC; OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	6	40

OTHER CASING (if used): diameter (inch), depth (feet) from, to — (blank)

SCREEN RECORD
screen type or open hole insert appropriate code below: ST STEEL; BR BRASS BRONZE; HO OPEN HOLE; PL PLASTIC; OT OTHER

C2 DEPTH (nearest ft.)

Screen type	From	To
HO	40	250

SLOT SIZE 1 ___ 2 ___ 3 ___

DIAMETER OF SCREEN ___ (NEAREST INCH) from ___ to ___

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER): T (E.R.O.S.) W Q; TELESCOPE CASING; LOG INDICATOR; OTHER DATA

C3

PUMPING TEST
HOURS PUMPED (nearest hour): 3

PUMPING RATE (gal. per min.): 8.

METHOD USED TO MEASURE PUMPING RATE: Watch + Bucket

WATER LEVEL (distance from land surface)
- BEFORE PUMPING: 38 ft.
- WHEN PUMPING: 185 ft.

TYPE OF PUMP USED (for test): A air; P piston; T turbine; C centrifugal; R rotary; O other (describe below); J jet; S submersible (circled: S)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): YES / NO (circled: NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29: ___

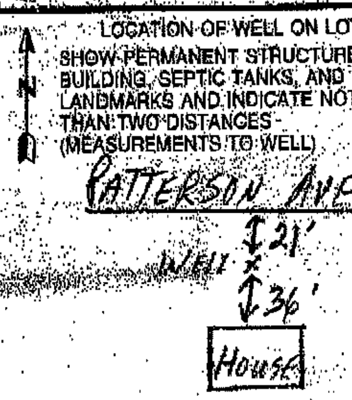
CAPACITY: GALLONS PER MINUTE (to nearest gallon): ___

PUMP HORSE POWER: ___

PUMP COLUMN LENGTH (nearest ft.): ___

CASING HEIGHT (circle appropriate box and enter casing height): + above (circled) / − below LAND SURFACE: 1 (nearest foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



COUNTY: ACD

CT 5251

SEQUENCE NO. (MDE USE ONLY)

THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER R2284

ST/CO USE ONLY — DATE Received

DATE WELL COMPLETED: 11 03 04

Depth of Well: 250 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": CE 95 0669

OWNER: PATTERSON, ROSS
STREET OR RFD: 2 PATTERSON AVE
TOWN: Perryville Md
SUBDIVISION: SECTION: LOT:

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Light Brown Sandy Clay	0	18	
Red Clay	18	[illegible]	
Light Brown Sand	32	40	
Soft Green Rock	40	44	
Hard Green + Gray Granite	44	250	✓

Water Bearing At 175 FT + 220 FT.

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: Y / (N)

CIRCLE APPROPRIATE LETTER
- **A** A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED.
- **E** ELECTRIC LOG OBTAINED
- **P** TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: MWD 047

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: D

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle appropriate box): (Y) N

TYPE OF GROUTING MATERIAL (Circle one): CEMENT (CM) BENTONITE CLAY BC

NO. OF BAGS: 16 NO. OF POUNDS: 1504

GALLONS OF WATER: 96

DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. (TOP) to 47 ft. (BOTTOM) (enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below: ST STEEL, CO CONCRETE, PL PLASTIC, OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	6	47

OTHER CASING (if used): diameter (inch), depth (feet) from, to

SCREEN RECORD
screen type or open hole insert appropriate code below: ST STEEL, BR BRASS BRONZE, HO OPEN HOLE, PL PLASTIC, OT OTHER

C 2 DEPTH (nearest ft.)

EACH SCREEN: HO 40 47 250

SLOT SIZE 1 2 3

DIAMETER OF SCREEN (NEAREST INCH) from to

GRAVEL PACK

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q

C 3

PUMPING TEST
HOURS PUMPED (nearest hour): 3

PUMPING RATE (gal. per min.): 8

METHOD USED TO MEASURE PUMPING RATE: BUCKET

WATER LEVEL (distance from land surface)
BEFORE PUMPING: 30 ft.
WHEN PUMPING: 160 ft.

TYPE OF PUMP USED (for test): A air, P piston, T turbine, C centrifugal, R rotary, O other (describe below), J jet, (S) submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): YES (NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29.

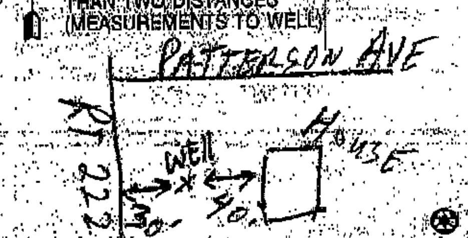
CAPACITY GALLONS PER MINUTE (to nearest gallon)

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height): (+) above / − below LAND SURFACE: 1 (nearest foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND / OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



MAP 29 PARCEL 34

SITE SUPERVISOR (sign if other than driller)

COUNTY

C1 0990 SEQUENCE NO. (DENV USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER Replacement

ST/CO USE ONLY DATE Received: [ ] (8–13)

DATE WELL COMPLETED: 1 1 2 2 9 5 (15–20)

Depth of Well: 300 (22–26) (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": C E - 9 3 - 0 1 9 7 (28–37)

OWNER: White Catherine W. (last name / first name)
STREET OR RFD: PO Box 273 TOWN: Perryville Md. 21903
SUBDIVISION: ______ SECTION: ______ LOT: ______

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	Check if water bearing
Brown Clay	0	10	
Very [illegible]	10	30	
Soft Green Weathered Rock	30	36	
Hard Green & Gray Granite	36	300	

Parcel 162 Map 29

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS IDENT. NO. 112

DRILLERS SIGNATURE [signature]
(MUST MATCH SIGNATURE ON APPLICATION)

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): (Y) yes / N no (44)
TYPE OF GROUTING MATERIAL: (CEMENT CM) (45–46) / BENTONITE CLAY BC (45–46)
NO. OF BAGS 10 NO. OF POUNDS 940
GALLONS OF WATER 60
DEPTH OF GROUT SEAL (to nearest foot): from 0 (TOP, 48–52) ft. to 38 (BOTTOM, 54–58) ft. (enter 0 if from surface)

CASING RECORD
casing types — insert appropriate code below: ST STEEL; CO CONCRETE; PL PLASTIC; OT OTHER

MAIN CASING TYPE (60–61)	Nominal diameter top (main) casing (nearest inch) (63–64)	Total depth of main casing (nearest foot) (66–70)
PL	6	38

OTHER CASING (if used) — EACH CASING: diameter inch / depth (feet) from / to: ______

SCREEN RECORD
screen type or open hole — insert appropriate code below: ST STEEL; BR BRASS BRONZE; HO OPEN HOLE; PL PLASTIC; OT OTHER

C2 — EACH SCREEN

	Type	DEPTH (nearest ft.) from	to
1	HO (8–9)	35 (11–15)	300 (17–21)
2	(23–24)	(26–30)	(32–36)
3	(38–39)	(41–45)	(47–51)

SLOT SIZE 1____ 2____ 3____
DIAMETER OF SCREEN [ ] (56–60) (NEAREST INCH)

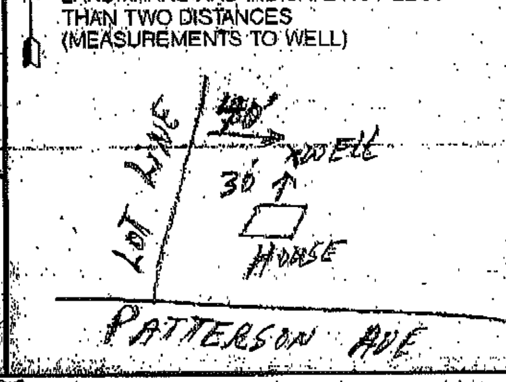
GRAVEL PACK from ______ to ______
IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68: [ ]

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T 70 [ ] TELESCOPE CASING; (E.R.O.S.) 72 [ ] LOG INDICATOR; W Q 74 75 76 [ ] OTHER DATA

C3 PUMPING TEST
HOURS PUMPED (nearest hour): 3 (8–9)
PUMPING RATE (gal. per min. to nearest gal.): 4 (11–15)
METHOD USED TO MEASURE PUMPING RATE: Bucket
WATER LEVEL (distance from land surface)
BEFORE PUMPING: 35 (17–20)
WHEN PUMPING: 190 (22–25)
TYPE OF PUMP USED (for test) (27): A air; P piston; T turbine; C centrifugal; R rotary; O other (describe below); J jet; (S) submersible

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO): YES (NO)
IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE.
TYPE OF PUMP INSTALLED. PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE: [ ] (29)
CAPACITY: GALLONS PER MINUTE (to nearest gallon): [ ] (31–35)
PUMP HORSE POWER: [ ] (37–41)
PUMP COLUMN LENGTH (nearest ft.): [ ] (43–47)
CASING HEIGHT (circle appropriate box and enter casing height): (+) above (49) / − below (49) LAND SURFACE: 1 (nearest foot) (50–51)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



C1 1174 (SEQUENCE NO. — OEP USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COL. 1-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED

COUNTY NUMBER: B5879

DATE Received: 1/ /
DATE WELL COMPLETED: 6 14 84
Depth of Well: 300 (TO NEAREST FOOT)
PERMIT NO. FROM PERMIT TO DRILL WELL: CE-81-1069

OWNER: SQUIRES (last name) JAMES (first name)
STREET OR RFD: 1550 Pulaski Hwy TOWN: Elkton, md. 21921
SUBDIVISION: ______ SECTION: ______ LOT: ______

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	Check if water bearing
Clay	0	35	
Granite	35	300	

MAP 29 PARCEL 619

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 10.17.15 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS IDENT. NO: 38

Larry A. Brown
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

Larry A. Brown
SITE SUPERVISOR (sign; of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): (Y) N
TYPE OF GROUTING MATERIAL: CEMENT (CM) — BENTONITE CLAY BC
NO. OF BAGS: 11 NO. OF POUNDS: 110
GALLONS OF WATER: 55
DEPTH OF GROUT SEAL (to nearest foot): from 0 ft. to 42 ft. (enter 0 if from surface)

CASING RECORD
casing types — insert appropriate code below: (ST) STEEL, CO CONCRETE, PL PLASTIC, OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
ST	6	44

OTHER CASING (if used): diameter inch ______ depth (feet) from ______ to ______

SCREEN RECORD
screen type or open hole — insert appropriate code below: ST STEEL, BR BRASS BRONZE, (HO) OPEN HOLE, PL PLASTIC, OT OTHER

C2

Type	DEPTH (nearest ft.) from	to
HO	44	300

SLOT SIZE 1. ______ 2. ______ 3. ______
DIAMETER OF SCREEN ______ (NEAREST INCH)

GRAVEL PACK from ______ to ______
IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 66: ______

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T: TELESCOPE CASING — (E.R.O.S.) LOG INDICATOR: / — WQ OTHER DATA

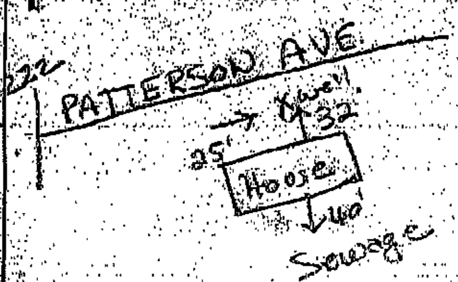
C3

PUMPING TEST
HOURS PUMPED (nearest hour): 6
PUMPING RATE (gal. per min. to nearest gal.): 7
METHOD USED TO MEASURE PUMPING RATE: Air
WATER LEVEL (distance from land surface)
BEFORE PUMPING: 20
WHEN PUMPING: 130

TYPE OF PUMP USED (for test): (A) air, P piston, T turbine, C centrifugal, R rotary, O other (describe below), J jet, S submersible

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE YES or NO): YES (NO)
IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE
TYPE OF PUMP INSTALLED — PLACE (A,C,J,P,R,S,T,O) IN BOX. SEE ABOVE: ______
CAPACITY GALLONS PER MINUTE (to nearest gallon): ______
PUMP HORSE POWER: ______
PUMP COLUMN LENGTH (nearest ft.): ______
CASING HEIGHT (circle appropriate box and enter casing height): (+) above / − below LAND SURFACE: 1 (nearest foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL).



G 151

SEQUENCE NO (MDE USE ONLY)

THIS NUMBER IS TO BE FURNISHED IN BOLD TYPE ON ALL COPIES

STATE OF MARYLAND
WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED

COUNTY NUMBER Standby 85879

PERMIT NO. FROM PERMIT TO DRILL WELL: CE 94 1573

DATE WELL COMPLETED: 11 26 97

DEPTH OF WELL: 300

OWNER: Squires James

STREET OR RFD: 38 Patterson Ave

TOWN: Perryville MD

SUBDIVISION

SECTION

LOT

WELL LOG

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO
Brown Sand & Gravel	0	18
yellow Clay	18	30
Soft Green weathered Rock	30	38
Hard Green & Gray Granite	38	300

Water Bearing at 79 FT & 195 FT

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: Y (N)

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH ... IN CONFORMANCE WITH ALL CONDITIONS ... CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

TYPE: MWD/MSD/MGD # 112

DRILLER LIC NO.

DRILLER'S SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

LIC NO.

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD

WELL HAS BEEN GROUTED: (Y) N

TYPE OF GROUTING MATERIAL (circle one): (CEMENT) CM BENTONITE CLAY BC

NO. OF BAGS: 24 NO. OF POUNDS: 1326

DEPTH OF GROUT SEAL (to nearest foot): from 0 ft. to 41 ft.

CASING RECORD

casing types insert appropriate code below: ST STEEL, CO CONCRETE, PL PLASTIC, OT OTHER

ST 6 47

OTHER CASING

SCREEN RECORD

ST STEEL, BR BRASS/BRONZE, HO HOLE, PL PLASTIC, OT OTHER

C 2

DEPTH (nearest ft.): 47 300

DIAMETER OF SCREEN (NEAREST INCH)

FLOWING WELL DRILLED WAS FLOWING WELL INSERT IN BOX

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

(E.R.O.S.) W.C.

TELESCOPE CASING LOG INDICATOR OTHER DATA

C 3

PUMPING TEST

HOURS PUMPED (nearest hour): 4

PUMPING RATE (gal. per min.): 9

METHOD USED TO MEASURE PUMPING RATE: Bucket

WATER LEVEL (distance from land surface)

BEFORE PUMPING: 40 ft.

WHEN PUMPING: 216 ft.

TYPE OF PUMP USED (for test): A air, P piston, T turbine, C centrifugal, R rotary, O other (describe below), J jet, (S) submersible

PUMP INSTALLED

DRILLER WILL INSTALL PUMP (CIRCLE YES OR NO): YES (NO)

IF DRILLER INSTALLS PUMP THIS SECTION MUST BE COMPLETED FOR ALL WELLS

TYPE OF PUMP INSTALLED (USE A, C, J, P, R, S, T, O) IN BOX 29

CAPACITY GALLONS PER MINUTE (to nearest gallon)

PUMP HORSE POWER

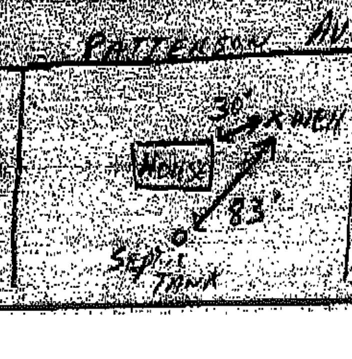
PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

(+) above / − below LAND SURFACE: 1 (nearest foot)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



May 29 Parcel 619

C1 6875 SEQUENCE NO. (OEP USE ONLY)

(THIS NUMBER TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER: ~~R1232-97~~ Standby

DATE Received	DATE WELL COMPLETED	Depth of Well (TO NEAREST FOOT)	PERMIT NO. FROM "PERMIT TO DRILL WELL"
	010787	246	CE-81-2695

OWNER: Stephens (last name) Kathleen (first name)
STREET OR RFD: Box 214 TOWN: Perryville, Md.
SUBDIVISION: SECTION: LOT:

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	Check if water bearing
Light Brown Sand	0	25	
Red Clay	25	38	
Hard Green & Gray Granite	38	246	✓

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): **(Y)** yes / N no

TYPE OF GROUTING MATERIAL: CEMENT **(CM)** / BENTONITE CLAY BC

NO. OF BAGS: 11 NO. OF POUNDS: 1034
GALLONS OF WATER: 55
DEPTH OF GROUT SEAL (to nearest foot): from 0 (TOP) ft. to 42 (BOTTOM) ft. (enter 0 if from surface)

CASING RECORD
casing types: Insert appropriate code below — ST STEEL, CO CONCRETE, PL PLASTIC, OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
ST	6	42

OTHER CASING (if used): EACH CASING — diameter inch; depth (feet) from / to

SCREEN RECORD
screen type or open hole: Insert appropriate code below — ST STEEL, BR BRASS BRONZE, HO OPEN HOLE, PL PLASTIC, OT OTHER

C2

EACH SCREEN	Type	DEPTH (nearest ft.) from	to
1	HO	42	246
2			
3			

SLOT SIZE 1.____ 2.____ 3.____
DIAMETER OF SCREEN ____ (NEAREST INCH)

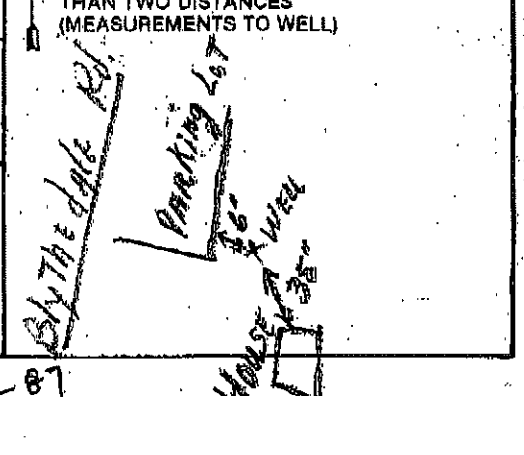
GRAVEL PACK from ____ to ____
IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

C3 PUMPING TEST
HOURS PUMPED (nearest hour): 6
PUMPING RATE (gal. per min. to nearest gal.): 2
METHOD USED TO MEASURE PUMPING RATE: Bucket & Watch
WATER LEVEL (distance from land surface)
BEFORE PUMPING: 56
WHEN PUMPING: 100

TYPE OF PUMP USED (for test): A air, P piston, T turbine, C centrifugal, R rotary, O other (describe below), J jet, **(S) submersible**

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO): YES **(NO)**
IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE
TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX-SEE ABOVE:
CAPACITY: GALLONS PER MINUTE (to nearest gallon):
PUMP HORSE POWER:
PUMP COLUMN LENGTH (nearest ft.):
CASING HEIGHT (circle appropriate box and enter casing height): + above / − below LAND SURFACE: 2 (nearest foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



CIRCLE APPROPRIATE LETTER
A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E — ELECTRIC LOG OBTAINED
P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 10.17.13 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS IDENT. NO.: 112
Charles H. Hamilton Jr.
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

SUPERVISOR (sign, of driller or journeyman responsible for sitework if different from permittee)

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T — TELESCOPE CASING; (E.R.O.S.) — LOG INDICATOR; WQ — OTHER DATA

MAR 29 PARCEL 517

HEALTH 045-13-87

C1 6845 SEQUENCE NO. (MDE USE ONLY)

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER Repl. R2392

ST/CO USE ONLY DATE Received MM DD

DATE WELL COMPLETED: 05 01 01

Depth of Well: 300 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": CE 94 4455

OWNER: SMITH DONALD
STREET OR RFD: 49 Blythedale Rd TOWN: Perryville, md. 21903
SUBDIVISION SECTION LOT

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
Clay	0	5	
Sand	5	51	✓
Granite	51	300	✓

Water Bearing Zones
97 - 193
293

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED: YES Y / NO (N) — circled N

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: MWD 038
DRILLERS SIGNATURE: Larry A. Brown
(MUST MATCH SIGNATURE ON APPLICATION)
LIC. NO.: MWD 038
Larry A. Brown
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): (Y) yes / N no

TYPE OF GROUTING MATERIAL (Circle one): CEMENT (CM) BENTONITE CLAY (BC)

NO. OF BAGS: 4-6 NO. OF POUNDS: 580
GALLONS OF WATER: 320
DEPTH OF GROUT SEAL (to nearest foot): from 0 ft. (TOP) to 61 ft. (BOTTOM) (enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below: ST STEEL; CO CONCRETE; (PL) PLASTIC; OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	6	61

OTHER CASING (if used): diameter (inch), depth (feet) from, to

SCREEN RECORD
Screen type or open hole — insert appropriate code below: ST STEEL; BR BRASS / BRONZE; HO OPEN HOLE; PL PLASTIC; OT OTHER

C2 DEPTH (nearest ft.)

Type	From	To
HO	61	300

SLOT SIZE 1 ____ 2 ____ 3 ____

DIAMETER OF SCREEN ____ (NEAREST INCH) from ____ to ____

GRAVEL PACK: IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER): T (E.R.O.S.) W Q; TELESCOPE CASING; LOG INDICATOR; OTHER DATA

C3 PUMPING TEST
HOURS PUMPED (nearest hour): 6
PUMPING RATE (gal. per min.): 5.
METHOD USED TO MEASURE PUMPING RATE: Air
WATER LEVEL (distance from land surface)
BEFORE PUMPING: 40 ft.
WHEN PUMPING: 150 ft.

TYPE OF PUMP USED (for test): (A) air; P piston; T turbine; C centrifugal; R rotary; O other (describe below); J jet; S submersible

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO): YES / (NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29.
CAPACITY GALLONS PER MINUTE (to nearest gallon)
PUMP HORSE POWER
PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height): (+) above / − below LAND SURFACE: 1 (nearest foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

SEQUENCE NO. (DEP USE ONLY)

THIS NUMBER IS TO BE PUNCHED IN COLS. 1-5 ON ALL CARDS

COUNTY NUMBER: Replacement

DATE RECEIVED

DATE WELL COMPLETED: 07 15 87

Depth of Well (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": CM-81-2175

OWNER: Taylor, ERNEST (last name, first name)

STREET OR RFD: 92 PATTERSON AVE TOWN: Perryville, Md 21903

SUBDIVISION: SECTION: LOT:

WELL LOG
Not required for driven wells.

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	Check if water bearing
YELLOW SANDY CLAY	0	10	
RED CLAY	10	28	
SOFT [illegible] WEATHERED ROCK	28	37	
HARD GREEN & GRAY GRANITE	37	223	

PARCEL 190 MAP 29

CIRCLE APPROPRIATE LETTER(S)
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 10.17.13 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS IDENT. NO. 112

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): YES (Y) NO (N)

TYPE OF GROUTING MATERIAL: CEMENT (CM) BENTONITE CLAY (BC)

NO. OF BAGS: NO. OF POUNDS: 40 #

GALLONS OF WATER:

DEPTH OF GROUT SEAL (to nearest foot): from 0 ft. to 20 ft. (enter 0 if from surface)

CASING RECORD
casing types — insert appropriate code below:
- ST — STEEL
- CO — CONCRETE
- PL — PLASTIC
- OT — OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
ST	6	40

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below:
- ST — STEEL
- BR — BRASS, BRONZE
- HO — OPEN HOLE
- PL — PLASTIC
- OT — OTHER

C 2

EACH SCREEN	DEPTH (nearest ft.)	
1	40	220
2		
3		

SLOT SIZE: 1 2 3

DIAMETER OF SCREEN (NEAREST INCH)

GRAVEL PACK from to

IF WELL DRILLED WAS FLOWING WELL, INSERT F IN BOX 68

DEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (TELESCOPE CASING) (E.R.O.S.) (LOG INDICATOR) WQ (OTHER DATA)

C 3

PUMPING TEST
HOURS PUMPED (nearest hour): 6

PUMPING RATE (gal. per min. to nearest gal.): 3

METHOD USED TO MEASURE PUMPING RATE: Bucket & Watch

WATER LEVEL (distance from land surface)

BEFORE PUMPING: 28

WHEN PUMPING: 150

TYPE OF PUMP USED (for test)
- A — air
- P — piston
- T — turbine
- C — centrifugal
- R — rotary
- O — other (describe below)
- J — jet
- S — submersible

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO): YES / NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX SEE ABOVE:

CAPACITY: GALLONS PER MINUTE (to nearest gallon):

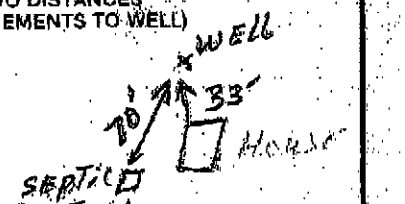
PUMP HORSE POWER:

PUMP COLUMN LENGTH (nearest ft.):

CASING HEIGHT (circle appropriate box and enter casing height): + above / − below LAND SURFACE (nearest foot): 1

LOCATION OF WELL ON LOT
N

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



PATTERSON AVE

HEALTH CKS

8416

SEQUENCE NO. (DWR USE ONLY)

STATE OF MARYLAND
DEPARTMENT OF WATER RESOURCES
STATE OFFICE BLDG., ANNAPOLIS, MARYLAND 21401

WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 30 DAYS AFTER WELL COMPLETION. FILL IN THIS FORM COMPLETELY.

DATE WELL COMPLETED: [illegible]

DEPTH OF WELL: 120 (TO NEAREST FOOT)

PERMIT NO. FROM PERMIT: [illegible]

DRILLERS IDENTIFICATION NO.: [illegible]

OWNER: Phillips Petroleum Co (LAST NAME) (FIRST NAME)

STREET OR RFD: POST OFFICE:

WELL DESCRIPTION

WELL LOG

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING.

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY)	FEET FROM	FEET TO	CIRCLE IF WATER BEARING
yellow clay	0	4	
red "	4	14	
Grey "	14	26	
green "	26	42	
" Granite	42	120	✓

Map 29 Parcel 48
9 Blythedale Rd

GROUTING RECORD

WELL HAS BEEN GROUTED (CIRCLE APPROPRIATE BOX): **Y** (circled) / N

TYPE OF GROUTING MATERIAL (CIRCLE BOX): CEMENT C M; BENTONITE CLAY B C

NO. OF BAGS: 2 NO. OF POUNDS:

GALLONS OF WATER: 10

DEPTH OF GROUT SEAL (TO NEAREST FOOT): FROM 0 FT. TO 20 FT. (ENTER 0 IF FROM SURFACE)

CASING RECORD

CASING TYPES (INSERT APPROPRIATE CODE BELOW): S T STEEL; C O CONCRETE; P L PLASTIC; O T OTHER

MAIN CASING TYPE	NOMINAL DIAMETER TOP (MAIN) CASING (NEAREST INCH)	TOTAL DEPTH OF MAIN CASING (NEAREST FOOT)
ST	6	45

OTHER CASING (IF USED): DIAMETER (INCH) / DEPTH (FEET) FROM / TO

SCREEN RECORD

SCREEN TYPE OR OPEN HOLE (INSERT APPROPRIATE CODE BELOW): S T STEEL; B R BRASS OR BRONZE; H O OPEN HOLE; P L PLASTIC; O T OTHER

C 2 (SEQ. NO.)

EACH SCREEN	TYPE	DEPTH FROM (NEAREST WHOLE FOOT)	DEPTH TO
1	HO	45	120
2			
3			

SLOT SIZE 1. ____ 2. ____ 3. ____

DIAMETER OF SCREEN ____ (NEAREST INCH)

GRAVEL PACK FROM ____ TO ____

IF WELL DRILLED WAS A FLOWING WELL CIRCLE BOX: F

PUMPING TEST

C 3 (SEQ. NO.)

HOURS PUMPED (TO NEAREST HOUR): 2

PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON): 18

METHOD USED TO MEASURE PUMPING RATE: Airlift

WATER LEVEL (DISTANCE FROM LAND SURFACE): BEFORE PUMPING 42 (NEAREST FOOT); WHEN PUMPING ____ (NEAREST FOOT)

TYPE OF PUMPED USED (CIRCLE APPROPRIATE BOX): **A AIR** (circled); P PISTON; T TURBINE; C CENTRIFUGAL; R ROTARY; O OTHER (DESCRIBE BELOW); J JET; S SUBMERSIBLE

PUMP INSTALLED

TYPE OF PUMP (WRITE APPROPRIATE LETTER IN BOX — SEE ABOVE): A, C, J, P, R, S, T, O

DRILLER WILL INSTALL PUMP (CIRCLE APPROPRIATE BOX): Y / **N** (circled)

CAPACITY: GALLONS PER MINUTE (TO NEAREST GALLON)

PUMP HORSE POWER

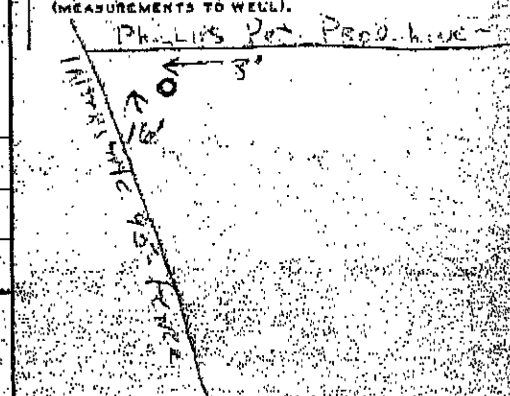
PUMP COLUMN LENGTH (NEAREST FOOT)

CASING HEIGHT

(CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT): **+ ABOVE** (circled) / − BELOW LAND SURFACE: 1 (NEAREST FOOT)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDINGS, SEPTIC TANKS, AND/OR OTHER LAND MARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL).



CIRCLE APPROPRIATE BOXES

- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- C — COPY OF ELECTRIC LOG ATTACHED

I HEREBY CERTIFY THAT I HAVE COMPLIED WITH ALL CONDITIONS STATED ON THE ABOVE-CAPTIONED "PERMIT TO DRILL WELL", AND THAT INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

DRILLERS NAME (PLEASE PRINT): CHAS HAMILTON, JR

SIGNATURE: Charles L Hamilton

DWR USE ONLY (NOT TO BE FILLED IN BY DRILLER): TELESCOPE CASING; LOG INDICATOR (E.R.O.S.); W. O. OTHER DATA AVAILABLE

APPENDIX D

Boring and Monitoring Well Construction Logs

LOG OF MONITORING WELL NO. MW-01

Project Description: **Exxon RAS # 2-0025**
Location: 31 Heather Lane - Perryville, MD
Permit Number: CE-95-1061
T.O.C.: 89.9 ft Static Water Level: Dry ft

Depth	Material Description		PID, ppm	Penetration Blows / Foot	Core Drilled, ft.	Core Recovered, ft.
0	ASPHALT					
	SILTY CLAY, brown, some fine gravel, damp	1.0				
	CLAY, gray, with some silt, dry	3.0				
	CLAY, gray, dry	4.0				
5	CLAY, brown, dry	6.0	0			
10	CLAY, brown tan, dry	10.0		18		
	CLAY, red, dry	11.0				
	CLAY, red, with interbedded gray clay, dry	12.0	0			
15	- refusal of core barrel			60		
20				27		
	CLAY, red	22.0				
25				66		
30				45		
35				40		
40		40.0				

Well Construction:
- grout (0-6)
- bentonite seal (6-8)
- sand (8-40)
- 2" diameter PVC 0.020 slotted wall screen (10-40)
- 2" pointed end cap

Completion Depth: 40 ft
Date Boring Started: 8/2/05
Date Boring Completed: 8/2/05
Engineer / Geologist: CAS
Project No.: 60507603

Remarks: Bottom of well at 40 feet
Driller: BL Myers
Drill Method: Air Rotary
Sample Method: Core Barrel

KLEINFELDER

The stratification lines represent approximate strata boundaries
In situ, the transition may be gradual

LOG OF MONITORING WELL NO. MW-02

Project Description: **Exxon RAS # 2-0025**
Location: 31 Heather Lane - Perryville, MD
Permit Number: CE-95-1062
T.O.C.: 86.2 ft Static Water Level: 22.1 ft

Depth	Material Description	PID, ppm	Penetration Blows / Foot	Core Drilled, ft.	Core Recovered, ft.	Well Construction
0	ASPHALT					
	SILTY CLAY, brown, saturated	1.0				
	CLAY, gray, damp	2.0				grout (0-6)
5	SILT and CLAY, gray brown, damp	4.0				
	SAND and SILT, tan, fine, dry	6.0				bentonite seal (6-8)
						sand (8-30)
10		0				
	CLAY, brown, with fine sand, dry	12.0				
15		0				
	CLAY, brown red, some thin strata of gray sand, dry	18.0				2" diameter PVC 0.020 slotted wall screen (10-30)
20		0				
	▼					
25	- refusal of core barrel					
30		30.0				2" pointed end cap

Completion Depth: 30.6 ft
Date Boring Started: 8/2/05
Date Boring Completed: 8/2/05
Engineer / Geologist: CAS
Project No.: 60507603

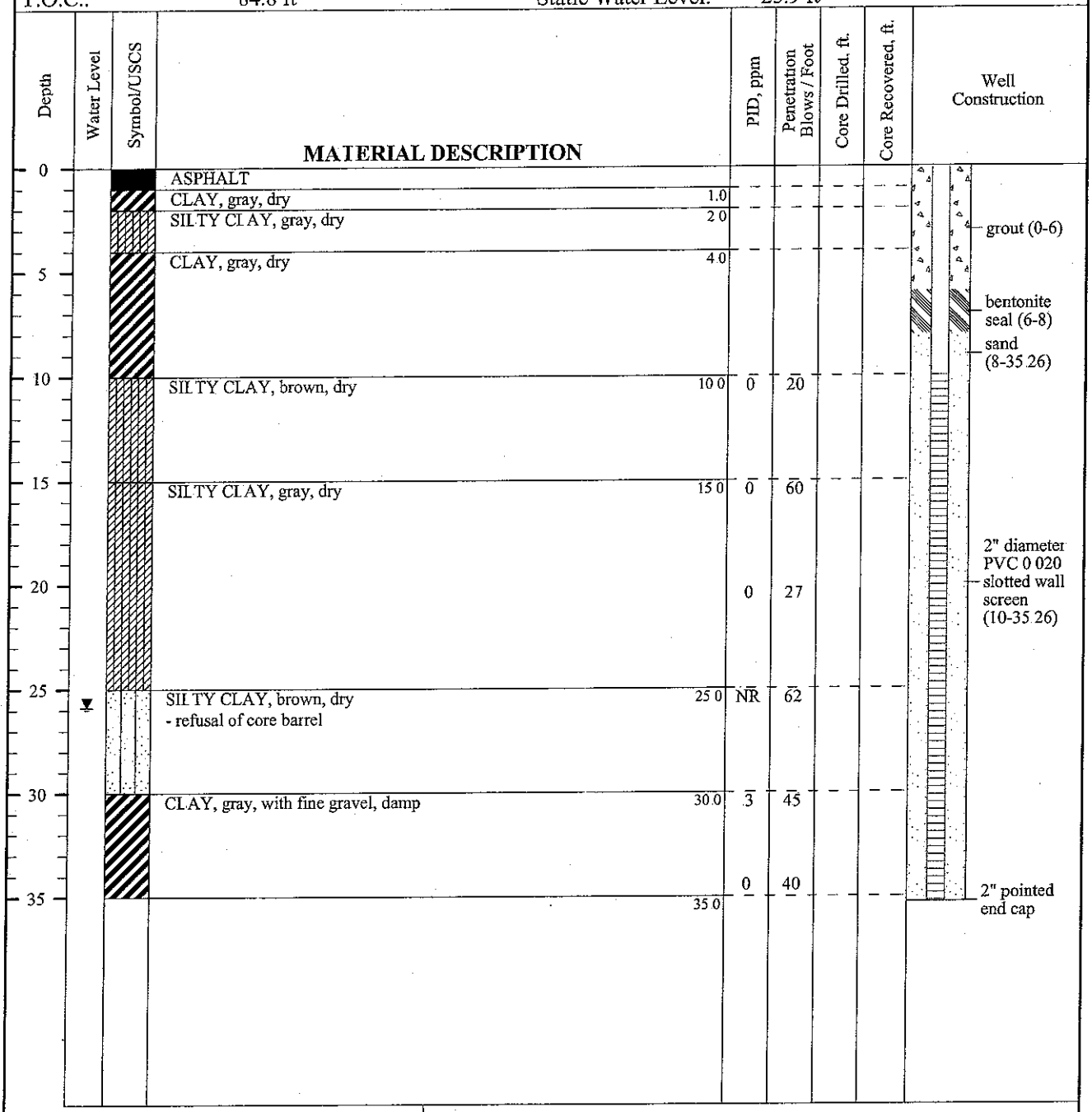
Remarks: Bottom of well at 30.65 feet
Driller: B.I. Myers
Drill Method: Air Rotary
Sample Method: Core Barrel

KLEINFELDER

The stratification lines represent approximate strata boundaries. In situ, the transition may be gradual.

LOG OF MONITORING WELL NO. MW-03

Project Description: **Exxon RAS # 2-0025**
Location: 31 Heather Lane - Perryville, MD
Permit Number: CE-95-1063
T.O.C.: 84.8 ft Static Water Level: 25.9 ft



Completion Depth: 35.3 ft
Date Boring Started: 8/2/05
Date Boring Completed: 8/2/05
Engineer / Geologist: CAS
Project No.: 60507603

Remarks: Bottom of well at 35.26 feet
Driller: BL Myers
Drill Method: Air Rotary / Hollow Stem Auger
Sample Method: Split Spoon

KLEINFELDER

The stratification lines represent approximate strata boundaries. In situ, the transition may be gradual.

KLEINFELDER
EXPECT MORE

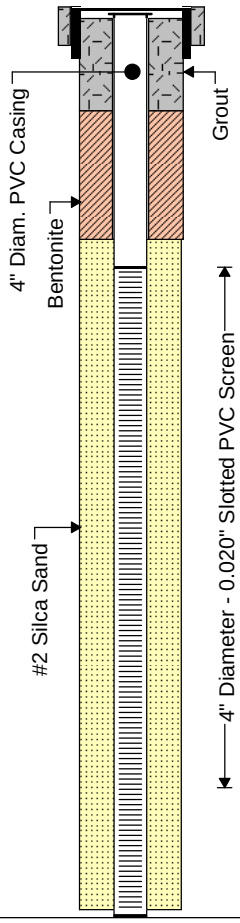
1340 Charwood Road, Suite I
Hanover, MD 21076
(410) 850-0404

DRILLING LOG

Well No. MW-4

Project Name:	Exxon 2-0025	***Start Date:***	March 20, 2007	***Logged By:***	JTM and BPS
Site Location:	31 Heather Lane, Perryville MD	***End Date:***	March 29, 2007	***Permit No.:***	CE-95-1930
Project No:	79473	***Total Hole Depth:***	35'	***Checked By:***	MCS
Client:	Exxon Mobil Corporation	***Hole Diameter:***	10.5"	***Notes:***	Hole hand 8' using air knife vacuum
Drilling Company:	Soft Dig and B.L. Myers Brothers	***Depth to Bedrock:***	NA		
Driller:	Ray Chilcote	***Well Diameter:***	4"		Split spoon collected by hydraulic push
Drill Rig Type:	Air Vac and Schramm 450T	***Water Level (Initial):***	24'		
Drilling Method:	Air Knife and Air Rotary with HSA	***Screen Length:***	25'		
Sampling Method:	Grab and Split Spoon	***TOC Elevation:***	84.65		

Depth (feet)	Graphic Log	Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	PID Headspace (ppm)
0.0		GROUND SURFACE				
		Asphalt				
		(ML) CLAYEY SILT, yellow brown, moist, med soft, micaceous	HA 1 (3')			0
5.0			HA 2 (6')			0
			HA 3 (8')			0
10.0		**(MH)** SILT, with clay, grey, moist, micaceous	S (10'-12')		24"	0
15.0			S (16'-18')		24"	0
20.0		**(CL)** SILTY CLAY, dark brown, micaceous	S (20'-22')		24"	0
25.0			S (25'-27') *		24"	0
30.0		**(ML)** CLAYEY SILT, brown, with fine sands				
35.0		Total Depth 35'				
40.0						



PID - Photoionization Detector
ppm - Parts per million
NA - Not Applicable
* - Sample Submited for Lab Analysis

- Water Level Initial Measurement
- Water Level Subsequent Measurement

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

KLEINFELDER
EXPECT MORE

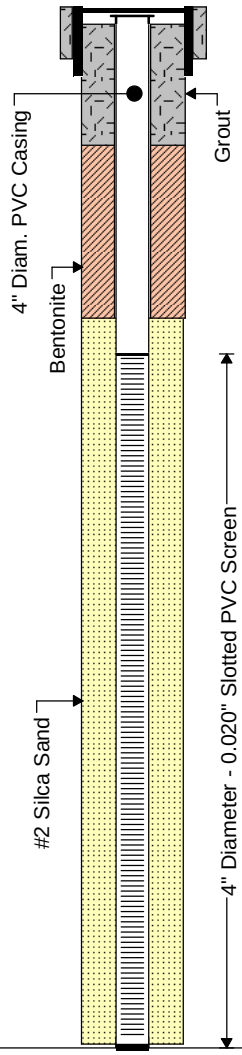
1340 Charwood Road, Suite I
Hanover, MD 21076
(410) 850-0404

DRILLING LOG

Well No. MW-5

Project Name:	Exxon 2-0025	***Start Date:***	March 20, 2007	***Logged By:***	JTM and BPS
Site Location:	31 Heather Lane, Perryville MD	***End Date:***	March 29, 2007	***Permit No.:***	CE-95-1931
Project No:	79473	***Total Hole Depth:***	30'	***Checked By:***	MCS
Client:	Exxon Mobil Corporation	***Hole Diameter:***	8"	***Notes:***	Hole hand 8' using air knife vacuum
Drilling Company:	Soft Dig and B.L. Myers Brothers	***Depth to Bedrock:***	NA		
Driller:	Ray Chilcote	***Well Diameter:***	4"		Split spoon collected by hydraulic push
Drill Rig Type:	Air Vac and Schramm 450T	***Water Level (Initial):***	18'		
Drilling Method:	Air Knife and Air Rotary with HSA	***Screen Length:***	20'		
Sampling Method:	Grab and Split Spoon	***TOC Elevation:***	80.81		

Depth (feet)	Graphic Log	Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	PID Headspace (ppm)
0.0		GROUND SURFACE				
		Asphalt				
		(ML) CLAYEY SILT, light brown, moist,stiff, moist	HA 1 (3')			0
5.0			HA 2 (6')			0
			HA 3 (8')			0
10.0		**(CL)** SILTY CLAY, grey, moist, micaceous	S (10'-12')		24"	0
15.0		**(OL)** Organic material, black, hard	S (15'-16')		24"	0
			S (16'-17')			0
		(ML) CLAYEY SILT, light brown, with fine sands				
20.0		**(SC)** SILTY SAND fine, orange-brown,and grey, wet	S (20'-22) *		24"	0
25.0		**(CL)** SILTY CLAY, dark brown, micaceous				
30.0		Total Depth 30'				



PID - Photoionization Detector
ppm - Parts per million
NA - Not Applicable
* - Sample Submited for Lab Analysis

- Water Level Initial Measurement
- Water Level Subsequent Measurement

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

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Boring No. SB-1

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0025
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: NR
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/04/09
End Date: 08/04/09
Total Hole Depth: 28'
Hole Diameter: 6"
Depth to Bedrock: Unknown
Surface Elevation: NA
Water Level (Initial): 27.5'
Water Level (Static): NA
Logged By (Geol.): SE/MW

Permit No.: NA
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 8' bgs

SUBSURFACE PROFILE			SAMPLE				
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	VOC (ppm) 0 – 2000	Blows/6"	Penetration/ Recovery	Depth (feet)
0		Ground Surface		0.1			0
1		***SP*** Greenish gray, poorly graded GRAVEL/SILT		0.0			1
2		***CL*** Reddish brown, gravelly CLAY with sand		0.0			2
3		***CL*** Reddish brown, some water, gravelly CLAY with sand		0.0			3
4		***CL*** Reddish brown, wet, gravelly CLAY with sand		0.0			4
5				0.0			5
6				0.0			6
7				0.0			7
8				18.8			8
9		***CL*** Yellow-beige, moist, silty CLAY					9
10		Decreasing silt color change to light reddish brown Increasing moisture		37.9			10
11			SB-1 (10-12)				11
12				32.9			12
13							13
14				31.6			14
15		Increasing fine sand @ 15.5' bgs		31.6			15
16		***SP-SC*** moist to wet, clayey SAND, increased moisture likely fall-back from above		33.8			16
17							17
18		***CL*** Light reddish brown, wet, CLAY		33.1			18
19							19
20				28.6			20

VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not Recorded
NM - Not Measured
ppm - parts per million

USCS - Unified Soil Classification System
bgs - below ground surface

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Boring No. SB-1

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0025
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: NR
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/04/09
End Date: 08/04/09
Total Hole Depth: 28'
Hole Diameter: 6"
Depth to Bedrock: Unknown
Surface Elevation: NA
Water Level (Initial): 27.5'
Water Level (Static): NA
Logged By (Geol.): SE/MW

Permit No.: NA
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 8' bgs

SUBSURFACE PROFILE			SAMPLE				
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	VOC (ppm) 0 – 2000	Blows/6"	Penetration/ Recovery	Depth (feet)
21		**CL** Weak red, wet, CLAY		28.6			21
22				25.2			22
23							23
24				22.4			24
25			SB-1 (24-26)				25
26		Siltly sand lenses, wet		18.5			26
27							27
28		**SP-SM** Yellow, saturated, fine silty SAND					28
29		End of Borehole					29
30							30
31							31
32							32
33							33
34							34
35							35
36							36
37							37
38							38
39							39
40							40

VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not Recorded
NM - Not Measured
ppm - parts per million

USCS - Unified Soil Classification System
bgs - below ground surface

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Well No. SB-2/MW-6

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0036
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: HH
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/04/09
End Date: 09/01/09
Total Hole Depth: 36'
Hole Diameter: 4.25"
Depth to Bedrock: Unknown
Top-Of-Casing Elevation: TBD
Water Level (Initial): 22.12'
Water Level (Static): NA
Logged By (Geol.): SE/VD

Permit No.: CE-95-2695
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 8' bgs

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	VOC (ppm) 0 2000	Well Completion Details	Depth (feet)
0		Ground Surface				0.0		0
0–3		**CL** Yellowish brown, GRAVEL with lean clay				0.0	2'x2' Concrete Pad	0–3
3–4		**CL** Pink, CLAY with some gravel, odor				0.5	Concrete	3–4
4–8		**CL** Pinkish brown, CLAY with some gravel				1.5 1.9 3.7 3.2 3.1 9.4	Bentonite Seal	4–8
8–11		**CL** Gray brown, moist to very moist, firm to soft, silty CLAY				14.1 13.7 10.4	2" PVC Riser 8" Diameter Roadbox Locking Compression Cap	8–11
11–15		**CL** Gray brown, moist silty CLAY, trace sand				9.6 8.7 13.7 12.0	#1 Sand Pack	11–15
15–19		**CL** Gray, moist, firm, sandy CLAY				7.6 9.1 9.9 7.8	2" PVC 0.010" Slot Screen	15–19
19–20		**CL** Gray brown, moist, firm, CLAY, trace sand				6.0		19–20

VOC - Volatile Organic Compound
USCS - Unified Soil Classification System
NA - Not Applicable
NS - Not Sampled
NR - Not recorded
NM - Not measured
bgs - below ground surface
ppm - parts per million

KLEINFELDER — Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Well No. SB-2/MW-6

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0036
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: HH
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/04/09
End Date: 09/01/09
Total Hole Depth: 36'
Hole Diameter: 4.25"
Depth to Bedrock: Unknown
Top-Of-Casing Elevation: TBD
Water Level (Initial): 22.12'
Water Level (Static): NA
Logged By (Geol.): SE/VD

Permit No.: CE-95-2695
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 8' bgs

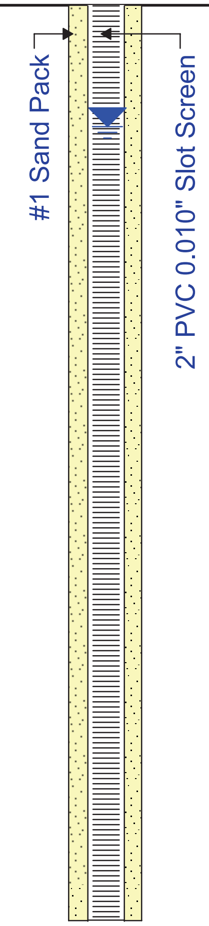
SUBSURFACE PROFILE

Depth (feet)	USCS Code Soil/Geologic Description
20–25	
25–27.5	**CL** Yellow brown, firm to hard, silty CLAY, trace sand
27.5–30	**SC** Reddish yellow, wet, clayey SAND
30–33	**SP** Light gray brown, wet, SAND, trace clay
33–36	**CL** Blue gray, moist, firm, CLAY
36	End of Borehole

SAMPLE

Depth (feet)	Sample ID	Blows/6"	Penetration / Recovery	VOC (ppm) (0–2000)
20				6.0
21				4.9
22				5.5
23				5.0
24				4.1
25				3.8
26	MW-6 (26)			5.2
27				6.8
28				7.1
29				4.0
30				2.8
31				3.1
32				3.3
33				4.1
34				3.8
35	MW-6 (35)			4.7

Well Completion Details



VOC - Volatile Organic Compound
USCS - Unified Soil Classification System
NA - Not Applicable
NS - Not Sampled
NR - Not recorded
NM - Not measured
bgs - below ground surface
ppm - parts per million

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Boring No. SB-3

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0025
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: NR
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/04/09
End Date: 08/04/09
Total Hole Depth: 28'
Hole Diameter: 6"
Depth to Bedrock: Unknown
Surface Elevation: NA
Water Level (Initial): 25'
Water Level (Static): NA
Logged By (Geol.): SE/MW

Permit No.: NA
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 8' bgs

SUBSURFACE PROFILE			SAMPLE				
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	VOC (ppm) 0 – 2000	Blows/6"	Penetration/ Recovery	Depth (feet)
0		Ground Surface					0
0 – 1		***SP*** Greenish gray, poorly graded GRAVEL		1.8			0 – 1
1 – 4		***CL*** Olive yellow, some water, lean CLAY		0.0, 0.3, 0.0			1 – 4
4 – 8		***CL*** Olive yellow some pink, some water, lean CLAY		0.0, 0.0, 0.0, 0.0, 3.0			4 – 8
8 – 10		***CL*** Yellow-beige, CLAY		14.4, 17.7			8 – 10
10 – 20		***CL*** Dark greenish gray, wet to saturated, (most likely from surface water) Increasing silt	SB-3 (12-14)	18.8, 11.3, 11.3, 5.4, 7.9, 7.6			10 – 20

VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not Recorded
NM - Not Measured
ppm - parts per million

USCS - Unified Soil Classification System
bgs - below ground surface

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Boring No. SB-3

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0025
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: NR
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/04/09
End Date: 08/04/09
Total Hole Depth: 28'
Hole Diameter: 6"
Depth to Bedrock: Unknown
Surface Elevation: NA
Water Level (Initial): 25'
Water Level (Static): NA
Logged By (Geol.): SE/MW

Permit No.: NA
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 8' bgs

SUBSURFACE PROFILE			SAMPLE				
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	VOC (ppm) 0 – 2000	Blows/6"	Penetration/ Recovery	Depth (feet)
21		***CL*** Increasing silt and very fine sand, color change brownish yellow, moist @ 22' bgs		7.6			21
22				4.5			22
23			SB-3 (22-24)				23
24				5.2			24
25		***SP-SC*** Brownish yellow, fine clayey SAND					25
26				4.2			26
27		***SW-SM*** Silty SAND					27
28		***CL*** Dark greenish gray, CLAY					28
29		End of Borehole					29
30							30
31							31
32							32
33							33
34							34
35							35
36							36
37							37
38							38
39							39
40							40

VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not Recorded
NM - Not Measured
ppm - parts per million

USCS - Unified Soil Classification System
bgs - below ground surface

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Well No. SB-4/MW-7

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0036
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: HH
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/17/09
End Date: 08/31/09
Total Hole Depth: 42'
Hole Diameter: 4.25"
Depth to Bedrock: Unknown
Top-Of-Casing Elevation: TBD
Water Level (Initial): Dry
Water Level (Static): NA
Logged By (Geol.): GM/VD

Permit No.: CE-95-2696
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 5' bgs

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	VOC (ppm) 0 2000	Well Completion Details	Depth (feet)
0		Ground Surface				0.8	2'x2' Concrete Pad Concrete Bentonite Seal 2" PVC Riser 8" Diameter Roadbox Locking Compression Cap #1 Sand Pack	0
0–6		**CL** Pink with gray streaks, dry, CLAY with gravel and silt				0.6 0.5 0.3 0.2 1.3		
6–10		**CL** Gray with red brown, moist, firm, CLAY				1.0 2.2 3.1 2.5 1.8		
10–15		**CL** Red brown with gray, moist, firm, silty CLAY				2.7 3.4 2.6 1.9 1.5		
15–20		**CL** Red brown with yellow brown and gray, moist, firm, silty CLAY				3.9 4.8 3.8 4.5 6.1		

VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not recorded
NM - Not measured
bgs - below ground surface
ppm - parts per million
USCS - Unified Soil Classification System

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Well No. SB-4/MW-7

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0036
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: HH
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/17/09
End Date: 08/31/09
Total Hole Depth: 42'
Hole Diameter: 4.25"
Depth to Bedrock: Unknown
Top-Of-Casing Elevation: TBD
Water Level (Initial): Dry
Water Level (Static): NA
Logged By (Geol.): GM/VD

Permit No.: CE-95-2696
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 5' bgs

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	VOC (ppm) 0 2000	Well Completion Details	Depth (feet)
21		***CL*** Gray, trace yellow brown, moist, firm, sandy CLAY				6.1		21
22		***SP*** Yellow brown with gray, moist, SAND with clay				7.0		22
23		***SP*** Yellow brown to red brown, moist, SAND, trace clay				4.4		23
24						5.2		24
25		***CL*** Yellow brown, moist, firm, silty CLAY with sand				6.6		25
26						7.1		26
27		***CL*** Yellow brown, dry, firm, silty CLAY, trace sand				6.0		27
28						6.9		28
29		***CL*** Yellow brown with gray mottles, moist, firm, silty CLAY, trace sand				4.6		29
30			MW-7 (30)			4.2		30
31		***CL*** Pink with gray, moist, firm, CLAY				6.8		31
32						7.1		32
33						6.5		33
34						6.1		34
35						4.8		35
36		***CL*** Gray with red brown, moist, firm, silty CLAY				3.4		36
37						3.3		37
38						3.1		38
39		***CL*** Moist, firm, CLAY, trace weathered mica				1.3		39
40			MW-7 (40)			2.1		40
						2.0	#1 Sand Pack; 2" PVC 0.010" Slot Screen	

VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not recorded
NM - Not measured
bgs - below ground surface
ppm - parts per million
USCS - Unified Soil Classification System

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Well No. SB-4/MW-7

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0036
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: HH
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/17/09
End Date: 08/31/09
Total Hole Depth: 42'
Hole Diameter: 4.25"
Depth to Bedrock: Unknown
Top-Of-Casing Elevation: TBD
Water Level (Initial): Dry
Water Level (Static): NA
Logged By (Geol.): GM/VD

Permit No.: CE-95-2696
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 5' bgs

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	VOC (ppm)	Well Completion Details	Depth (feet)
41						0 2.0 2000 1.6	#1 Sand Pack 2" PVC 0.010" Slot Screen	41
42		End of Borehole						42
43								43
44								44
45								45
46								46
47								47
48								48
49								49
50								50
51								51
52								52
53								53
54								54
55								55
56								56
57								57
58								58
59								59
60								60

VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not recorded
NM - Not measured
bgs - below ground surface
ppm - parts per million
USCS - Unified Soil Classification System

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

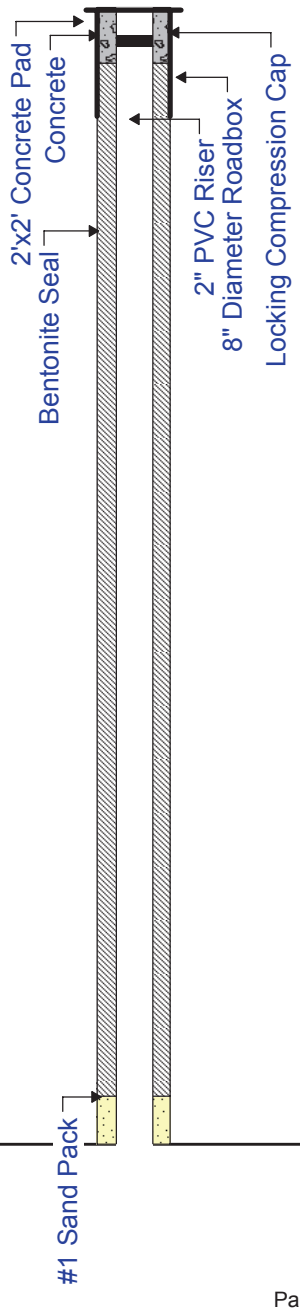
DRILLING LOG
Well No. SB-5/MW-8

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0036
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: HH
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/17/09
End Date: 08/31/09
Total Hole Depth: 42'
Hole Diameter: 4.25"
Depth to Bedrock: Unknown
Top-Of-Casing Elevation: TBD
Water Level (Initial): 35.9'
Water Level (Static): 30.26'
Logged By (Geol.): GM/VD

Permit No.: CE-95-2697
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 5' bgs

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	VOC (ppm) 0 2000	Well Completion Details	Depth (feet)
0		Ground Surface						0
0		***ASPHALT*** Asphalt				1.1		0
1		***SP*** Reddish brown, dry, poorly graded gravelly SAND with clay				0.5		1
2						0.4		2
3		***CL*** Grayish brown, dry, gravelly CLAY with sand				0.2		3
4						0.3		4
5		***SP*** Reddish brown, dry, gravelly SAND with clay						5
6		***CL*** Light brownish gray, moist, sandy CLAY with gravel				6.1		6
7						7.5		7
8		***CL*** Reddish brown, moist, gravelly SAND with clay				7.8		8
9		***CL*** Gray with red brown, moist, firm, silty CLAY				8.1		9
10						4.5		10
11		***CL*** Red brown with gray, moist, firm, silty CLAY				5.4		11
12						4.7		12
13		***CL*** Red brown with gray, trace brown/yellow, moist, firm, silty CLAY, trace sand				3.9		13
14						3.8		14
15						4.0		15
16		***CL*** Yellow brown and gray with red brown, moist, firm, silty CLAY, trace sand				5.5		16
17						6.7		17
18						4.9		18
19						6.0		19
20						3.9		20



VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not recorded
NM - Not measured
bgs - below ground surface
ppm - parts per million
USCS - Unified Soil Classification System

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Well No. SB-5/MW-8

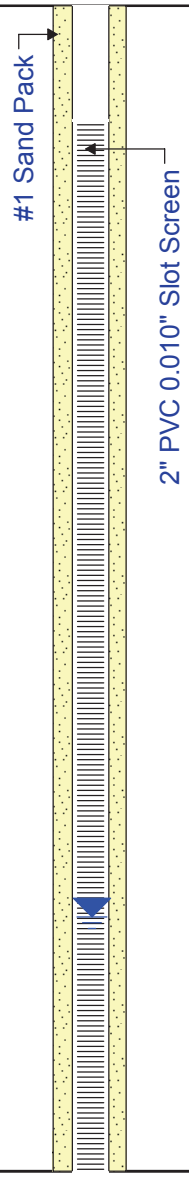
Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0036
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: HH
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/17/09
End Date: 08/31/09
Total Hole Depth: 42'
Hole Diameter: 4.25"
Depth to Bedrock: Unknown
Top-Of-Casing Elevation: TBD
Water Level (Initial): 35.9'
Water Level (Static): 30.26'
Logged By (Geol.): GM/VD

Permit No.: CE-95-2697
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 5' bgs

SUBSURFACE PROFILE | **SAMPLE**

Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	VOC (ppm) 0 2000	Well Completion Details	Depth (feet)
21		***CL*** Yellow brown with red, moist, firm, sandy CLAY				3.9		21
22		***SP*** Gray with yellow brown, moist, clayey SAND				5.2		22
23						7.2		23
24		***SP*** Yellow brown with gray, moist, poorly sorted SAND, trace clay				8.1		24
25						4.8		25
26		No recovery				5.9		26
27		***SP*** Gray, trace yellow brown, moist, hard, poorly sorted SAND, trace clay				4.6		27
28		***SP*** Red brown, dry, SAND with clay				3.9		28
29		***CL*** Yellow brown and gray, moist firm, CLAY with sand				7.0		29
30						7.8		30
31		***CL*** Yellow brown with gray, moist to very moist, firm to soft, sandy CLAY				4.6		31
32			MW-8 (32)			5.5		32
33						4.8		33
34						3.3		34
35						5.1		35
36		***CL*** Yellow brown, moist, firm, CLAY, trace sand				6.6		36
37						8.1		37
38		***CL*** Gray, moist, firm, silty CLAY, trace sand				10.0		38
39						6.9		39
40			MW-8 (40)			6.0		40
						4.2		



VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not recorded
NM - Not measured
bgs - below ground surface
ppm - parts per million
USCS - Unified Soil Classification System

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Well No. SB-5/MW-8

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0036
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: HH
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/17/09
End Date: 08/31/09
Total Hole Depth: 42'
Hole Diameter: 4.25"
Depth to Bedrock: Unknown
Top-Of-Casing Elevation: TBD
Water Level (Initial): 35.9'
Water Level (Static): 30.26'
Logged By (Geol.): GM/VD

Permit No.: CE-95-2697
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 5' bgs

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	VOC (ppm) 0 2000	Well Completion Details	Depth (feet)
41		***CL*** Moist, hard, silty CLAY, trace weathered mica				4.2		41
42		End of Borehole				3.0	#1 Sand Pack; 2" PVC 0.010" Slot Screen	42
43–60								43–60

VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not recorded
NM - Not measured
bgs - below ground surface
ppm - parts per million
USCS - Unified Soil Classification System

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Well No. SB-6/MW-9

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0036
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: HH
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/17/09
End Date: 08/27/09
Total Hole Depth: 42.5'
Hole Diameter: 4.25"
Depth to Bedrock: Unknown
Top-Of-Casing Elevation: TBD
Water Level (Initial): 32.42'
Water Level (Static): NA
Logged By (Geol.): GM/VD

Permit No.: CE-95-2698
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 8' bgs

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	VOC (ppm) 0 2000	Well Completion Details	Depth (feet)
0		Ground Surface				0.8	2'x2' Concrete Pad, Concrete, Bentonite Seal, 2" PVC Riser, 8" Diameter Roadbox, Locking Compression Cap, #1 Sand Pack	0
0–1		***ASPHALT*** Asphalt				1.2		1
1–2		***CL*** Yellowish brown, dry, CLAY with gravel and sand				2.4		2
2–3		***SP-SC*** Brown, dry, clayey SAND with gravel				1.2		3
3–4		***CL*** Gray with yellowish brown, CLAY with sand				1.7		4
4–5		***CL*** Pink and gray, dry, CLAY with little sand				1.5		5
5–6		***CL*** Pink with brown and gray streaks, dry, CLAY with sand				0.7		6
6–7		***CL*** Yellow brown with red brown, moist, CLAY, trace sand				0.4		7
7–8		***CL*** Red brown with yellow brown and gray, moist, CLAY, trace sand				5.4		8
8–9						8.2		9
9–10						3.6		10
10–11						8.5		11
11–12						7.5		12
12–13						9.1		13
13–14		***CL*** Yellow brown, trace red brown, dry, firm, CLAY with sand				5.0		14
14–15						7.4		15
15–16						4.3		16
16–17		***SP*** Gray, trace yellow brown, moist, poorly sorted SAND with clay				5.1		17
17–18						10.7		18
18–19						7.1		19
19–20						6.7		20

VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not recorded
NM - Not measured
bgs - below ground surface
ppm - parts per million
USCS - Unified Soil Classification System

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

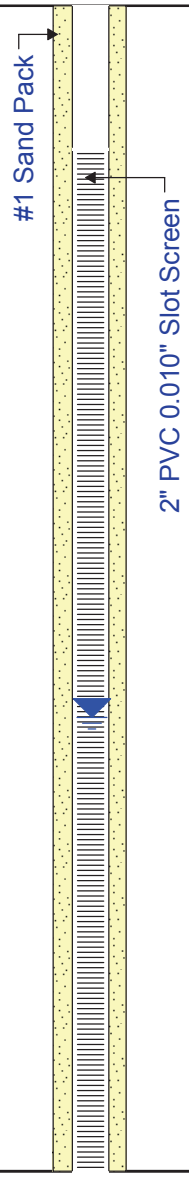
DRILLING LOG
Well No. SB-6/MW-9

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0036
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: HH
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/17/09
End Date: 08/27/09
Total Hole Depth: 42.5'
Hole Diameter: 4.25"
Depth to Bedrock: Unknown
Top-Of-Casing Elevation: TBD
Water Level (Initial): 32.42'
Water Level (Static): NA
Logged By (Geol.): GM/VD

Permit No.: CE-95-2698
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 8' bgs

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	VOC (ppm) 0 2000	Well Completion Details	Depth (feet)
21		***CL*** Light gray, trace yellow brown, moist, firm, CLAY with sand				6.7		21
22						6.1		22
23		***CL*** Yellow brown with light gray and red, moist, firm, CLAY, trace sand				7.0		23
24						5.2		24
25						10.1		25
26		***CL*** Red brown, trace yellow brown, moist, firm, CLAY, trace sand				12.4		26
27						8.1		27
28		***SP*** Yellow brown with light gray and red brown, moist, poorly sorted SAND with clay				7.0		28
29			MW-9 (29)			3.9		29
30		***SP*** Light gray, very moist, soft, poorly sorted SAND, trace clay				6.0		30
31		***CL*** Red brown with gray, moist, firm, CLAY with sand				3.8		31
32						4.6		32
33						10.7		33
34						11.1		34
35		***CL*** Gray, moist, firm, CLAY, trace sand				4.9		35
36						5.7		36
37						6.4		37
38		***CL*** Gray brown, moist, firm, CLAY, trace sand				7.8		38
39						8.3		39
40						9.1		40
						6.3		



VOC - Volatile Organic Compound
USCS - Unified Soil Classification System
NA - Not Applicable
NS - Not Sampled
NR - Not recorded
NM - Not measured
bgs - below ground surface
ppm - parts per million

KLEINFELDER
Bright People. Right Solutions.

1340 Charwood Road
Suite I
Hanover, MD 21076

DRILLING LOG
Well No. SB-6/MW-9

Project Name: ExxonMobil Station # 2-0025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 2-0036
Client: ExxonMobil Corporation
Drilling Company: Connelly Associates
Driller: HH
Drill Rig Type: CME-55
Drilling Method: Hollow-stem auger
Sampling Method: Split Spoon

Start Date: 08/17/09
End Date: 08/27/09
Total Hole Depth: 42.5'
Hole Diameter: 4.25"
Depth to Bedrock: Unknown
Top-Of-Casing Elevation: TBD
Water Level (Initial): 32.42'
Water Level (Static): NA
Logged By (Geol.): GM/VD

Permit No.: CE-95-2698
License No.: JGD 034
Checked By: GYR
Notes: Pre-cleared boring to 8' bgs

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	USCS Code Soil/Geologic Description	Sample ID	Blows/6"	Penetration / Recovery	VOC (ppm) 0 2000	Well Completion Details	Depth (feet)
41			MW-9 (41)			6.3 5.8	#1 Sand Pack 2" PVC 0.010" Slot Screen	41
42		End of Borehole						42
43								43
44								44
45								45
46								46
47								47
48								48
49								49
50								50
51								51
52								52
53								53
54								54
55								55
56								56
57								57
58								58
59								59
60								60

VOC - Volatile Organic Compound
NA - Not Applicable
NS - Not Sampled
NR - Not recorded
NM - Not measured
bgs - below ground surface
ppm - parts per million
USCS - Unified Soil Classification System

KLEINFELDER
Bright People. Right Solutions.

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

BORING LOG

Boring No. SB-7

Project Name: Southside Facility #20025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 113847
Client: Southside Oil LLC
Drilling Company: Odyssey Environmental Services, Inc.
Driller: Z. Hoppes
Drill Rig Type: Geoprobe 7730DT
Drilling Method: Direct Push
Sampling Method: 2.25 inch Macrocore

Start Date: 8-31-11
End Date: 8-31-11
Total Hole Depth: 23 feet
Hole Diameter: 2.25 inches
Depth to Bedrock: Not encountered
Surface Elevation: 0
Water Level (Initial): Not encountered
Water Level (Static): NA
Logged By (Geol.): CL

Permit No.: CE-10-0090
License No.: JGD095
Checked By: NMH
Notes: Airknife to 5 feet

SUBSURFACE PROFILE			SAMPLE		
Depth (feet)	Graphic Log	Soil/Geologic Description (Unified Soil Classification System)	Sample ID	PID (ppm)	Depth (feet)
0		Ground Surface			0
		Grass /Topsoil			
1		***GW*** Fine to coarse GRAVEL with fine sand, light brown, dry, with some fill materials and concrete pieces		0.1	1
2					2
3		***SC*** Medium SAND with clay and fine gravel, brown to light gray, dry		1.1	3
4				0.0	4
5		***SC*** Medium SAND with clay and fine gravel, light gray, dry, very firm		0.0	5
6		***CL*** CLAY, light brown, dry, hard		0.0	6
7				0.0	7
8				0.0	8
9				0.0	9
10				0.0	10
11				0.0	11
12		***CL*** CLAY, red-brown, dry, hard		0.0	12
13		***CL*** CLAY, light brown, dry, hard		0.0	13
14				0.0	14
15		***CL*** CLAY, red-brown, dry, hard		0.0	15
16		***SM*** Medium SAND with silt, yellow-brown, moist, medium dense		0.0	16
17				0.0	17
18				0.0	18
19		***CL*** CLAY, red-brown, dry, hard		0.0	19
20		***CL*** CLAY, red-brown, dry, very hard Probe refusal at 23 feet		0.3	20
21				0.2	21
22			MW-11 (22-23)	0.4	22
23		End of Borehole			23
24					24
25					25

PID - Photoionization Detector
NA - Not Applicable
NS - Not Sampled
NM - Not Measured
MU - Meter Units
PP - Pocket Penetrometer Reading (tons/sq. foot)

SHA Permit # SHA-2-CE-4709-UT-11

KLEINFELDER
Bright People. Right Solutions.

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

BORING LOG
Boring No. MW-10D

Project Name: Southside Facility #20025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 113847
Client: Southside Oil LLC
Drilling Company: Odyssey Environmental Services, Inc.
Driller: F. Bahrenburg
Drill Rig Type: CME-75
Drilling Method: 4.25" Hollow Stem Augers
Sampling Method: 2 Foot Split Spoon

Start Date: 8-31-11
End Date: 9-1-11
Total Hole Depth: 43 feet
Hole Diameter: 8 inches
Depth to Bedrock: Not encountered
TOC Elevation: 82.61 feet
Water Level (Initial): 17 feet
Water Level (Static): 28.18 feet
Logged By (Geol.): CL

Permit No.: CE-10-0089
License No.: JGD095
Checked By: NMH
Notes: Airknife to 5 feet

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	Soil/Geologic Description (Unified Soil Classification System)	Sample ID	Blows/6 in	PID (ppm)	Recovery (in)	Well Construction	Depth (feet)
0		Ground Surface						0
0		Grass /Topsoil						0
1		**SC** Medium SAND with clay, brown, moist			0.0			1
2								2
3		**SC** Medium SAND with clay, light gray, moist			0.2			3
4					0.0			4
5		**SC** Medium SAND with clay, brown, moist		2 3 3 2	0.0	24"		5
6		**ML** Clayey SILT, gray, soft			0.3			6
7				2 3 3 3	1.8	24"		7
8								8
9		**ML** Clayey SILT, dark gray, moist, soft		2 2 2 3	1.8	24"		9
10					1.0			10
11		**ML** Clayey SILT, dark gray, very moist, soft		3 3 3 3	3.5	24"		11
12					2.0			12
13		**CL** Silty CLAY, dark gray, moist, firm		2 2 2 3	2.2	18"		13
14					0.5			14
15		**CL** CLAY, dark gray, dry, firm		2 2 2 3	1.2	18"		15
16			MW-10D (16-17)		4.3			16
17		**CL** Silty CLAY, dark gray, moist, firm		4 4 6 5	0.8	24"		17
18		**ML** SILT, dark gray, wet, soft			0.5			18
19		**CL** CLAY, dark gray, dry, hard		2 3 4 5	0.4	24"		19
20					0.0			20
21		**ML** Clayey SILT, dark gray, moist, firm		5 5 5 5	0.0	24"		21
22					0.0			22
23		**CL** CLAY, dark gray, moist, firm		6 8 13 13	0.0	24"		23
24		**CL** CLAY, dark gray, moist, hard			0.0			24
25				2				25

Portland Grout
2" PVC Riser

PID - Photoionization Detector
NA - Not Applicable
NS - Not Sampled
NM - Not Measured
MU - Meter Units
PP - Pocket Penetrometer Reading (tons/sq. foot)

KLEINFELDER
Bright People. Right Solutions.

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

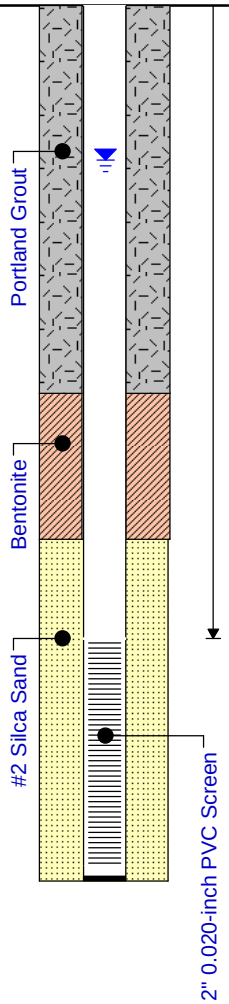
BORING LOG
Boring No. MW-10D

Project Name: Southside Facility #20025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 113847
Client: Southside Oil LLC
Drilling Company: Odyssey Environmental Services, Inc.
Driller: F. Bahrenburg
Drill Rig Type: CME-75
Drilling Method: 4.25" Hollow Stem Augers
Sampling Method: 2 Foot Split Spoon

Start Date: 8-31-11
End Date: 9-1-11
Total Hole Depth: 43 feet
Hole Diameter: 8 inches
Depth to Bedrock: Not encountered
TOC Elevation: 82.61 feet
Water Level (Initial): 17 feet
Water Level (Static): 28.18 feet
Logged By (Geol.): CL

Permit No.: CE-10-0089
License No.: JGD095
Checked By: NMH
Notes: Airknife to 5 feet

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	Soil/Geologic Description (Unified Soil Classification System)	Sample ID	Blows/6 in	PID (ppm)	Recovery (in)	Well Construction	Depth (feet)
26		***ML*** SILT, dark gray, wet, soft		2 7 7 7	0.0 0.0	18"		26
27		***SM*** Silty fine SAND, yellow-brown, wet, medium dense		6 8 10 10	0.0 0.0	18"		27
28								28
29		***SP*** Medium SAND, yellow-brown, wet, medium dense		7 12 15 15	0.0 0.0	12"		29
30								30
31		***SM*** Silty fine SAND, red-brown, moist, medium dense,		8 10 10 12	0.0 0.0	12"		31
32								32
33		***CL*** CLAY, gray, moist, very firm		8 10 6 6	0.0 0.0	12"		33
34		***CL*** CLAY, gray, moist, soft						34
35								35
36		***CL*** CLAY, olive-gray, moist, hard		4 4 5 7	0.0 0.0	24"		36
37								37
38		***CL*** CLAY, dark blue-gray, moist, hard		7 8 11 12	0.0 0.1	18"		38
39		***CL*** Silty CLAY, dark blue-gray, dry, very hard, saprolitic texture						39
40				7 8 11 12	0.0 0.0	24"		40
41		***ML*** Clayey SILT, dark blue-gray, dry, very hard						41
42				9 12 15 18	0.0 0.0	24"		42
43		***ML*** Clayey SILT, light gray, dry, very hard						43
44		***ML*** Clayey SILT, dark blue-gray, dry, very hard						44
45								45
46		***SM*** Silty medium SAND, green-gray, dry, dense Auger refusal at 43 feet						46
47								47
48		End of Borehole						48
49								49
50								50



PID - Photoionization Detector
NA - Not Applicable
NS - Not Sampled
NM - Not Measured
MU - Meter Units
PP - Pocket Penetrometer Reading (tons/sq. foot)

KLEINFELDER
Bright People. Right Solutions.

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

BORING LOG
Boring No. MW-12

Project Name: Southside Facility #20025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 113847
Client: Southside Oil LLC
Drilling Company: Odyssey Environmental Services, Inc.
Driller: F. Bahrenburg
Drill Rig Type: CME-75
Drilling Method: 4.25 inch Hollow Stem Augers
Sampling Method: 2 foot Split Spoon

Start Date: 8-31-11
End Date: 9-6-11
Total Hole Depth: 38.5 feet
Hole Diameter: 8 inches
Depth to Bedrock: 38 feet
TOC Elevation: 70.57 feet
Water Level (Initial): 37.5 feet
Water Level (Static): 30.52 feet
Logged By (Geol.): CL / NMH

Permit No.: CE-10-0091
License No.: JGD095
Checked By: NMH
Notes: Airknife to 5 feet

SUBSURFACE PROFILE			SAMPLE					
Depth (feet)	Graphic Log	Soil/Geologic Description (Unified Soil Classification System)	Sample ID	Blows/6 in	PID (ppm)	Recovery (in)	Well Construction	Depth (feet)
0		Ground Surface						0
0		Grass /Topsoil						0
1		***SC*** Medium SAND with clay and fine gravel, brown, moist			0.0			1
2								2
3		***SC*** Medium SAND with clay, light gray-brown, dry			0.0			3
4					0.3			4
5		***CL*** CLAY with fine sand, red-brown, dry, very firm		4 6 8 8	0.0	23"		5
6								6
7		***CL*** CLAY with silt, red and light gray mottled, dry, very firm		7 8 8 9	4.4	18"	Portland Grout	7
8								8
9				4 4 6 9	10.1	24"		9
10								10
11				6 8 12 14	15.3	12"		11
12								12
13				8 8 12 13	10.9	12"		13
14								14
15				7 8 14 15	11.8	24"	Bentonite	15
16		***SC*** Clayey fine SAND, light gray, dry, firm, dense						16
17				12 13 15 14	12.2	18"		17
18		Yellow-orange mottling at 18 feet						18
19		***SC*** Clayey fine SAND, light gray and orange, dry, medium dense						19
20			MW-12 (19-21)	7 10 14 18	13.1	24"		20
21		Auger refusal at 21 feet, Drove spoons to 25 feet					#2 Silca Sand	21
22		***CL*** Sandy CLAY, red, dry, hard		23 50 in 2"	7.4	8"	2" PVC Riser	22
23								23

Roller bit engaged from 25' to terminus, no spoons collected

PID - Photoionization Detector
NA - Not Applicable
NS - Not Sampled
NM - Not Measured
MU - Meter Units
PP - Pocket Penetrometer Reading (tons/sq. foot)

KLEINFELDER
Bright People. Right Solutions.

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

BORING LOG
Boring No. MW-12

Project Name: Southside Facility #20025
Site Location: 31 Heather Lane, Perryville, MD
Kleinfelder Project No: 113847
Client: Southside Oil LLC
Drilling Company: Odyssey Environmental Services, Inc.
Driller: F. Bahrenburg
Drill Rig Type: CME-75
Drilling Method: 4.25 inch Hollow Stem Augers
Sampling Method: 2 foot Split Spoon

Start Date: 8-31-11
End Date: 9-6-11
Total Hole Depth: 38.5 feet
Hole Diameter: 8 inches
Depth to Bedrock: 38 feet
TOC Elevation: 70.57 feet
Water Level (Initial): 37.5 feet
Water Level (Static): 30.52 feet
Logged By (Geol.): CL / NMH

Permit No.: CE-10-0091
License No.: JGD095
Checked By: NMH
Notes: Airknife to 5 feet

SUBSURFACE PROFILE | **SAMPLE**

Depth (feet)	Graphic Log	Soil/Geologic Description (Unified Soil Classification System)	Sample ID	Blows/6 in	PID (ppm)	Recovery (in)	Well Construction	Depth (feet)
24–25		***SC*** Clayey fine SAND, light gray mottled, dry, hard			5.2			24–25
26		***ML*** SILT with fine sand, light brown, dry, hard						26
27–30		***ML*** SILT with fine sand, light brown, dry, soft					#2 Silca Sand	27–30
31–36		***ML*** SILT with fine sand, light brown, dry, hard					2" 0.020-inch PVC Screen	31–36
37–38		***ML*** SILT with fine sand, light brown, dry, soft Wet cuttings at 37.5 feet						37–38
39		***BK*** Bedrock, no recovery						39
40		End of Borehole						40
41–46								41–46

PID - Photoionization Detector
NA - Not Applicable
NS - Not Sampled
NM - Not Measured
MU - Meter Units
PP - Pocket Penetrometer Reading (tons/sq. foot)

Roller bit engaged from 25' to terminus, no spoons collected

APPENDIX E

SHA Right-of-Way Permit & Private Access Agreement

MARYLAND STATE HIGHWAY ADMINISTRATION
615 Morgnec Road
Chestertown, MD 21620

Permit No. SHA 2-CE-4709-UT-11

RECEIVED
AUG 24 2011
BY:_____

Route: MD 222 (Perryville Road)
Date: August 19, 2011

PERMISSION IS HEREBY GIVEN TO:

Kleinfelder East, Inc.
1340 Charwood Road
Suite #1
Hanover, MD 21076

ATT: Natalie Morales Hendricks
Job Order No. 20025

So far as the State Highway Administration has the right and power to grant same, For the purpose of performing work in the State Highway Administration's right-of-way to conduct one test boring sample (MW-11) for the purpose of collecting soil and groundwater samples. Work location for test boring (MW-11) is the western side of MD Rt 222 (Perryville Road) approximately fifty (50) feet from the edge of pavement. After test boring is accomplished any areas that have been disturbed by this procedure will be stabilized by seeding, mulch and matting. Permanent/temporary structures will not be permitted to remain in the State Highway Administration's right after the procedure has been accomplished. **Permit will expire thirty (30) days from date of issue. This permit covers only the work being performed in the SHA right-of-way.**

- **Before any excavation or drilling/boring the permittee must contact "MISS UTILITY" for Cecil County at 1-800-257-7777.**

- **The State Highway Administration reserves the right to modify or expand the methods of traffic control specified and to restrict the hours if in the opinion of the SHA Engineer the contractors operations are detrimental to the safe and efficient flow of traffic.**

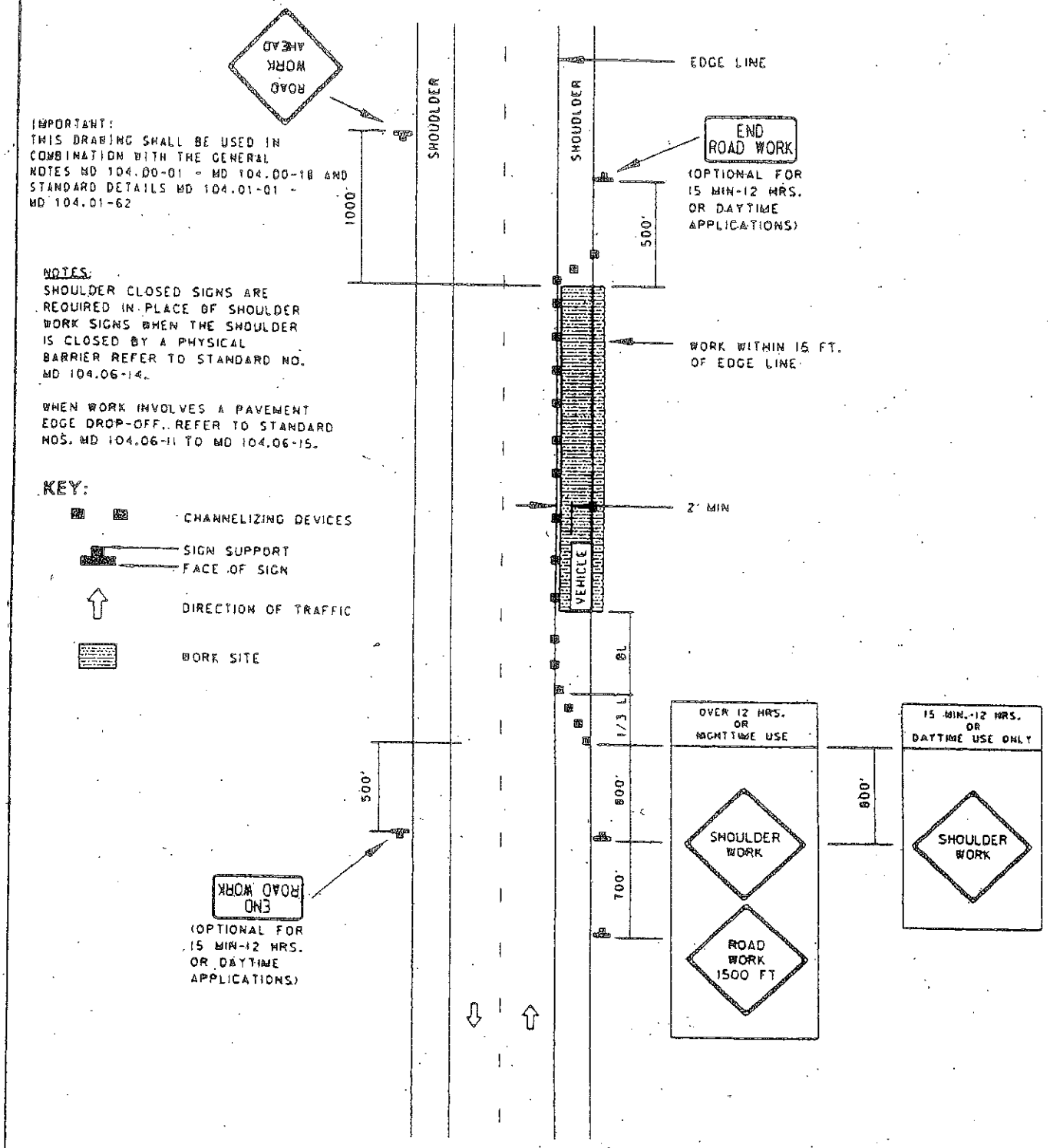
Traffic control shall be as per the attached standard as required. The Foreman at the work site shall be the Traffic Control Manager.

NOTIFICATIONS
Permittee shall furnish the District Utilities Office, (410)778-3061; SHA District No. 2 Office, Chestertown MD and Kenny Fender, Resident Maintenance Engineer, Elkton MD (410)398-1565, with the name of its representative on the job and to give at least 48 hours notice prior to starting any work under this permit. THIS PERMIT IS ISSUED WITH THE REQUIREMENT THAT IT WILL BE ENFORCED BY THE GENERAL PROVISIONS, SPECIAL PROVISIONS, AND PERMIT REGULATIONS AS OUTLINED IN THE FULL LENGTH SHA MASTER PERMIT WHICH WILL HEREBY BE ATTACHED TO THIS PAGE AND FOUND ON THE JOB SITE AT ALL TIMES.

Barry O. Clothier

Terry O. Wright
District Engineer
State Highway Administration

TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION



IMPORTANT:
THIS DRAWING SHALL BE USED IN COMBINATION WITH THE GENERAL NOTES MD 104.00-01 - MD 104.00-18 AND STANDARD DETAILS MD 104.01-01 - MD 104.01-62

NOTES:
SHOULDER CLOSED SIGNS ARE REQUIRED IN PLACE OF SHOULDER WORK SIGNS WHEN THE SHOULDER IS CLOSED BY A PHYSICAL BARRIER REFER TO STANDARD NO. MD 104.06-14.

WHEN WORK INVOLVES A PAVEMENT EDGE DROP-OFF, REFER TO STANDARD NOS. MD 104.06-11 TO MD 104.06-15.

KEY:

- CHANNELIZING DEVICES
- SIGN SUPPORT
- FACE OF SIGN
- DIRECTION OF TRAFFIC
- WORK SITE

SPECIFICATION	CATEGORY CODE ITEMS
104	

APPROVED

DIRECTOR - OFFICE OF TRAFFIC AND SAFETY

APPROVAL - SHA REVISIONS		APPROVAL - FEDERAL HIGHWAY ADMINISTRATION	
APPROVAL	8-20-03	APPROVAL	9-23-03
REVISED		REVISED	
REVISED		REVISED	
REVISED		REVISED	

SHA State Highway Administration

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES

SHOULDER WORK/2-LANE, 2-WAY EQL/LESS THAN 40 MPH

STANDARD NO. MD 104.02-02

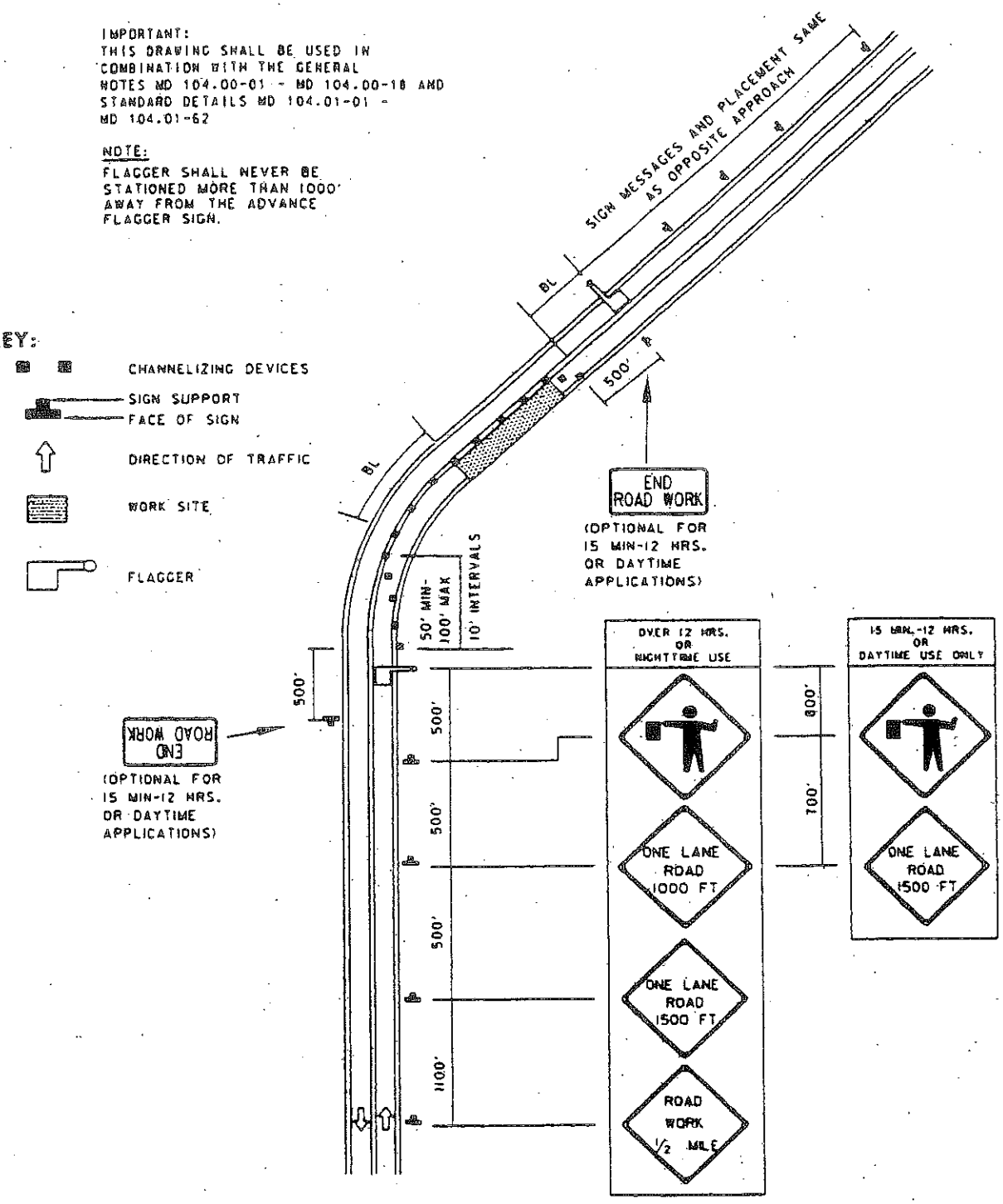
TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION

IMPORTANT:
THIS DRAWING SHALL BE USED IN COMBINATION WITH THE GENERAL NOTES MD 104.00-01 - MD 104.00-18 AND STANDARD DETAILS MD 104.01-01 - MD 104.01-62

NOTE:
FLAGGER SHALL NEVER BE STATIONED MORE THAN 1000' AWAY FROM THE ADVANCE FLAGGER SIGN.

KEY:

- CHANNELIZING DEVICES
- SIGN SUPPORT
- FACE OF SIGN
- DIRECTION OF TRAFFIC
- WORK SITE
- FLAGGER



SPECIFICATION	CATEGORY CODE ITEMS
104	

APPROVED _____
DIRECTOR - OFFICE OF TRAFFIC AND SAFETY

APPROVAL • SHA REVISIONS		APPROVAL • FEDERAL HIGHWAY ADMINISTRATION	
APPROVAL	8-20-03	APPROVAL	9-23-03
REVISED		REVISED	
REVISED		REVISED	
REVISED		REVISED	

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES

FLAGGING OPERATION/2-LANE, 2-WAY EQL/LESS THAN 40 MPH

STANDARD NO. MD 104.02-10

LICENSE AGREEMENT

Identification of Parties

1. This Site Access License Agreement (hereinafter referred to as the "License") is entered into by and between Feazell Property Management II, LLC (hereinafter referred to as "Licensor") and KLEINFELDER EAST, INC. (hereinafter to as "Licensee"), located at 1340 Charwood Road, Hanover, Maryland.

Property Description

2. Licensor is the owner of certain real property located at 1825 Perryville Road Perryville, MD 21903 (hereinafter referred to as "the Property").

Grant of License

3. Licensor grants to Licensee a License to perform the following acts on the Property, to be conducted in connection with the environmental investigation at Southside Oil, LLC (Southside) Facility #20025 located at 31 Heather Lane in Perryville, Cecil County, Maryland.

    - Access is being requested for the installation, maintenance, and periodic sampling of one monitoring well installed to a depth of approximately 35 feet below grade (hereinafter referred to as "the Work")

    - In the event that Licensor or any third party plans any construction or modifications to the Property that may impact Licensee's Work pursuant to this Agreement, Licensor shall provide written notice to Licensee of its proposed construction or modifications within thirty (30) business days prior to commencement of such proposed construction or modifications so that Licensor can review such plans with Licensee in order to accommodate and facilitate the Work to the maximum extent possible. If such proposed construction or modifications will impact the Work, the monitoring well may be relocated on the Property to a location agreeable to Licensor or the well will be abandoned by a licensed well driller.

    Licensee may not use the Property for any other purpose or business without obtaining Licensor's prior written consent. Licensee agrees to provide Licensor at least five business days notice of the date the Work is scheduled. The Licensee shall use best efforts to minimize inconvenience to Licensor.

Assignment

4. Under no circumstances shall this License be assignable by Licensee without the prior written consent of the Licensor. Notwithstanding the foregoing, Licensor may assign this License without Licensee's consent, in connection with the sale or lease of the Property.

Term

5. The duration of the License shall be for a fixed term only and shall commence on the date that this License Agreement is executed by both Licensee and Licensor and shall terminate One (1) year thereafter provided that, upon (a) Licensee's written request to Licensor, and (b) Licensor's written consent, the term of the License may be extended for an additional period to be agreed upon by the parties. The License Agreement shall terminate prior to 1 year if (a) Southside informs the Licensee that our services are no longer required or (b) 30 days following the Maryland Department of the Environment (MDE) issuing No Further Action for the Southside property.

Termination of Occupancy

6. On or before the termination date specified in Paragraph 5 of this License, Licensee shall remove all of Licensee's personal property from the Property and shall be responsible to surrender and/or return possession of the Property to Licensor in good order and repair to the reasonable satisfaction of Licensor, normal wear and tear excepted. In the event that Southside notifies Licensee that our services are no longer required, Kleinfelder will notify Licensor in writing that this license is being terminated. At no time will Licensor bear liability for maintenance and restoration subsequent to written notification to Licensor that this License is being terminated.

   Either party may terminate this agreement at any time, with or without cause, by providing no fewer than thirty (30) days written notice to the other party. Upon termination of this Agreement for any reason including the circumstances described in Section 5 of this Agreement, Licensor will not release Licensee from any and all responsibilities of maintenance and restoration of the work area, with the exception of Southside's termination of contract with Kleinfelder. In that event, Southside will be responsible for maintenance and restoration of the work area.

Indemnity

7. Licensee agrees to defend and indemnify Licensor from and against all claims, liabilities, losses, damages, or expenses caused as a result of the installation of this well.

   Please note that this indemnification is void if Licensor or its tenants, employees or agents make any changes to the monitoring well as installed by Licensee. If modifications to the property are planned and will impact the monitoring well construction, Licensor will contact Licensee so that proper arrangements can be made to modify the well in order to prevent any unsafe conditions.

Insurance

8. Licensee and its employees and agents are protected by Worker's Compensation Insurance, Employer's Liability Insurance, General Liability Insurance and Automobile Insurance for bodily injury and property damage ("the

Coverage") and will furnish to Licensor evidence thereof prior to entry on the Property upon request. The Coverage may not be materially changed or terminated without at least 30 days prior written notice to Licensor.

Attorney's Fee

9. Subject to the terms and provisions hereof, if any legal proceeding or action arising out of or relating to this License is brought by either party to the License, each party shall bear sole responsibility for its own attorney's fee and costs that may be incurred in the prosecution and/or defense of any such proceeding or action. If the Licensor prevails, all Licensor's reasonable costs and fees shall be paid by the Licensee.

Entire Agreement

10. This agreement constitutes the entire agreement between Licensor and Licensee relating to the License. Any prior agreements, promises, negotiations, or representations not expressly set forth in this License are of no force effect. This License shall be binding on the parties successors and permitted assigns. Any amendment shall be of no force and effect and will not be binding on either party hereto unless it is in writing and signed by Licensor and Licensee.

LICENSOR

Steve Feazell — 8-30-11

Steve Feazell
Feazell Property Management II, LLC
1002 Klender Court
Bel Air, Maryland 21014

Date

LICENSEE/AUTHORIZED AGENT

8/30/11

Kleinfelder East, Inc.
Mark Steele
Senior Project Manager

Date

APPENDIX F
Lancaster Laboratories Technical Reports - Soil

Lancaster Laboratories

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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Kleinfelder
30 Porter Road
Littleton MA 01460

September 21, 2011

Project: Southside Oil 20025

Submittal Date: 09/03/2011
Group Number: 1264924
PO Number: 51141-161270
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LLI) #
MW-12 (19-21 ft) Grab Soil	6396884

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

ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele
ELECTRONIC COPY TO	Kleinfelder	Attn: Angela Vogt
ELECTRONIC COPY TO	Kleinfelder	Attn: Brian Barone
ELECTRONIC COPY TO	Kleinfelder	Attn: Natalie Hendricks

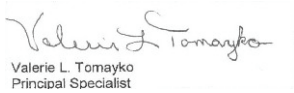
Lancaster Laboratories

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

Analysis Report

Questions? Contact your Client Services Representative
Natalie R Luciano at (717) 656-2300 Ext. 1881

Respectfully Submitted,



Valerie L. Tomayko
Principal Specialist

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-12 (19-21 ft) Grab Soil
Southside Oil 20025

LLI Sample # SW 6396884
LLI Group # 1264924
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/02/2011 09:49 by NMH

Submitted: 09/03/2011 09:50
Reported: 09/21/2011 13:39

Kleinfelder
30 Porter Road
Littleton MA 01460

SSM12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10950	Acetone	67-64-1	< 0.023	0.023	1.05
10950	Acrolein	107-02-8	< 0.11	0.11	1.05
10950	Acrylonitrile	107-13-1	< 0.023	0.023	1.05
10950	t-Amyl methyl ether	994-05-8	< 0.006	0.006	1.05
10950	Benzene	71-43-2	< 0.006	0.006	1.05
10950	Bromodichloromethane	75-27-4	< 0.006	0.006	1.05
10950	Bromoform	75-25-2	< 0.006	0.006	1.05
10950	Bromomethane	74-83-9	< 0.006	0.006	1.05
10950	2-Butanone	78-93-3	< 0.011	0.011	1.05
10950	t-Butyl alcohol	75-65-0	< 0.11	0.11	1.05
10950	n-Butylbenzene	104-51-8	< 0.006	0.006	1.05
10950	sec-Butylbenzene	135-98-8	< 0.006	0.006	1.05
10950	Carbon Tetrachloride	56-23-5	< 0.006	0.006	1.05
10950	Chlorobenzene	108-90-7	< 0.006	0.006	1.05
10950	Chloroethane	75-00-3	< 0.006	0.006	1.05
10950	Chloroform	67-66-3	< 0.006	0.006	1.05
10950	Chloromethane	74-87-3	< 0.006	0.006	1.05
10950	Dibromochloromethane	124-48-1	< 0.006	0.006	1.05
10950	1,2-Dichlorobenzene	95-50-1	< 0.006	0.006	1.05
10950	1,3-Dichlorobenzene	541-73-1	< 0.006	0.006	1.05
10950	1,4-Dichlorobenzene	106-46-7	< 0.006	0.006	1.05
10950	1,1-Dichloroethane	75-34-3	< 0.006	0.006	1.05
10950	1,2-Dichloroethane	107-06-2	< 0.006	0.006	1.05
10950	1,1-Dichloroethene	75-35-4	< 0.006	0.006	1.05
10950	cis-1,2-Dichloroethene	156-59-2	< 0.006	0.006	1.05
10950	trans-1,2-Dichloroethene	156-60-5	< 0.006	0.006	1.05
10950	1,2-Dichloropropane	78-87-5	< 0.006	0.006	1.05
10950	cis-1,3-Dichloropropene	10061-01-5	< 0.006	0.006	1.05
10950	trans-1,3-Dichloropropene	10061-02-6	< 0.006	0.006	1.05
10950	Ethyl t-butyl ether	637-92-3	< 0.006	0.006	1.05
10950	Ethylbenzene	100-41-4	< 0.006	0.006	1.05
10950	di-Isopropyl ether	108-20-3	< 0.006	0.006	1.05
10950	Isopropylbenzene	98-82-8	< 0.006	0.006	1.05
10950	p-Isopropyltoluene	99-87-6	< 0.006	0.006	1.05
10950	Methyl Tertiary Butyl Ether	1634-04-4	< 0.006	0.006	1.05
10950	Methylene Chloride	75-09-2	< 0.006	0.006	1.05
10950	Naphthalene	91-20-3	< 0.006	0.006	1.05
10950	n-Propylbenzene	103-65-1	< 0.006	0.006	1.05
10950	1,1,2,2-Tetrachloroethane	79-34-5	< 0.006	0.006	1.05
10950	Tetrachloroethene	127-18-4	< 0.006	0.006	1.05
10950	Toluene	108-88-3	< 0.006	0.006	1.05
10950	1,1,1-Trichloroethane	71-55-6	< 0.006	0.006	1.05
10950	1,1,2-Trichloroethane	79-00-5	< 0.006	0.006	1.05
10950	Trichloroethene	79-01-6	< 0.006	0.006	1.05
10950	Trichlorofluoromethane	75-69-4	< 0.006	0.006	1.05
10950	1,2,4-Trimethylbenzene	95-63-6	< 0.006	0.006	1.05
10950	1,3,5-Trimethylbenzene	108-67-8	< 0.006	0.006	1.05
10950	Vinyl Chloride	75-01-4	< 0.006	0.006	1.05
10950	Xylene (Total)	1330-20-7	< 0.006	0.006	1.05

2-Chloroethyl vinyl ether is an acid labile compound and cannot be reported in this sample due to the acid preservation of the samples and standards.

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-12 (19-21 ft) Grab Soil
Southside Oil 20025

LLI Sample # SW 6396884
LLI Group # 1264924
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/02/2011 09:49 by NMH

Submitted: 09/03/2011 09:50
Reported: 09/21/2011 13:39

Kleinfelder
30 Porter Road
Littleton MA 01460

SSM12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC Volatiles	**SW-846 8015B**		**mg/kg**	**mg/kg**	
01637	TPH-GRO soil C6-C10	n.a.	< 1.2	1.2	28.74
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	< 13	13	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	**Moisture**	n.a.	**7.5**	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10950	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	A112551AA	09/13/2011 00:37	Andrea E Lando	1.05
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201124925471	09/02/2011 09:49	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201124925471	09/02/2011 09:49	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201124925471	09/02/2011 09:49	Client Supplied	1
01637	TPH-GRO soil C6-C10	SW-846 8015B	1	11256A34A	09/13/2011 21:35	Marie D John	28.74
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201124925471	09/02/2011 09:49	Client Supplied	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	112550021A	09/16/2011 06:03	Glorines Suarez-Rivera	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	112550021A	09/13/2011 07:55	Katheryne V Sponheimer	1
00111	Moisture	SM20 2540 G	1	11249820008B	09/06/2011 23:03	Scott W Freisher	1

Quality Control Summary

Client Name: Kleinfelder Group Number: 1264924
Reported: 09/21/11 at 01:39 PM

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.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: A112551AA	Sample number(s): 6396884							
Acetone	< 0.020	0.020	mg/kg	125	144	32-209	14	30
Acrolein	< 0.10	0.10	mg/kg	85	77	52-139	10	30
Acrylonitrile	< 0.020	0.020	mg/kg	119	127	60-133	6	30
t-Amyl methyl ether	< 0.005	0.005	mg/kg	93	96	69-124	2	30
Benzene	< 0.005	0.005	mg/kg	101	101	80-120	0	30
Bromodichloromethane	< 0.005	0.005	mg/kg	88	89	78-120	1	30
Bromoform	< 0.005	0.005	mg/kg	80	83	70-120	5	30
Bromomethane	< 0.005	0.005	mg/kg	74	73	32-162	1	30
2-Butanone	< 0.010	0.010	mg/kg	111	122	46-153	9	30
t-Butyl alcohol	< 0.10	0.10	mg/kg	115	114	71-122	1	30
n-Butylbenzene	< 0.005	0.005	mg/kg	98	97	72-120	1	30
sec-Butylbenzene	< 0.005	0.005	mg/kg	100	99	75-120	1	30
Carbon Tetrachloride	< 0.005	0.005	mg/kg	88	87	69-122	2	30
Chlorobenzene	< 0.005	0.005	mg/kg	94	94	80-120	0	30
Chloroethane	< 0.005	0.005	mg/kg	77	75	37-154	3	30
Chloroform	< 0.005	0.005	mg/kg	94	94	80-120	0	30
Chloromethane	< 0.005	0.005	mg/kg	90	87	54-132	3	30
Dibromochloromethane	< 0.005	0.005	mg/kg	86	88	77-120	3	30
1,2-Dichlorobenzene	< 0.005	0.005	mg/kg	92	94	79-120	1	30
1,3-Dichlorobenzene	< 0.005	0.005	mg/kg	94	94	78-120	0	30
1,4-Dichlorobenzene	< 0.005	0.005	mg/kg	93	94	79-120	0	30
1,1-Dichloroethane	< 0.005	0.005	mg/kg	101	101	80-120	0	30
1,2-Dichloroethane	< 0.005	0.005	mg/kg	91	92	71-129	1	30
1,1-Dichloroethene	< 0.005	0.005	mg/kg	97	96	73-123	1	30
cis-1,2-Dichloroethene	< 0.005	0.005	mg/kg	96	96	80-120	0	30
trans-1,2-Dichloroethene	< 0.005	0.005	mg/kg	97	95	79-120	2	30
1,2-Dichloropropane	< 0.005	0.005	mg/kg	99	100	80-120	2	30
cis-1,3-Dichloropropene	< 0.005	0.005	mg/kg	91	92	80-120	1	30
trans-1,3-Dichloropropene	< 0.005	0.005	mg/kg	88	90	77-120	2	30
Ethyl t-butyl ether	< 0.005	0.005	mg/kg	95	96	70-122	1	30
Ethylbenzene	< 0.005	0.005	mg/kg	97	96	80-120	1	30
di-Isopropyl ether	< 0.005	0.005	mg/kg	104	105	73-121	1	30
Isopropylbenzene	< 0.005	0.005	mg/kg	97	96	76-120	1	30
p-Isopropyltoluene	< 0.005	0.005	mg/kg	98	97	75-120	1	30
Methyl Tertiary Butyl Ether	< 0.005	0.005	mg/kg	93	96	74-121	3	30
Methylene Chloride	< 0.005	0.005	mg/kg	98	99	76-124	1	30
Naphthalene	< 0.005	0.005	mg/kg	92	101	59-123	9	30
n-Propylbenzene	< 0.005	0.005	mg/kg	102	100	77-120	1	30
1,1,2,2-Tetrachloroethane	< 0.005	0.005	mg/kg	97	101	71-123	4	30
Tetrachloroethene	< 0.005	0.005	mg/kg	92	91	77-120	1	30
Toluene	< 0.005	0.005	mg/kg	96	95	80-120	2	30
1,1,1-Trichloroethane	< 0.005	0.005	mg/kg	91	90	71-125	2	30
1,1,2-Trichloroethane	< 0.005	0.005	mg/kg	95	96	80-120	1	30
Trichloroethene	< 0.005	0.005	mg/kg	93	92	80-120	1	30
Trichlorofluoromethane	< 0.005	0.005	mg/kg	80	77	58-133	4	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.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1264924
Reported: 09/21/11 at 01:39 PM

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2,4-Trimethylbenzene	< 0.005	0.005	mg/kg	96	96	79-120	1	30
1,3,5-Trimethylbenzene	< 0.005	0.005	mg/kg	99	98	78-120	1	30
Vinyl Chloride	< 0.005	0.005	mg/kg	85	83	53-120	2	30
Xylene (Total)	< 0.005	0.005	mg/kg	96	95	80-120	1	30
Batch number: 11256A34A	Sample number(s): 6396884							
TPH-GRO soil C6-C10	< 1.0	1.0	mg/kg	93	85	67-119	10	30
Batch number: 112550021A	Sample number(s): 6396884							
TPH-DRO soil C10-C28 microwave	< 12	12.	mg/kg	99		76-117		
Batch number: 11249820008B	Sample number(s): 6396884							
Moisture				100		99-101		

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: 112550021A	Sample number(s): 6396884 UNSPK: P396833								
TPH-DRO soil C10-C28 microwave	90	88	30-159	2	20				
Batch number: 11249820008B	Sample number(s): 6396884 BKG: P394064								
Moisture						30.5	30.0	2	15

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: VOCs TCL (4.3) 8260 Soil
Batch number: A112551AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6396884	94	100	105	93
Blank	96	102	101	98
LCS	98	100	103	100
LCSD	98	102	102	101
Limits:	71-114	70-109	70-123	70-111

Analysis Name: TPH-GRO soil C6-C10
Batch number: 11256A34A

	Trifluorotoluene-F
6396884	89
Blank	93
LCS	91
LCSD	84

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

Quality Control Summary

Client Name: Kleinfelder Group Number: 1264924
Reported: 09/21/11 at 01:39 PM

Surrogate Quality Control

Limits: 61-122

Analysis Name: TPH-DRO soil C10-C28 microwave
Batch number: 112550021A

	Orthoterphenyl
6396884	93
Blank	104
LCS	108
MS	97
MSD	92

Limits: 59-129

*- 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 #: 1264924 Sample #: 6396884

Client:	Southside Oil	Acct. #:	
Project Name/#:	20025	PWSID #:	
Project Manager:	Mark Steele	P.O. #:	51141-161270
Sampler:	Natalie M. Hendricks	Quote #:	
Name of State where samples were collected:	Maryland		

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Other	Total # of Containers	Analyses Requested: Full List VOC+oxy 8260	TPH- GRO 8015	TPH-DRO 8015	Marsnue	Remarks
MW-13 (15-31 ft)	9-2-2011	0949	X		X			6	X	X	X	X	

Matrix: Potable, NPDES

Analyses Requested / Preservation Codes

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: khendricks@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
NMH	9-2-11		Sample Room	9-2-11	
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: Brandy Barclay	9-3-11	950

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)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

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

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

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

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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Kleinfelder
30 Porter Road
Littleton MA 01460

September 28, 2011

Project: Southside Oil 20025

Submittal Date: 09/02/2011
Group Number: 1264877
PO Number: 51141-161270
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LLI) #
MW-11(22-23) Grab Soil	6396443
MW-10D(16-17) Grab Soil	6396444
Waste Class Composite Soil	6396445
Waste Class Composite Soil	6396446

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

ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele
ELECTRONIC COPY TO	Kleinfelder	Attn: Angela Vogt
ELECTRONIC COPY TO	Kleinfelder	Attn: Brian Barone
ELECTRONIC COPY TO	Kleinfelder	Attn: Natalie Hendricks

Lancaster Laboratories

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

Analysis Report

Questions? Contact your Client Services Representative
Natalie R Luciano at (717) 656-2300 Ext. 1881

Respectfully Submitted,

Lawrence M. Taylor
Senior Specialist

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-11(22-23) Grab Soil
Southside Oil 20025

LLI Sample # SW 6396443
LLI Group # 1264877
Account # 12152

Project Name: Southside Oil 20025

Collected: 08/31/2011 12:25 by CL

Submitted: 09/02/2011 19:05
Reported: 09/28/2011 15:45

Kleinfelder
30 Porter Road
Littleton MA 01460

02511

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10950	Acetone	67-64-1	< 0.021	0.021	0.83
10950	Acrolein	107-02-8	< 0.11	0.11	0.83
10950	Acrylonitrile	107-13-1	< 0.021	0.021	0.83
10950	t-Amyl methyl ether	994-05-8	< 0.005	0.005	0.83
10950	Benzene	71-43-2	< 0.005	0.005	0.83
10950	Bromodichloromethane	75-27-4	< 0.005	0.005	0.83
10950	Bromoform	75-25-2	< 0.005	0.005	0.83
10950	Bromomethane	74-83-9	< 0.005	0.005	0.83
10950	2-Butanone	78-93-3	< 0.011	0.011	0.83
10950	t-Butyl alcohol	75-65-0	< 0.11	0.11	0.83
10950	n-Butylbenzene	104-51-8	< 0.005	0.005	0.83
10950	sec-Butylbenzene	135-98-8	< 0.005	0.005	0.83
10950	Carbon Tetrachloride	56-23-5	< 0.005	0.005	0.83
10950	Chlorobenzene	108-90-7	< 0.005	0.005	0.83
10950	Chloroethane	75-00-3	< 0.005	0.005	0.83
10950	Chloroform	67-66-3	< 0.005	0.005	0.83
10950	Chloromethane	74-87-3	< 0.005	0.005	0.83
10950	Dibromochloromethane	124-48-1	< 0.005	0.005	0.83
10950	1,2-Dichlorobenzene	95-50-1	< 0.005	0.005	0.83
10950	1,3-Dichlorobenzene	541-73-1	< 0.005	0.005	0.83
10950	1,4-Dichlorobenzene	106-46-7	< 0.005	0.005	0.83
10950	1,1-Dichloroethane	75-34-3	< 0.005	0.005	0.83
10950	1,2-Dichloroethane	107-06-2	< 0.005	0.005	0.83
10950	1,1-Dichloroethene	75-35-4	< 0.005	0.005	0.83
10950	cis-1,2-Dichloroethene	156-59-2	< 0.005	0.005	0.83
10950	trans-1,2-Dichloroethene	156-60-5	< 0.005	0.005	0.83
10950	1,2-Dichloropropane	78-87-5	< 0.005	0.005	0.83
10950	cis-1,3-Dichloropropene	10061-01-5	< 0.005	0.005	0.83
10950	trans-1,3-Dichloropropene	10061-02-6	< 0.005	0.005	0.83
10950	Ethyl t-butyl ether	637-92-3	< 0.005	0.005	0.83
10950	Ethylbenzene	100-41-4	< 0.005	0.005	0.83
10950	di-Isopropyl ether	108-20-3	< 0.005	0.005	0.83
10950	Isopropylbenzene	98-82-8	< 0.005	0.005	0.83
10950	p-Isopropyltoluene	99-87-6	< 0.005	0.005	0.83
10950	Methyl Tertiary Butyl Ether	1634-04-4	< 0.005	0.005	0.83
10950	Methylene Chloride	75-09-2	< 0.005	0.005	0.83
10950	Naphthalene	91-20-3	< 0.005	0.005	0.83
10950	n-Propylbenzene	103-65-1	< 0.005	0.005	0.83
10950	1,1,2,2-Tetrachloroethane	79-34-5	< 0.005	0.005	0.83
10950	Tetrachloroethene	127-18-4	< 0.005	0.005	0.83
10950	Toluene	108-88-3	< 0.005	0.005	0.83
10950	1,1,1-Trichloroethane	71-55-6	< 0.005	0.005	0.83
10950	1,1,2-Trichloroethane	79-00-5	< 0.005	0.005	0.83
10950	Trichloroethene	79-01-6	< 0.005	0.005	0.83
10950	Trichlorofluoromethane	75-69-4	< 0.005	0.005	0.83
10950	1,2,4-Trimethylbenzene	95-63-6	< 0.005	0.005	0.83
10950	1,3,5-Trimethylbenzene	108-67-8	< 0.005	0.005	0.83
10950	Vinyl Chloride	75-01-4	< 0.005	0.005	0.83
10950	Xylene (Total)	1330-20-7	< 0.005	0.005	0.83

2-Chloroethyl vinyl ether is an acid labile compound and cannot be reported in this sample due to the acid preservation of the samples and standards.

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-11(22-23) Grab Soil
Southside Oil 20025

LLI Sample # SW 6396443
LLI Group # 1264877
Account # 12152

Project Name: Southside Oil 20025

Collected: 08/31/2011 12:25 by CL

Submitted: 09/02/2011 19:05
Reported: 09/28/2011 15:45

Kleinfelder
30 Porter Road
Littleton MA 01460

02511

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC Volatiles	**SW-846 8015B**		**mg/kg**	**mg/kg**	
01637	TPH-GRO soil C6-C10	n.a.	< 1.1	1.1	21.01
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	< 15	15	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	**Moisture**	n.a.	**22.0**	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10950	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	A112551AA	09/12/2011 23:51	Andrea E Lando	0.83
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201124925471	08/31/2011 12:25	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201124925471	08/31/2011 12:25	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201124925471	08/31/2011 12:25	Client Supplied	1
01637	TPH-GRO soil C6-C10	SW-846 8015B	1	11255A34A	09/12/2011 16:29	Marie D John	21.01
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201124925471	08/31/2011 12:25	Client Supplied	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	112460027A	09/27/2011 10:07	Tracy A Cole	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	112460027A	09/06/2011 09:15	Kelli M Barto	1
00111	Moisture	SM20 2540 G	1	11249820004B	09/06/2011 19:53	Scott W Freisher	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-10D(16-17) Grab Soil
Southside Oil 20025

LLI Sample # SW 6396444
LLI Group # 1264877
Account # 12152

Project Name: Southside Oil 20025

Collected: 08/31/2011 13:50 by CL

Submitted: 09/02/2011 19:05
Reported: 09/28/2011 15:45

Kleinfelder
30 Porter Road
Littleton MA 01460

02510

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10950	**Acetone**	67-64-1	**0.086**	0.018	0.76
10950	Acrolein	107-02-8	< 0.091	0.091	0.76
10950	Acrylonitrile	107-13-1	< 0.018	0.018	0.76
10950	**t-Amyl methyl ether**	994-05-8	**0.018**	0.005	0.76
10950	Benzene	71-43-2	< 0.005	0.005	0.76
10950	Bromodichloromethane	75-27-4	< 0.005	0.005	0.76
10950	Bromoform	75-25-2	< 0.005	0.005	0.76
10950	Bromomethane	74-83-9	< 0.005	0.005	0.76
10950	2-Butanone	78-93-3	< 0.009	0.009	0.76
10950	**t-Butyl alcohol**	75-65-0	**1.2**	0.091	0.76
10950	n-Butylbenzene	104-51-8	< 0.005	0.005	0.76
10950	sec-Butylbenzene	135-98-8	< 0.005	0.005	0.76
10950	Carbon Tetrachloride	56-23-5	< 0.005	0.005	0.76
10950	Chlorobenzene	108-90-7	< 0.005	0.005	0.76
10950	Chloroethane	75-00-3	< 0.005	0.005	0.76
10950	Chloroform	67-66-3	< 0.005	0.005	0.76
10950	Chloromethane	74-87-3	< 0.005	0.005	0.76
10950	Dibromochloromethane	124-48-1	< 0.005	0.005	0.76
10950	1,2-Dichlorobenzene	95-50-1	< 0.005	0.005	0.76
10950	1,3-Dichlorobenzene	541-73-1	< 0.005	0.005	0.76
10950	1,4-Dichlorobenzene	106-46-7	< 0.005	0.005	0.76
10950	1,1-Dichloroethane	75-34-3	< 0.005	0.005	0.76
10950	1,2-Dichloroethane	107-06-2	< 0.005	0.005	0.76
10950	1,1-Dichloroethene	75-35-4	< 0.005	0.005	0.76
10950	cis-1,2-Dichloroethene	156-59-2	< 0.005	0.005	0.76
10950	trans-1,2-Dichloroethene	156-60-5	< 0.005	0.005	0.76
10950	1,2-Dichloropropane	78-87-5	< 0.005	0.005	0.76
10950	cis-1,3-Dichloropropene	10061-01-5	< 0.005	0.005	0.76
10950	trans-1,3-Dichloropropene	10061-02-6	< 0.005	0.005	0.76
10950	Ethyl t-butyl ether	637-92-3	< 0.005	0.005	0.76
10950	Ethylbenzene	100-41-4	< 0.005	0.005	0.76
10950	di-Isopropyl ether	108-20-3	< 0.005	0.005	0.76
10950	Isopropylbenzene	98-82-8	< 0.005	0.005	0.76
10950	p-Isopropyltoluene	99-87-6	< 0.005	0.005	0.76
10950	**Methyl Tertiary Butyl Ether**	1634-04-4	**0.91**	0.24	40.65
10950	Methylene Chloride	75-09-2	< 0.005	0.005	0.76
10950	Naphthalene	91-20-3	< 0.005	0.005	0.76
10950	n-Propylbenzene	103-65-1	< 0.005	0.005	0.76
10950	1,1,2,2-Tetrachloroethane	79-34-5	< 0.005	0.005	0.76
10950	Tetrachloroethene	127-18-4	< 0.005	0.005	0.76
10950	Toluene	108-88-3	< 0.005	0.005	0.76
10950	1,1,1-Trichloroethane	71-55-6	< 0.005	0.005	0.76
10950	1,1,2-Trichloroethane	79-00-5	< 0.005	0.005	0.76
10950	Trichloroethene	79-01-6	< 0.005	0.005	0.76
10950	Trichlorofluoromethane	75-69-4	< 0.005	0.005	0.76
10950	1,2,4-Trimethylbenzene	95-63-6	< 0.005	0.005	0.76
10950	1,3,5-Trimethylbenzene	108-67-8	< 0.005	0.005	0.76
10950	Vinyl Chloride	75-01-4	< 0.005	0.005	0.76
10950	Xylene (Total)	1330-20-7	< 0.005	0.005	0.76

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-10D(16-17) Grab Soil
Southside Oil 20025

LLI Sample # SW 6396444
LLI Group # 1264877
Account # 12152

Project Name: Southside Oil 20025

Collected: 08/31/2011 13:50 by CL

Submitted: 09/02/2011 19:05
Reported: 09/28/2011 15:45

Kleinfelder
30 Porter Road
Littleton MA 01460

02510

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
	2-Chloroethyl vinyl ether is an acid labile compound and cannot be reported in this sample due to the acid preservation of the samples and standards.				
GC Volatiles	**SW-846 8015B**		**mg/kg**	**mg/kg**	
01637	TPH-GRO soil C6-C10	n.a.	< 0.9	0.9	19.5
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	< 14	14	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	**Moisture**	n.a.	**16.8**	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10950	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	A112551AA	09/13/2011 00:14	Andrea E Lando	0.76
10950	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Q112571AA	09/14/2011 04:04	Stephanie A Selis	40.65
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201124925471	08/31/2011 13:50	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201124925471	08/31/2011 13:50	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201124925471	08/31/2011 13:50	Client Supplied	1
01637	TPH-GRO soil C6-C10	SW-846 8015B	1	11255A34A	09/12/2011 18:18	Marie D John	19.5
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201124925471	08/31/2011 13:50	Client Supplied	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	112460027A	09/08/2011 01:46	Dustin A Underkoffler	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	112460027A	09/06/2011 09:15	Kelli M Barto	1
00111	Moisture	SM20 2540 G	1	11249820004B	09/06/2011 19:53	Scott W Freisher	1

Lancaster Laboratories

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

Analysis Report

Sample Description: Waste Class Composite Soil
Southside Oil 20025

LLI Sample # SW 6396445
LLI Group # 1264877
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/01/2011 14:00 by CL

Submitted: 09/02/2011 19:05
Reported: 09/28/2011 15:45

Kleinfelder
30 Porter Road
Littleton MA 01460

WCL25

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10950	**Benzene**	71-43-2	**0.01**	0.005	0.86
10950	Ethylbenzene	100-41-4	< 0.005	0.005	0.86
10950	Toluene	108-88-3	< 0.005	0.005	0.86
10950	Xylene (Total)	1330-20-7	< 0.005	0.005	0.86
	The GC/MS volatile internal standard peak areas were outside the QC limits. A re-analysis was performed, and the matrix effect was confirmed.				
GC Volatiles	**SW-846 8015B**		**mg/kg**	**mg/kg**	
01637	TPH-GRO soil C6-C10	n.a.	< 1.2	1.2	25.28
Pesticides/PCBs	**SW-846 8082**		**mg/kg**	**mg/kg**	
10736	PCB-1016	12674-11-2	< 0.020	0.020	1
10736	PCB-1221	11104-28-2	< 0.020	0.020	1
10736	PCB-1232	11141-16-5	< 0.020	0.020	1
10736	PCB-1242	53469-21-9	< 0.020	0.020	1
10736	PCB-1248	12672-29-6	< 0.020	0.020	1
10736	PCB-1254	11097-69-1	< 0.020	0.020	1
10736	PCB-1260	11096-82-5	< 0.020	0.020	1
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	< 15	15	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	**Moisture**	n.a.	**18.0**	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10950	VOCs BTEX 8260 (Soil)	SW-846 8260B	1	X112571AA	09/14/2011 14:57	Emily R Styer	0.86
07579	GC/MS-5g Field Preserv.MeOH-NC	SW-846 5035A	1	201124925471	09/01/2011 14:00	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	1	201124925471	09/01/2011 14:00	Client Supplied	1
02392	L/H Field Preserved Bisulfate	SW-846 5035A	2	201124925471	09/01/2011 14:00	Client Supplied	1
01637	TPH-GRO soil C6-C10	SW-846 8015B	1	11256A34A	09/13/2011 16:07	Marie D John	25.28
01150	GC - Bulk Soil Prep	SW-846 5030A	1	201124725464	09/03/2011 22:24	Scott W Freisher	n.a.
06647	GC-5g Field Preserved MeOH	SW-846 5035A	1	201124925471	09/01/2011 14:00	Client Supplied	n.a.

Lancaster Laboratories

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

Analysis Report

Sample Description: Waste Class Composite Soil
Southside Oil 20025

LLI Sample # SW 6396445
LLI Group # 1264877
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/01/2011 14:00 by CL

Submitted: 09/02/2011 19:05
Reported: 09/28/2011 15:45

Kleinfelder
30 Porter Road
Littleton MA 01460

WCL25

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10736	7 PCBs in Solids	SW-846 8082	1	112490001A	09/12/2011 07:59	Jamie L Brillhart	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	112490001A	09/06/2011 11:00	Noah M Rainbow	1
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	112460027A	09/08/2011 01:13	Dustin A Underkoffler	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	112460027A	09/06/2011 09:15	Kelli M Barto	1
00111	Moisture	SM20 2540 G	1	11249820004B	09/06/2011 19:53	Scott W Freisher	1

Lancaster Laboratories

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

Analysis Report

Sample Description: Waste Class Composite Soil
TCLP NVE
Southside Oil 20025

LLI Sample # TL 6396446
LLI Group # 1264877
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/01/2011 14:00 by CL

Submitted: 09/02/2011 19:05
Reported: 09/28/2011 15:45

Kleinfelder
30 Porter Road
Littleton MA 01460

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
Metals		**SW-846 6010B**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	< 0.0200	0.0200	1
07046	**Barium**	7440-39-3	**0.164**	0.0050	1
07049	Cadmium	7440-43-9	< 0.0050	0.0050	1
07051	Chromium	7440-47-3	< 0.0150	0.0150	1
07055	Lead	7439-92-1	< 0.0150	0.0150	1
07036	Selenium	7782-49-2	< 0.0200	0.0200	1
07066	Silver	7440-22-4	< 0.0050	0.0050	1
		SW-846 7470A	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	< 0.00020	0.00020	1

General Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

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
07035	Arsenic	SW-846 6010B	1	112515705001	09/10/2011 20:02	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	112515705001	09/10/2011 20:02	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	112515705001	09/10/2011 20:02	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	112515705001	09/10/2011 20:02	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	112515705001	09/12/2011 11:53	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	112515705001	09/10/2011 20:02	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	112515705001	09/10/2011 20:02	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	112515713002	09/09/2011 11:00	Damary Valentin	1
05705	WW/TL SW 846 ICP Digest (tot)	SW-846 3010A	1	112515705001	09/09/2011 09:42	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	112515713002	09/08/2011 15:15	Nelli S Markaryan	1
00947	TCLP Non-volatile Extraction	SW-846 1311	1	11249-2341-0947A	09/06/2011 15:10	Roza S Goslawska	n.a.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1264877
Reported: 09/28/11 at 03:45 PM

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: A112551AA	Sample number(s): 6396443-6396444							
Acetone	< 0.020	0.020	mg/kg	125	144	32-209	14	30
Acrolein	< 0.10	0.10	mg/kg	85	77	52-139	10	30
Acrylonitrile	< 0.020	0.020	mg/kg	119	127	60-133	6	30
t-Amyl methyl ether	< 0.005	0.005	mg/kg	93	96	69-124	2	30
Benzene	< 0.005	0.005	mg/kg	101	101	80-120	0	30
Bromodichloromethane	< 0.005	0.005	mg/kg	88	89	78-120	1	30
Bromoform	< 0.005	0.005	mg/kg	80	83	70-120	5	30
Bromomethane	< 0.005	0.005	mg/kg	74	73	32-162	1	30
2-Butanone	< 0.010	0.010	mg/kg	111	122	46-153	9	30
t-Butyl alcohol	< 0.10	0.10	mg/kg	115	114	71-122	1	30
n-Butylbenzene	< 0.005	0.005	mg/kg	98	97	72-120	1	30
sec-Butylbenzene	< 0.005	0.005	mg/kg	100	99	75-120	1	30
Carbon Tetrachloride	< 0.005	0.005	mg/kg	88	87	69-122	2	30
Chlorobenzene	< 0.005	0.005	mg/kg	94	94	80-120	0	30
Chloroethane	< 0.005	0.005	mg/kg	77	75	37-154	3	30
Chloroform	< 0.005	0.005	mg/kg	94	94	80-120	0	30
Chloromethane	< 0.005	0.005	mg/kg	90	87	54-132	3	30
Dibromochloromethane	< 0.005	0.005	mg/kg	86	88	77-120	3	30
1,2-Dichlorobenzene	< 0.005	0.005	mg/kg	92	94	79-120	1	30
1,3-Dichlorobenzene	< 0.005	0.005	mg/kg	94	94	78-120	0	30
1,4-Dichlorobenzene	< 0.005	0.005	mg/kg	93	94	79-120	0	30
1,1-Dichloroethane	< 0.005	0.005	mg/kg	101	101	80-120	0	30
1,2-Dichloroethane	< 0.005	0.005	mg/kg	91	92	71-129	1	30
1,1-Dichloroethene	< 0.005	0.005	mg/kg	97	96	73-123	1	30
cis-1,2-Dichloroethene	< 0.005	0.005	mg/kg	96	96	80-120	0	30
trans-1,2-Dichloroethene	< 0.005	0.005	mg/kg	97	95	79-120	2	30
1,2-Dichloropropane	< 0.005	0.005	mg/kg	99	100	80-120	2	30
cis-1,3-Dichloropropene	< 0.005	0.005	mg/kg	91	92	80-120	1	30
trans-1,3-Dichloropropene	< 0.005	0.005	mg/kg	88	90	77-120	2	30
Ethyl t-butyl ether	< 0.005	0.005	mg/kg	95	96	70-122	1	30
Ethylbenzene	< 0.005	0.005	mg/kg	97	96	80-120	1	30
di-Isopropyl ether	< 0.005	0.005	mg/kg	104	105	73-121	1	30
Isopropylbenzene	< 0.005	0.005	mg/kg	97	96	76-120	1	30
p-Isopropyltoluene	< 0.005	0.005	mg/kg	98	97	75-120	1	30
Methyl Tertiary Butyl Ether	< 0.005	0.005	mg/kg	93	96	74-121	3	30
Methylene Chloride	< 0.005	0.005	mg/kg	98	99	76-124	1	30
Naphthalene	< 0.005	0.005	mg/kg	92	101	59-123	9	30
n-Propylbenzene	< 0.005	0.005	mg/kg	102	100	77-120	1	30
1,1,2,2-Tetrachloroethane	< 0.005	0.005	mg/kg	97	101	71-123	4	30
Tetrachloroethene	< 0.005	0.005	mg/kg	92	91	77-120	1	30
Toluene	< 0.005	0.005	mg/kg	96	95	80-120	2	30
1,1,1-Trichloroethane	< 0.005	0.005	mg/kg	91	90	71-125	2	30
1,1,2-Trichloroethane	< 0.005	0.005	mg/kg	95	96	80-120	1	30
Trichloroethene	< 0.005	0.005	mg/kg	93	92	80-120	1	30
Trichlorofluoromethane	< 0.005	0.005	mg/kg	80	77	58-133	4	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.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1264877
Reported: 09/28/11 at 03:45 PM

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2,4-Trimethylbenzene	< 0.005	0.005	mg/kg	96	96	79-120	1	30
1,3,5-Trimethylbenzene	< 0.005	0.005	mg/kg	99	98	78-120	1	30
Vinyl Chloride	< 0.005	0.005	mg/kg	85	83	53-120	2	30
Xylene (Total)	< 0.005	0.005	mg/kg	96	95	80-120	1	30
Batch number: Q112571AA	Sample number(s): 6396444							
Methyl Tertiary Butyl Ether	< 0.25	0.25	mg/kg	98	97	74-121	1	30
Batch number: X112571AA	Sample number(s): 6396445							
Benzene	< 0.005	0.005	mg/kg	106	102	80-120	3	30
Ethylbenzene	< 0.005	0.005	mg/kg	111	108	80-120	3	30
Toluene	< 0.005	0.005	mg/kg	108	105	80-120	3	30
Xylene (Total)	< 0.005	0.005	mg/kg	111	109	80-120	2	30
Batch number: 11255A34A	Sample number(s): 6396443-6396444							
TPH-GRO soil C6-C10	< 1.0	1.0	mg/kg	87	89	67-119	2	30
Batch number: 11256A34A	Sample number(s): 6396445							
TPH-GRO soil C6-C10	< 1.0	1.0	mg/kg	93	85	67-119	10	30
Batch number: 112490001A	Sample number(s): 6396445							
PCB-1016	< 0.017	0.017	mg/kg	100		64-121		
PCB-1221	< 0.017	0.017	mg/kg					
PCB-1232	< 0.017	0.017	mg/kg					
PCB-1242	< 0.017	0.017	mg/kg					
PCB-1248	< 0.017	0.017	mg/kg					
PCB-1254	< 0.017	0.017	mg/kg					
PCB-1260	< 0.017	0.017	mg/kg	96		72-123		
Batch number: 112460027A	Sample number(s): 6396443-6396445							
TPH-DRO soil C10-C28 microwave	< 12	12.	mg/kg	91		76-117		
Batch number: 112515705001	Sample number(s): 6396446							
Arsenic	< 0.0200	0.0200	mg/l	106		89-115		
Barium	< 0.0050	0.0050	mg/l	105		90-110		
Cadmium	< 0.0050	0.0050	mg/l	100		90-112		
Chromium	< 0.0150	0.0150	mg/l	94		90-110		
Lead	< 0.0150	0.0150	mg/l	101		88-110		
Selenium	< 0.0200	0.0200	mg/l	110		80-120		
Silver	< 0.0050	0.0050	mg/l	101		83-120		
Batch number: 112515713002	Sample number(s): 6396446							
Mercury	< 0.00020	0.00020	mg/l	97		80-120		
Batch number: 11249820004B	Sample number(s): 6396443-6396445							
Moisture				100		99-101		

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.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1264877
Reported: 09/28/11 at 03:45 PM

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: 112490001A	Sample number(s): 6396445 UNSPK: P396203								
PCB-1016	106	104	29-146	0	50				
PCB-1260	104	98	39-149	4	50				
Batch number: 112460027A	Sample number(s): 6396443-6396445 UNSPK: P394228 BKG: P394228								
TPH-DRO soil C10-C28 microwave	98		30-159			< 12	< 12	2 (1)	20
Batch number: 112515705001	Sample number(s): 6396446 UNSPK: P394262 BKG: P394262								
Arsenic	90	92	75-125	2	20	< 0.0200	< 0.0200	28* (1)	20
Barium	37*	37*	75-125	2	20	0.689	0.714	4	20
Cadmium	84	88	75-125	2	20	0.785	0.815	4	20
Chromium	81	83	75-125	1	20	0.0153	0.0154	0 (1)	20
Lead	57*	59*	75-125	2	20	2.23	2.31	4	20
Selenium	93	94	75-125	2	20	< 0.0200	< 0.0200	0 (1)	20
Silver	52*	53*	75-125	2	20	< 0.0050	< 0.0050	0 (1)	20
Batch number: 112515713002	Sample number(s): 6396446 UNSPK: P394262 BKG: P394262								
Mercury	81	74*	80-120	8	20	< 0.00020	< 0.00020	0 (1)	20
Batch number: 11249820004B	Sample number(s): 6396443-6396445 BKG: 6396445								
Moisture						18.0	17.6	2	15

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: TCL(4.3)by 8260(soil)
Batch number: A112551AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6396443	96	100	100	96
6396444	95	104	105	92
Blank	96	102	101	98
LCS	98	100	103	100
LCSD	98	102	102	101
Limits:	71-114	70-109	70-123	70-111

Analysis Name: 8260 Ext. Soil Master w/GRO
Batch number: Q112571AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Blank	84	86	96	92
LCS	79	79	91	88
LCSD	84	87	96	93
Limits:	71-114	70-109	70-123	70-111

Analysis Name: TCL(4.3)by 8260(soil)

*- 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: 1264877
Reported: 09/28/11 at 03:45 PM

Surrogate Quality Control

Batch number: X112571AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6396445	102	99	111	70
Blank	101	96	94	98
LCS	101	98	103	100
LCSD	98	99	103	101
Limits:	71-114	70-109	70-123	70-111

Analysis Name: TPH-GRO soil C6-C10
Batch number: 11255A34A

	Trifluorotoluene-F
6396443	67
6396444	73
Blank	89
LCS	91
LCSD	91
Limits:	61-122

Analysis Name: TPH-GRO soil C6-C10
Batch number: 11256A34A

	Trifluorotoluene-F
6396445	105
Blank	93
LCS	91
LCSD	84
Limits:	61-122

Analysis Name: PCBs in Soil (microwave)
Batch number: 112490001A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6396445	93	82
Blank	100	99
LCS	99	99
MS	105	103
MSD	101	98
Limits:	33-143	24-164

Analysis Name: TPH-DRO soil C10-C28 microwave
Batch number: 112460027A

	Orthoterphenyl
6396443	84
6396444	88
6396445	73
Blank	98
DUP	94
LCS	99
MS	101

*- 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: 1264877
Reported: 09/28/11 at 03:45 PM

Surrogate Quality Control

Limits: 59-129

*- 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 #: 1261878 Sample #: 6396443-46

Client:	Southside Oil	Acct. #:	
Project Name/#:	20025	PWSID #:	
Project Manager:	Mark Steele	P.O. #:	51141-161270
Sampler:	Charlie Low	Quote #:	

Name of State where samples were collected: Maryland

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Other	Total # of Containers	Analyses Requested: Full List VOC+oxy 8260	TPH- GRO 8015	TPH-DRO 8015	BTEX	PCBs	TCLP Metals	Remarks
MW-11(22-23)	8/31/11	1225	X		X			6	X	X	X				
MW-10D(16-17)	8/31/11	1350	X		X			6	X	X	X				
Waste Class.	9/1/11	1400		X	X			8		X	X	X	X	X	

Matrix: Potable, NPDES

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

For Lab Use Only
FSC:
SCR#:

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]	9/1/11	1930	Sample Room		
[signature]	9/2/11	1010	[signature]	9/2/11	1010
[signature]	9/2/11	1801			

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)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

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

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

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

APPENDIX G
Lancaster Laboratories Technical Reports – Groundwater

Lancaster Laboratories

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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Kleinfelder
30 Porter Road
Littleton MA 01460

September 26, 2011

Project: Southside Oil 20025

Submittal Date: 09/14/2011
Group Number: 1266369
PO Number: 51141-161891
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LLI) #
MW-1 Grab Water	6405532
MW-2 Grab Water	6405533
MW-3 Grab Water	6405534
MW-4 Grab Water	6405535
MW-5 Grab Water	6405536
MW-6 Grab Water	6405537
MW-7 Grab Water	6405538
MW-8 Grab Water	6405539
TF-1 Grab Water	6405540
TF-2 Grab Water	6405541
TF-3 Grab Water	6405542
MW-10D Grab Water	6405543
MW-12 Grab Water	6405544
Trip Blank Water	6405545

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

ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele
ELECTRONIC COPY TO	Kleinfelder	Attn: Angela Vogt
ELECTRONIC COPY TO	Kleinfelder	Attn: Brian Barone
ELECTRONIC COPY TO	Kleinfelder	Attn: Natalie Hendricks

Lancaster Laboratories

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

Analysis Report

Questions? Contact your Client Services Representative
Natalie R Luciano at (717) 656-2300 Ext. 1881

Respectfully Submitted,

Lawrence M. Taylor
Senior Specialist

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-1 Grab Water
Southside Oil 20025

LLI Sample # WW 6405532
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 07:42 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S2501

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-1 Grab Water
Southside Oil 20025

LLI Sample # WW 6405532
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 07:42 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S2501

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	TPH-GRO water C6-C10	n.a.	< 0.050	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	**TPH-DRO water C10-C28**	n.a.	**0.36**	0.097	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 05:05	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 05:05	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11260A20A	09/20/2011 03:27	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11260A20A	09/20/2011 03:27	Laura M Krieger	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 11:30	Anita M Dale	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-2 Grab Water
Southside Oil 20025

LLI Sample # WW 6405533
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 11:43 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-252

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether 2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.	110-75-8	< 10	10	1
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	**Methyl Tertiary Butyl Ether**	1634-04-4	**39**	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-2 Grab Water
Southside Oil 20025

LLI Sample # WW 6405533
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 11:43 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-252

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	TPH-GRO water C6-C10	n.a.	< 0.050	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	**TPH-DRO water C10-C28**	n.a.	**0.13**	0.094	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 05:25	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 05:25	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11260A20A	09/20/2011 03:49	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11260A20A	09/20/2011 03:49	Laura M Krieger	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 11:47	Anita M Dale	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-3 Grab Water
Southside Oil 20025

LLI Sample # WW 6405534
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 09:12 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-253

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-3 Grab Water
Southside Oil 20025

LLI Sample # WW 6405534
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 09:12 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-253

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	TPH-GRO water C6-C10	n.a.	< 0.050	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	**TPH-DRO water C10-C28**	n.a.	**1.1**	0.51	5

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 05:45	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 05:45	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11260A20A	09/20/2011 04:11	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11260A20A	09/20/2011 04:11	Laura M Krieger	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 16:46	Anita M Dale	5
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-4 Grab Water
Southside Oil 20025

LLI Sample # WW 6405535
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 12:09 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-254

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	**t-Amyl methyl ether**	994-05-8	**16**	5	1
10903	**Benzene**	71-43-2	**20**	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	**t-Butyl alcohol**	75-65-0	**1,200**	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	**Ethylbenzene**	100-41-4	**9**	5	1
10903	**di-Isopropyl ether**	108-20-3	**11**	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	**Methyl Tertiary Butyl Ether**	1634-04-4	**310**	50	10
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	**1,2,4-Trimethylbenzene**	95-63-6	**6**	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-4 Grab Water
Southside Oil 20025

LLI Sample # WW 6405535
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 12:09 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-254

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	**Xylene (Total)**	1330-20-7	**24**	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	**TPH-GRO water C6-C10**	n.a.	**0.55**	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	TPH-DRO water C10-C28	n.a.	< 0.095	0.095	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 06:06	Holly Berry	1
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112621AA	09/19/2011 11:57	Nicholas R Rossi	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 06:06	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y112621AA	09/19/2011 11:57	Nicholas R Rossi	10
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11262A20A	09/20/2011 20:23	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	11262A20A	09/20/2011 20:23	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 12:03	Anita M Dale	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-5 Grab Water
Southside Oil 20025

LLI Sample # WW 6405536
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 13:07 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-255

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	**t-Butyl alcohol**	75-65-0	**290**	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	**Methyl Tertiary Butyl Ether**	1634-04-4	**110**	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-5 Grab Water
Southside Oil 20025

LLI Sample # WW 6405536
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 13:07 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-255

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	**TPH-GRO water C6-C10**	n.a.	**0.11**	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	TPH-DRO water C10-C28	n.a.	< 0.095	0.095	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 06:26	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 06:26	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11262A20A	09/20/2011 20:45	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	11262A20A	09/20/2011 20:45	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 13:59	Anita M Dale	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-6 Grab Water
Southside Oil 20025

LLI Sample # WW 6405537
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 09:51 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-256

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	**t-Amyl methyl ether**	994-05-8	**11**	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	**t-Butyl alcohol**	75-65-0	**670**	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	**Methyl Tertiary Butyl Ether**	1634-04-4	**240**	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-6 Grab Water
Southside Oil 20025

LLI Sample # WW 6405537
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 09:51 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-256

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	**TPH-GRO water C6-C10**	n.a.	**0.24**	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	TPH-DRO water C10-C28	n.a.	< 1.0	1.0	1

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

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 06:46	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 06:46	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11262A20A	09/20/2011 21:06	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	11262A20A	09/20/2011 21:06	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 12:20	Anita M Dale	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-7 Grab Water
Southside Oil 20025

LLI Sample # WW 6405538
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 08:44 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-257

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-7 Grab Water
Southside Oil 20025

LLI Sample # WW 6405538
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 08:44 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-257

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	TPH-GRO water C6-C10	n.a.	< 0.050	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	**TPH-DRO water C10-C28**	n.a.	**0.16**	0.096	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 07:06	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 07:06	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11262A20A	09/20/2011 21:28	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	11262A20A	09/20/2011 21:28	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 14:18	Anita M Dale	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-8 Grab Water
Southside Oil 20025

LLI Sample # WW 6405539
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 08:15 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-258

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-8 Grab Water
Southside Oil 20025

LLI Sample # WW 6405539
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 08:15 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-258

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	TPH-GRO water C6-C10	n.a.	< 0.050	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	TPH-DRO water C10-C28	n.a.	< 0.096	0.096	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 07:26	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 07:26	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11262A20A	09/20/2011 21:50	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	11262A20A	09/20/2011 21:50	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 12:36	Dustin A Underkoffler	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: TF-1 Grab Water
Southside Oil 20025

LLI Sample # WW 6405540
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 12:40 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-2T1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: TF-1 Grab Water
Southside Oil 20025

LLI Sample # WW 6405540
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 12:40 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-2T1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	**TPH-GRO water C6-C10**	n.a.	**0.081**	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	**TPH-DRO water C10-C28**	n.a.	**1.2**	0.097	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 07:46	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 07:46	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11262A20A	09/20/2011 22:12	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	11262A20A	09/20/2011 22:12	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 15:07	Anita M Dale	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: TF-2 Grab Water
Southside Oil 20025

LLI Sample # WW 6405541
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 11:15 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-2T2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	**sec-Butylbenzene**	135-98-8	**7**	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	**Isopropylbenzene**	98-82-8	**21**	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	**n-Propylbenzene**	103-65-1	**34**	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: TF-2 Grab Water
Southside Oil 20025

LLI Sample # WW 6405541
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 11:15 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-2T2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	**TPH-GRO water C6-C10**	n.a.	**0.56**	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	**TPH-DRO water C10-C28**	n.a.	**2.3**	0.10	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 08:07	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 08:07	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11262A20A	09/20/2011 22:34	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	11262A20A	09/20/2011 22:34	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 14:34	Anita M Dale	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: TF-3 Grab Water
Southside Oil 20025

LLI Sample # WW 6405542
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 13:50 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-2T3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: TF-3 Grab Water
Southside Oil 20025

LLI Sample # WW 6405542
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 13:50 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-2T3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	**TPH-GRO water C6-C10**	n.a.	**0.059**	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	**TPH-DRO water C10-C28**	n.a.	**14**	2.0	20

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 08:27	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 08:27	Holly Berry	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11262A20A	09/20/2011 22:56	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	11262A20A	09/20/2011 22:56	Catherine J Schwarz	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 17:03	Anita M Dale	20
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-10D Grab Water
Southside Oil 20025

LLI Sample # WW 6405543
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 10:30 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-10D

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether 2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.	110-75-8	< 10	10	1
10903	**Chloroform**	67-66-3	**51**	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	**Methyl Tertiary Butyl Ether**	1634-04-4	**26**	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-10D Grab Water
Southside Oil 20025

LLI Sample # WW 6405543
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 10:30 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-10D

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	**TPH-GRO water C6-C10**	n.a.	**0.077**	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	**TPH-DRO water C10-C28**	n.a.	**2.0**	1.0	1

The surrogate data is outside the QC limits due to possible unresolvable matrix problems as indicated by the prep notes.

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112581AA	09/15/2011 17:25	Frank A Valla, Jr	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112581AA	09/15/2011 17:25	Frank A Valla, Jr	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11260A20A	09/20/2011 04:33	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11260A20A	09/20/2011 04:33	Laura M Krieger	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 12:53	Dustin A Underkoffler	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-12 Grab Water
Southside Oil 20025

LLI Sample # WW 6405544
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 07:09 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-212

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether 2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.	110-75-8	< 10	10	1
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	**Methyl Tertiary Butyl Ether**	1634-04-4	**6**	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-12 Grab Water
Southside Oil 20025

LLI Sample # WW 6405544
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011 07:09 by PL

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-212

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	TPH-GRO water C6-C10	n.a.	< 0.050	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	TPH-DRO water C10-C28	n.a.	< 1.0	1.0	1

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

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112581AA	09/15/2011 18:31	Frank A Valla, Jr	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112581AA	09/15/2011 18:31	Frank A Valla, Jr	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11260A20A	09/20/2011 04:55	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11260A20A	09/20/2011 04:55	Laura M Krieger	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112580002A	09/17/2011 13:09	Anita M Dale	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112580002A	09/15/2011 16:45	Kathryn I DeHaven	1

Lancaster Laboratories

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

Analysis Report

Sample Description: Trip Blank Water
Southside Oil 20025

LLI Sample # WW 6405545
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-T2-

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: Trip Blank Water
Southside Oil 20025

LLI Sample # WW 6405545
LLI Group # 1266369
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/10/2011

Submitted: 09/14/2011 17:05
Reported: 09/26/2011 16:18

Kleinfelder
30 Porter Road
Littleton MA 01460

S-T2-

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Xylene (Total)	1330-20-7	< 5	5	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	Y112611AA	09/18/2011 08:48	Holly Berry	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y112611AA	09/18/2011 08:48	Holly Berry	1

Quality Control Summary

Client Name: Kleinfelder Group Number: 1266369
Reported: 09/26/11 at 04:18 PM

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: Y112581AA	Sample number(s): 6405543-6405544							
Acetone	< 20	20.	ug/l	139		49-234		
Acrolein	< 100	100.	ug/l	89		43-135		
Acrylonitrile	< 20	20.	ug/l	102		67-120		
t-Amyl methyl ether	< 5	5.	ug/l	98		77-120		
Benzene	< 5	5.	ug/l	102		79-120		
Bromodichloromethane	< 5	5.	ug/l	89		80-120		
Bromoform	< 5	5.	ug/l	75		61-120		
Bromomethane	< 5	5.	ug/l	84		44-120		
2-Butanone	< 10	10.	ug/l	136		66-151		
t-Butyl alcohol	< 80	80.	ug/l	89		62-129		
n-Butylbenzene	< 5	5.	ug/l	99		74-120		
sec-Butylbenzene	< 5	5.	ug/l	105		78-120		
Carbon Tetrachloride	< 5	5.	ug/l	88		75-123		
Chlorobenzene	< 5	5.	ug/l	99		80-120		
Chloroethane	< 5	5.	ug/l	79		49-129		
2-Chloroethyl Vinyl Ether	< 10	10.	ug/l	109		56-129		
Chloroform	< 5	5.	ug/l	97		77-122		
Chloromethane	< 5	5.	ug/l	100		60-129		
Dibromochloromethane	< 5	5.	ug/l	84		80-120		
1,2-Dichlorobenzene	< 5	5.	ug/l	98		80-120		
1,3-Dichlorobenzene	< 5	5.	ug/l	99		80-120		
1,4-Dichlorobenzene	< 5	5.	ug/l	98		80-120		
1,1-Dichloroethane	< 5	5.	ug/l	101		79-120		
1,2-Dichloroethane	< 5	5.	ug/l	99		70-130		
1,1-Dichloroethene	< 5	5.	ug/l	95		74-123		
cis-1,2-Dichloroethene	< 5	5.	ug/l	100		80-120		
trans-1,2-Dichloroethene	< 5	5.	ug/l	98		80-120		
1,2-Dichloropropane	< 5	5.	ug/l	98		78-120		
cis-1,3-Dichloropropene	< 5	5.	ug/l	92		80-120		
trans-1,3-Dichloropropene	< 5	5.	ug/l	86		79-120		
Ethyl t-butyl ether	< 5	5.	ug/l	98		76-120		
Ethylbenzene	< 5	5.	ug/l	98		79-120		
di-Isopropyl ether	< 5	5.	ug/l	102		71-124		
Isopropylbenzene	< 5	5.	ug/l	101		77-120		
p-Isopropyltoluene	< 5	5.	ug/l	101		80-120		
Methyl Tertiary Butyl Ether	< 5	5.	ug/l	98		76-120		
Methylene Chloride	< 5	5.	ug/l	98		80-120		
Naphthalene	< 5	5.	ug/l	97		62-120		
n-Propylbenzene	< 5	5.	ug/l	98		80-120		
1,1,2,2-Tetrachloroethane	< 5	5.	ug/l	93		71-120		
Tetrachloroethene	< 5	5.	ug/l	108		80-121		
Toluene	< 5	5.	ug/l	98		79-120		
1,1,1-Trichloroethane	< 5	5.	ug/l	92		75-127		
1,1,2-Trichloroethane	< 5	5.	ug/l	97		80-120		
Trichloroethene	< 5	5.	ug/l	101		80-120		

*- 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: 1266369
Reported: 09/26/11 at 04:18 PM

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Trichlorofluoromethane	< 5	5.	ug/l	86		64-129		
1,2,4-Trimethylbenzene	< 5	5.	ug/l	101		74-120		
1,3,5-Trimethylbenzene	< 5	5.	ug/l	102		75-120		
Vinyl Chloride	< 5	5.	ug/l	85		65-125		
Xylene (Total)	< 5	5.	ug/l	97		80-120		
Batch number: Y112611AA	Sample number(s): 6405532-6405542,6405545							
Acetone	< 20	20.	ug/l	139	128	49-234	9	30
Acrolein	< 100	100.	ug/l	80	72	43-135	10	30
Acrylonitrile	< 20	20.	ug/l	104	100	67-120	4	30
t-Amyl methyl ether	< 5	5.	ug/l	96	94	77-120	2	30
Benzene	< 5	5.	ug/l	102	98	79-120	3	30
Bromodichloromethane	< 5	5.	ug/l	87	83	80-120	5	30
Bromoform	< 5	5.	ug/l	74	72	61-120	3	30
Bromomethane	< 5	5.	ug/l	74	71	44-120	4	30
2-Butanone	< 10	10.	ug/l	134	130	66-151	4	30
t-Butyl alcohol	< 80	80.	ug/l	97	93	62-129	5	30
n-Butylbenzene	< 5	5.	ug/l	97	94	74-120	3	30
sec-Butylbenzene	< 5	5.	ug/l	103	100	78-120	3	30
Carbon Tetrachloride	< 5	5.	ug/l	90	87	75-123	3	30
Chlorobenzene	< 5	5.	ug/l	96	95	80-120	1	30
Chloroethane	< 5	5.	ug/l	69	64	49-129	6	30
2-Chloroethyl Vinyl Ether	< 10	10.	ug/l	106	104	56-129	2	30
Chloroform	< 5	5.	ug/l	97	94	77-122	3	30
Chloromethane	< 5	5.	ug/l	88	85	60-129	4	30
Dibromochloromethane	< 5	5.	ug/l	82	80	80-120	2	30
1,2-Dichlorobenzene	< 5	5.	ug/l	97	94	80-120	3	30
1,3-Dichlorobenzene	< 5	5.	ug/l	98	94	80-120	4	30
1,4-Dichlorobenzene	< 5	5.	ug/l	98	94	80-120	4	30
1,1-Dichloroethane	< 5	5.	ug/l	102	98	79-120	4	30
1,2-Dichloroethane	< 5	5.	ug/l	100	98	70-130	2	30
1,1-Dichloroethene	< 5	5.	ug/l	94	90	74-123	4	30
cis-1,2-Dichloroethene	< 5	5.	ug/l	98	94	80-120	5	30
trans-1,2-Dichloroethene	< 5	5.	ug/l	97	95	80-120	2	30
1,2-Dichloropropane	< 5	5.	ug/l	98	94	78-120	4	30
cis-1,3-Dichloropropene	< 5	5.	ug/l	89	88	80-120	1	30
trans-1,3-Dichloropropene	< 5	5.	ug/l	84	83	79-120	1	30
Ethyl t-butyl ether	< 5	5.	ug/l	100	98	76-120	2	30
Ethylbenzene	< 5	5.	ug/l	98	96	79-120	2	30
di-Isopropyl ether	< 5	5.	ug/l	105	101	71-124	4	30
Isopropylbenzene	< 5	5.	ug/l	99	97	77-120	2	30
p-Isopropyltoluene	< 5	5.	ug/l	100	96	80-120	4	30
Methyl Tertiary Butyl Ether	< 5	5.	ug/l	101	98	76-120	2	30
Methylene Chloride	< 5	5.	ug/l	94	91	80-120	3	30
Naphthalene	< 5	5.	ug/l	93	92	62-120	1	30
n-Propylbenzene	< 5	5.	ug/l	98	94	80-120	4	30
1,1,2,2-Tetrachloroethane	< 5	5.	ug/l	99	95	71-120	4	30
Tetrachloroethene	< 5	5.	ug/l	93	91	80-121	2	30
Toluene	< 5	5.	ug/l	97	94	79-120	2	30
1,1,1-Trichloroethane	< 5	5.	ug/l	90	88	75-127	2	30
1,1,2-Trichloroethane	< 5	5.	ug/l	96	94	80-120	2	30
Trichloroethene	< 5	5.	ug/l	96	93	80-120	3	30
Trichlorofluoromethane	< 5	5.	ug/l	86	80	64-129	8	30
1,2,4-Trimethylbenzene	< 5	5.	ug/l	99	95	74-120	4	30
1,3,5-Trimethylbenzene	< 5	5.	ug/l	101	96	75-120	5	30
Vinyl Chloride	< 5	5.	ug/l	79	75	65-125	4	30
Xylene (Total)	< 5	5.	ug/l	95	93	80-120	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.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1266369
Reported: 09/26/11 at 04:18 PM

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: Y112621AA	Sample number(s): 6405535							
Methyl Tertiary Butyl Ether	< 5	5.	ug/l	97		76-120		
Batch number: 11260A20A	Sample number(s): 6405532-6405534,6405543-6405544							
TPH-GRO water C6-C10	< 0.050	0.050	mg/l	100	100	75-135	0	30
Batch number: 11262A20A	Sample number(s): 6405535-6405542							
TPH-GRO water C6-C10	< 0.050	0.050	mg/l	100	100	75-135	0	30
Batch number: 112580002A	Sample number(s): 6405532-6405544							
TPH-DRO water C10-C28	< 0.10	0.10	mg/l	84	89	56-122	6	20

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: Y112581AA	Sample number(s): 6405543-6405544 UNSPK: 6405543								
Acetone	82	83	52-139	1	30				
Acrolein	72	76	24-145	6	30				
Acrylonitrile	93	96	60-123	4	30				
t-Amyl methyl ether	95	96	75-122	1	30				
Benzene	106	107	80-126	1	30				
Bromodichloromethane	86	87	78-125	1	30				
Bromoform	56*	59*	60-121	6	30				
Bromomethane	80	82	38-149	2	30				
2-Butanone	98	100	57-138	2	30				
t-Butyl alcohol	75	77	67-119	2	30				
n-Butylbenzene	95	94	73-128	2	30				
sec-Butylbenzene	105	103	79-125	2	30				
Carbon Tetrachloride	94	95	81-138	1	30				
Chlorobenzene	99	100	87-124	2	30				
Chloroethane	79	81	51-145	3	30				
2-Chloroethyl Vinyl Ether	0*	0*	10-151	0	30				
Chloroform	98	100	81-134	1	30				
Chloromethane	87	87	67-154	0	30				
Dibromochloromethane	73*	75	74-116	3	30				
1,2-Dichlorobenzene	96	97	84-119	0	30				
1,3-Dichlorobenzene	99	99	86-121	0	30				
1,4-Dichlorobenzene	97	99	85-121	1	30				
1,1-Dichloroethane	103	104	84-129	1	30				
1,2-Dichloroethane	97	99	66-141	1	30				
1,1-Dichloroethene	105	104	85-142	1	30				
cis-1,2-Dichloroethene	101	101	85-125	1	30				
trans-1,2-Dichloroethene	103	103	87-126	1	30				
1,2-Dichloropropane	99	100	83-124	1	30				
cis-1,3-Dichloropropene	81	84	75-125	3	30				
trans-1,3-Dichloropropene	77	80	74-119	3	30				
Ethyl t-butyl ether	97	99	74-122	2	30				
Ethylbenzene	100	102	71-134	2	30				
di-Isopropyl ether	102	102	70-129	0	30				
Isopropylbenzene	102	102	75-128	1	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.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1266369
Reported: 09/26/11 at 04:18 PM

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
p-Isopropyltoluene	101	100	76-123	1	30				
Methyl Tertiary Butyl Ether	86	92	72-126	2	30				
Methylene Chloride	98	98	79-120	1	30				
Naphthalene	89	91	52-125	1	30				
n-Propylbenzene	98	98	74-134	0	30				
1,1,2,2-Tetrachloroethane	93	96	72-128	3	30				
Tetrachloroethene	98	99	80-128	0	30				
Toluene	103	103	80-125	1	30				
1,1,1-Trichloroethane	99	100	80-143	1	30				
1,1,2-Trichloroethane	95	96	77-124	1	30				
Trichloroethene	101	102	88-133	1	30				
Trichlorofluoromethane	93	93	73-152	1	30				
1,2,4-Trimethylbenzene	98	100	72-130	2	30				
1,3,5-Trimethylbenzene	101	100	72-131	0	30				
Vinyl Chloride	86	86	66-133	1	30				
Xylene (Total)	98	99	79-125	1	30				
Batch number: Y112621AA	Sample number(s): 6405535 UNSPK: P404465								
Methyl Tertiary Butyl Ether	98	99	72-126	1	30				
Batch number: 11260A20A	Sample number(s): 6405532-6405534,6405543-6405544 UNSPK: P402931								
TPH-GRO water C6-C10	100		75-135						

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 Std. Water Master
Batch number: Y112581AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6405543	99	100	99	98
6405544	97	101	100	97
Blank	96	101	100	97
LCS	98	104	101	99
MS	99	103	100	99
MSD	98	103	100	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Std. Water Master
Batch number: Y112611AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6405532	95	101	98	98
6405533	95	100	100	97
6405534	96	99	99	97
6405535	95	100	99	98
6405536	96	101	98	96

*- 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: 1266369
Reported: 09/26/11 at 04:18 PM

Surrogate Quality Control

6405537	95	99	97	97
6405538	95	99	100	97
6405539	95	100	100	98
6405540	95	99	99	99
6405541	96	101	100	101
6405542	98	100	100	98
6405545	97	99	100	98
Blank	96	102	100	97
LCS	98	104	100	99
LCSD	98	101	101	99
Limits:	80-116	77-113	80-113	78-113

Analysis Name: 8260 Master Scan (water)
Batch number: Y112621AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
Blank	96	100	100	98
LCS	98	104	101	99
MS	98	102	100	98
MSD	98	100	100	98
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO water C6-C10
Batch number: 11260A20A

	Trifluorotoluene-F
6405532	90
6405533	89
6405534	89
6405543	90
6405544	89
Blank	84
LCS	112
LCSD	115
MS	115
Limits:	63-135

Analysis Name: TPH-GRO water C6-C10
Batch number: 11262A20A

	Trifluorotoluene-F
6405535	94
6405536	88
6405537	88
6405538	91
6405539	90
6405540	90
6405541	119
6405542	92
Blank	88
LCS	116
LCSD	115
Limits:	63-135

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

Quality Control Summary

Client Name: Kleinfelder Group Number: 1266369
Reported: 09/26/11 at 04:18 PM

Surrogate Quality Control

Analysis Name: TPH-DRO water C10-C28
Batch number: 112580002A

	Orthoterphenyl
6405532	99
6405533	94
6405534	102
6405535	79
6405536	97
6405537	96
6405538	102
6405539	99
6405540	102
6405541	100
6405542	75
6405543	48*
6405544	92
Blank	101
LCS	100
LCSD	105
Limits:	54-127

*- 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 #: _____
1266369 6405532-45

Client:	Southside Oil	Acct. #:	
Project Name/#:	20025	PWSID #:	
Project Manager:	Mark Steele	P.O. #:	51141-161891
Sampler:	Paul Lawson	Quote #:	

Name of State where samples were collected: Maryland

Sample Identification	2011 Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Potable	Matrix: NPDES	Matrix: Water	Matrix: Other	Total # of Containers	Full List VOC+oxy 8260	TPH-GRO 8015	TPH-DRO 8015	Remarks
MW-1	9/10	0742	X					X		8	X	X	X	
MW-2	9/10	1143	X					X		8	X	X	X	
MW-3	9/10	0912	X					X		8	X	X	X	
MW-4	9/10	1209	X					X		8	X	X	X	
MW-5	9/10	1307	X					X		8	X	X	X	
MW-6	9/10	0951	X					X		8	X	X	X	
MW-7	9/10	0844	X					X		8	X	X	X	
MW-8	9/10	0815	X					X		8	X	X	X	
~~MW-9~~														
TF-1	9/10	1240	X					X		8	X	X	X	
TF-2	9/10	1115	X					X		8	X	X	X	
TF-3	9/10	1350	X					X		8	X	X	X	

Analyses Requested / Preservation Codes

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 #: (410) 850-0404 Fax #: (410) 850-0049
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
Paul Lawson	9/12/11			9/14/11	10:40
	9/14/11	1705			
				9/14/11	1705

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

Lancaster Laboratories

Analysis Request/Environmental Services Chain of Custody

For Lancaster Laboratories use only Acct. #: 12152
Group #: 1266369 Sample #: 6405532-45

(2)

Client:	Southside Oil	Acct. #:	
Project Name/#:	20025	PWSID #:	
Project Manager:	Mark Steele	P.O. #:	51141-161891
Sampler:		Quote #:	

Name of State where samples were collected: Maryland

Sample Identification	Date Collected (2011)	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Other	Total # of Containers	Full List VOC+oxy 8260	TPH-GRO 8015	TPH-DRO 8015	Remarks
MW-10D	9/10	1030	X			X		8	X	X	X	Quick Turn
MW-12	9/10	0709	X			X		8	X	X	X	Quick Turn
												Analyze TB for VOCs 8260 per NH mms 9/15/11

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 pcl

(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 #: (410) 850-0049

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
Paul Lawson	9/10/11			9/14/11	10:20
	9/14/11	17:05			
			452	9/14/11	1705

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)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

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

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

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

Lancaster Laboratories

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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Kleinfelder
30 Porter Road
Littleton MA 01460

October 11, 2011

Project: Southside Oil 20025

Submittal Date: 09/30/2011
Group Number: 1269226
PO Number: 51141-161891
State of Sample Origin: MD

Client Sample Description	Lancaster Labs (LLI) #
MW-9 Grab Water	6425360

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

ELECTRONIC COPY TO	Kleinfelder	Attn: Mark Steele
ELECTRONIC COPY TO	Kleinfelder	Attn: Angela Vogt
ELECTRONIC COPY TO	Kleinfelder	Attn: Candace Pittmon
ELECTRONIC COPY TO	Kleinfelder	Attn: Brian Barone
ELECTRONIC COPY TO	Kleinfelder	Attn: Natalie Hendricks

Lancaster Laboratories

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

Analysis Report

Questions? Contact your Client Services Representative
Natalie R Luciano at (717) 656-2300 Ext. 1881

Respectfully Submitted,

Lawrence M. Taylor
Senior Specialist

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-9 Grab Water
Southside Oil 20025

LLI Sample # WW 6425360
LLI Group # 1269226
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/29/2011 12:45 by GM

Submitted: 09/30/2011 15:40
Reported: 10/11/2011 20:42

Kleinfelder
30 Porter Road
Littleton MA 01460

20025

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Acetone	67-64-1	< 20	20	1
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	t-Amyl methyl ether	994-05-8	< 5	5	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	2-Butanone	78-93-3	< 10	10	1
10903	t-Butyl alcohol	75-65-0	< 80	80	1
10903	n-Butylbenzene	104-51-8	< 5	5	1
10903	sec-Butylbenzene	135-98-8	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,2-Dichlorobenzene	95-50-1	< 5	5	1
10903	1,3-Dichlorobenzene	541-73-1	< 5	5	1
10903	1,4-Dichlorobenzene	106-46-7	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethyl t-butyl ether	637-92-3	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	di-Isopropyl ether	108-20-3	< 5	5	1
10903	Isopropylbenzene	98-82-8	< 5	5	1
10903	p-Isopropyltoluene	99-87-6	< 5	5	1
10903	Methyl Tertiary Butyl Ether	1634-04-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	Naphthalene	91-20-3	< 5	5	1
10903	n-Propylbenzene	103-65-1	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	1,2,4-Trimethylbenzene	95-63-6	< 5	5	1
10903	1,3,5-Trimethylbenzene	108-67-8	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1

Lancaster Laboratories

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

Analysis Report

Sample Description: MW-9 Grab Water
Southside Oil 20025

LLI Sample # WW 6425360
LLI Group # 1269226
Account # 12152

Project Name: Southside Oil 20025

Collected: 09/29/2011 12:45 by GM

Submitted: 09/30/2011 15:40
Reported: 10/11/2011 20:42

Kleinfelder
30 Porter Road
Littleton MA 01460

20025

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**	**ug/l**	
10903	Xylene (Total)	1330-20-7	< 5	5	1
GC Volatiles	**SW-846 8015B**		**mg/l**	**mg/l**	
01635	TPH-GRO water C6-C10	n.a.	< 0.050	0.050	1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**	**mg/l**	
08269	TPH-DRO water C10-C28	n.a.	< 0.095	0.095	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
10903	VOCs 8260 Kleinfelder Full	SW-846 8260B	1	T112782AA	10/06/2011 03:25	Lauren C Temple	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	T112782AA	10/06/2011 03:25	Lauren C Temple	1
01635	TPH-GRO water C6-C10	SW-846 8015B	1	11278D20A	10/06/2011 17:05	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	11278D20A	10/06/2011 17:05	Marie D John	1
08269	TPH-DRO water C10-C28	SW-846 8015B	1	112770003A	10/04/2011 19:35	Elizabeth J Marin	1
07003	Extraction - DRO (Waters)	SW-846 3510C	1	112770003A	10/04/2011 10:00	Roza S Goslawska	1

Lancaster Laboratories

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

Analysis Report

Quality Control Summary

Client Name: Kleinfelder Group Number: 1269226
Reported: 10/11/11 at 08:42 PM

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: T112782AA	Sample number(s): 6425360							
Acetone	< 20	20.	ug/l	133	132	49-234	1	30
Acrolein	< 100	100.	ug/l	99	103	43-135	4	30
Acrylonitrile	< 20	20.	ug/l	132*	129*	67-120	2	30
t-Amyl methyl ether	< 5	5.	ug/l	94	94	77-120	0	30
Benzene	< 5	5.	ug/l	114	111	79-120	2	30
Bromodichloromethane	< 5	5.	ug/l	104	100	80-120	4	30
Bromoform	< 5	5.	ug/l	75	77	61-120	2	30
Bromomethane	< 5	5.	ug/l	115	117	44-120	1	30
2-Butanone	< 10	10.	ug/l	107	104	66-151	3	30
t-Butyl alcohol	< 80	80.	ug/l	113	112	62-129	1	30
n-Butylbenzene	< 5	5.	ug/l	109	111	74-120	2	30
sec-Butylbenzene	< 5	5.	ug/l	97	96	78-120	0	30
Carbon Tetrachloride	< 5	5.	ug/l	95	95	75-123	0	30
Chlorobenzene	< 5	5.	ug/l	94	93	80-120	1	30
Chloroethane	< 5	5.	ug/l	116	117	49-129	1	30
2-Chloroethyl Vinyl Ether	< 10	10.	ug/l	98	98	56-129	0	30
Chloroform	< 5	5.	ug/l	112	110	77-122	2	30
Chloromethane	< 5	5.	ug/l	126	128	60-129	2	30
Dibromochloromethane	< 5	5.	ug/l	91	91	80-120	0	30
1,2-Dichlorobenzene	< 5	5.	ug/l	92	93	80-120	1	30
1,3-Dichlorobenzene	< 5	5.	ug/l	91	95	80-120	4	30
1,4-Dichlorobenzene	< 5	5.	ug/l	91	94	80-120	3	30
1,1-Dichloroethane	< 5	5.	ug/l	104	103	79-120	1	30
1,2-Dichloroethane	< 5	5.	ug/l	117	114	70-130	2	30
1,1-Dichloroethene	< 5	5.	ug/l	100	99	74-123	0	30
cis-1,2-Dichloroethene	< 5	5.	ug/l	100	98	80-120	2	30
trans-1,2-Dichloroethene	< 5	5.	ug/l	100	97	80-120	3	30
1,2-Dichloropropane	< 5	5.	ug/l	103	101	78-120	2	30
cis-1,3-Dichloropropene	< 5	5.	ug/l	94	92	80-120	2	30
trans-1,3-Dichloropropene	< 5	5.	ug/l	85	84	79-120	1	30
Ethyl t-butyl ether	< 5	5.	ug/l	105	107	76-120	2	30
Ethylbenzene	< 5	5.	ug/l	92	91	79-120	1	30
di-Isopropyl ether	< 5	5.	ug/l	104	103	71-124	2	30
Isopropylbenzene	< 5	5.	ug/l	93	94	77-120	1	30
p-Isopropyltoluene	< 5	5.	ug/l	97	97	80-120	1	30
Methyl Tertiary Butyl Ether	< 5	5.	ug/l	100	101	76-120	1	30
Methylene Chloride	< 5	5.	ug/l	114	112	80-120	1	30
Naphthalene	< 5	5.	ug/l	93	96	62-120	3	30
n-Propylbenzene	< 5	5.	ug/l	111	111	80-120	0	30
1,1,2,2-Tetrachloroethane	< 5	5.	ug/l	104	104	71-120	0	30
Tetrachloroethene	< 5	5.	ug/l	98	99	80-121	1	30
Toluene	< 5	5.	ug/l	106	104	79-120	2	30
1,1,1-Trichloroethane	< 5	5.	ug/l	98	98	75-127	0	30
1,1,2-Trichloroethane	< 5	5.	ug/l	92	93	80-120	1	30
Trichloroethene	< 5	5.	ug/l	103	100	80-120	3	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.

Quality Control Summary

Client Name: Kleinfelder Group Number: 1269226
Reported: 10/11/11 at 08:42 PM

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Trichlorofluoromethane	< 5	5.	ug/l	107	106	64-129	1	30
1,2,4-Trimethylbenzene	< 5	5.	ug/l	92	92	74-120	0	30
1,3,5-Trimethylbenzene	< 5	5.	ug/l	94	95	75-120	1	30
Vinyl Chloride	< 5	5.	ug/l	105	107	65-125	1	30
Xylene (Total)	< 5	5.	ug/l	94	95	80-120	0	30
Batch number: 11278D20A	Sample number(s): 6425360							
TPH-GRO water C6-C10	< 0.050	0.050	mg/l	100	100	75-135	0	30
Batch number: 112770003A	Sample number(s): 6425360							
TPH-DRO water C10-C28	< 0.10	0.10	mg/l	83	85	56-122	3	20

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 Std. Water Master
Batch number: T112782AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6425360	103	100	95	98
Blank	100	98	95	101
LCS	102	102	99	106
LCSD	100	98	98	105
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO water C6-C10
Batch number: 11278D20A

	Trifluorotoluene-F
6425360	88
Blank	84
LCS	111
LCSD	115
Limits:	63-135

Analysis Name: TPH-DRO water C10-C28
Batch number: 112770003A

	Orthoterphenyl
6425360	91
Blank	94
LCS	96
LCSD	97
Limits:	54-127

*- 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: 1269226
Reported: 10/11/11 at 08:42 PM

*- 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 #: 1269226 Sample #: 6425360

(1)

Client:	Southside Oil	Acct. #:	
Project Name/#:	20025	PWSID #:	
Project Manager:	Mark Steele	P.O. #:	51141-161891
Sampler:	Greg Moore	Quote #:	
Name of State where samples were collected:	Maryland		

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Potable	Matrix: NPDES	Matrix: Water	Matrix: Other	Total # of Containers	Analyses Requested: Full List VOC+oxy 8260	TPH-GRO 8015	TPH-DRO 8015	Remarks
MW-9	9/29/11	1245	X					X		8	X	X	X	

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:

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
Gregory Moore	9/30/11	0900	Sample Room	9/30/11	0900
Sample Room	9/30/11	1205		9/30/11	1205
	9/30/11	15:40			
				9/30-11	15:40

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)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

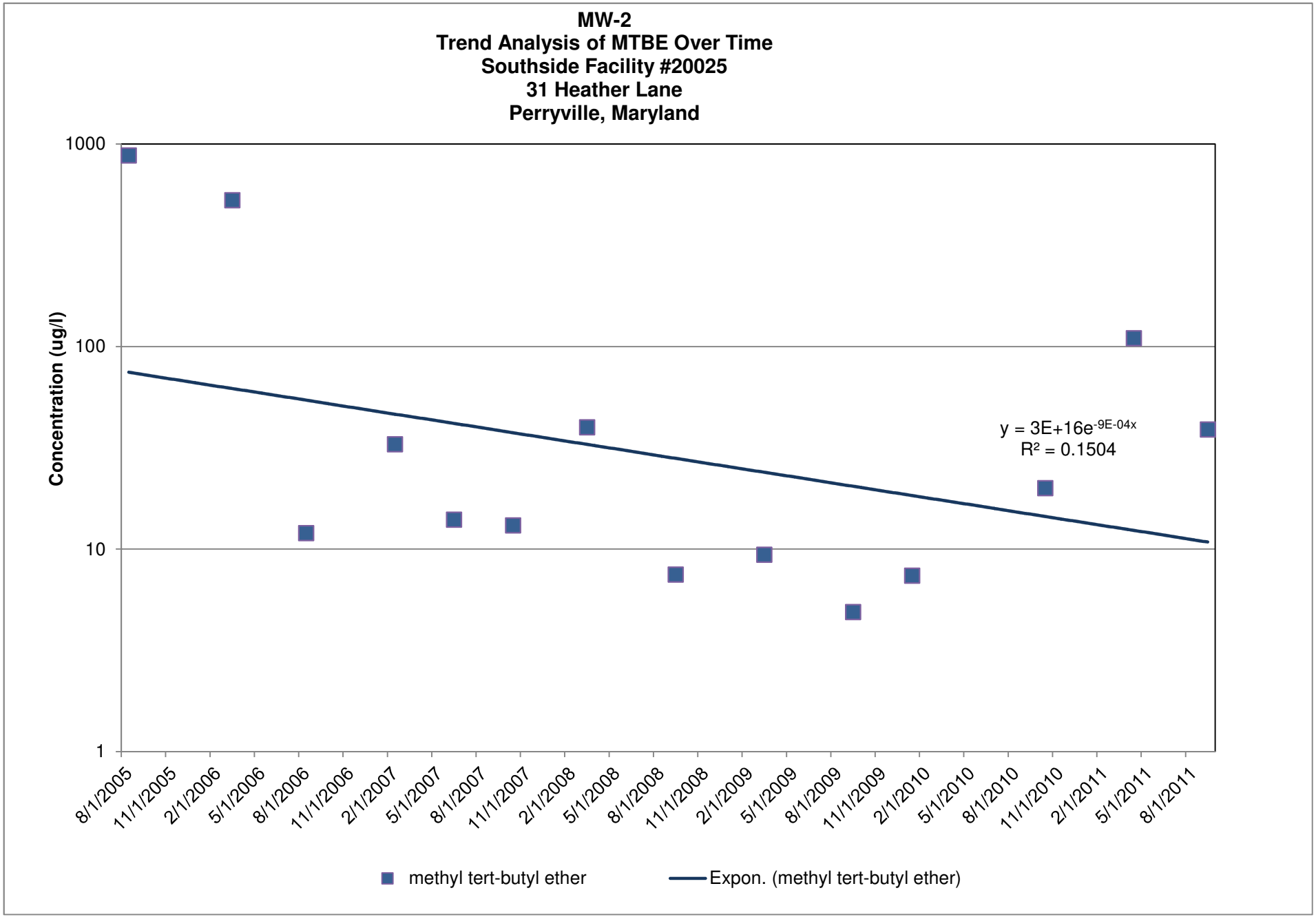
B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

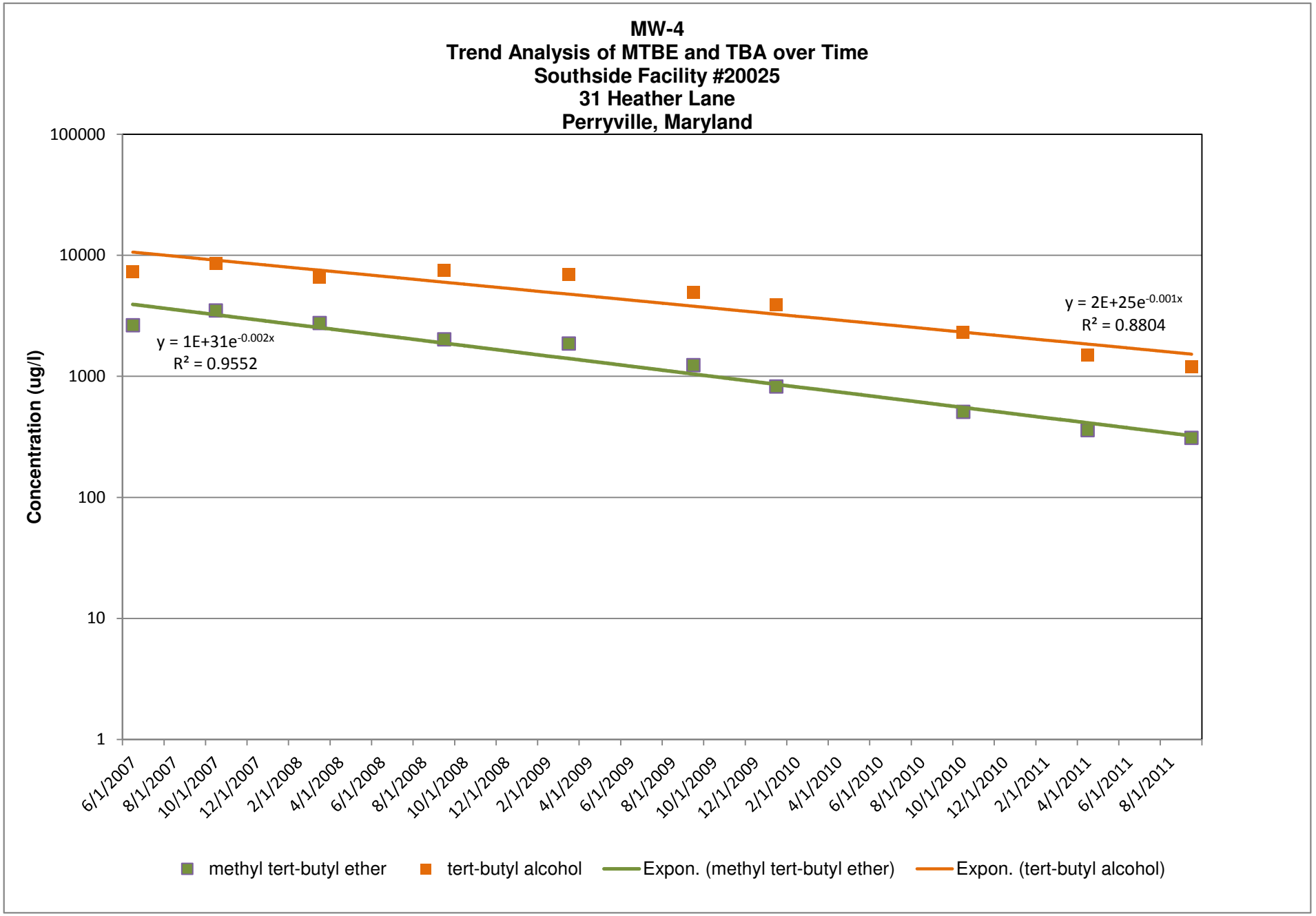
Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

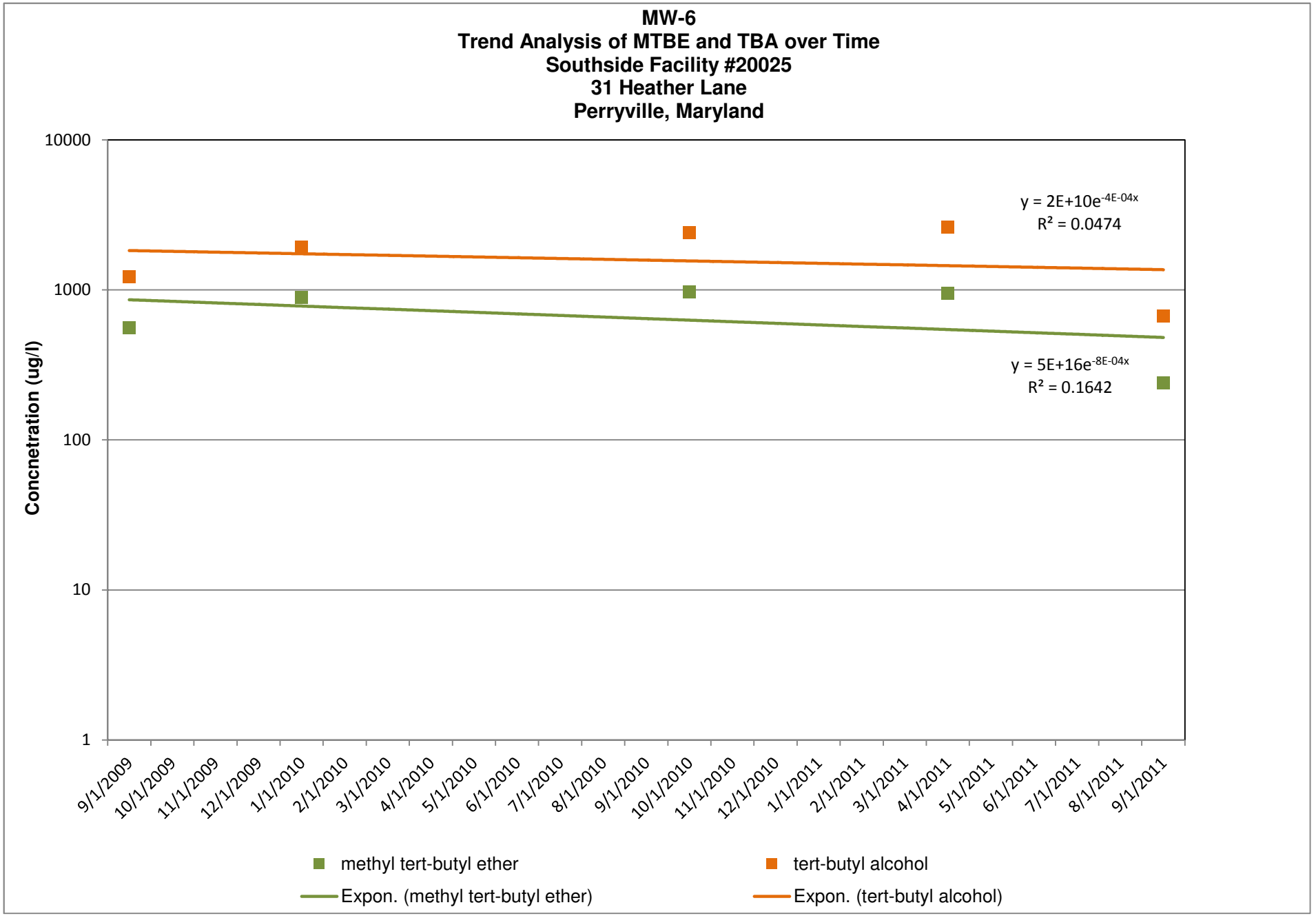
Measurement uncertainty values, as applicable, are available upon request.

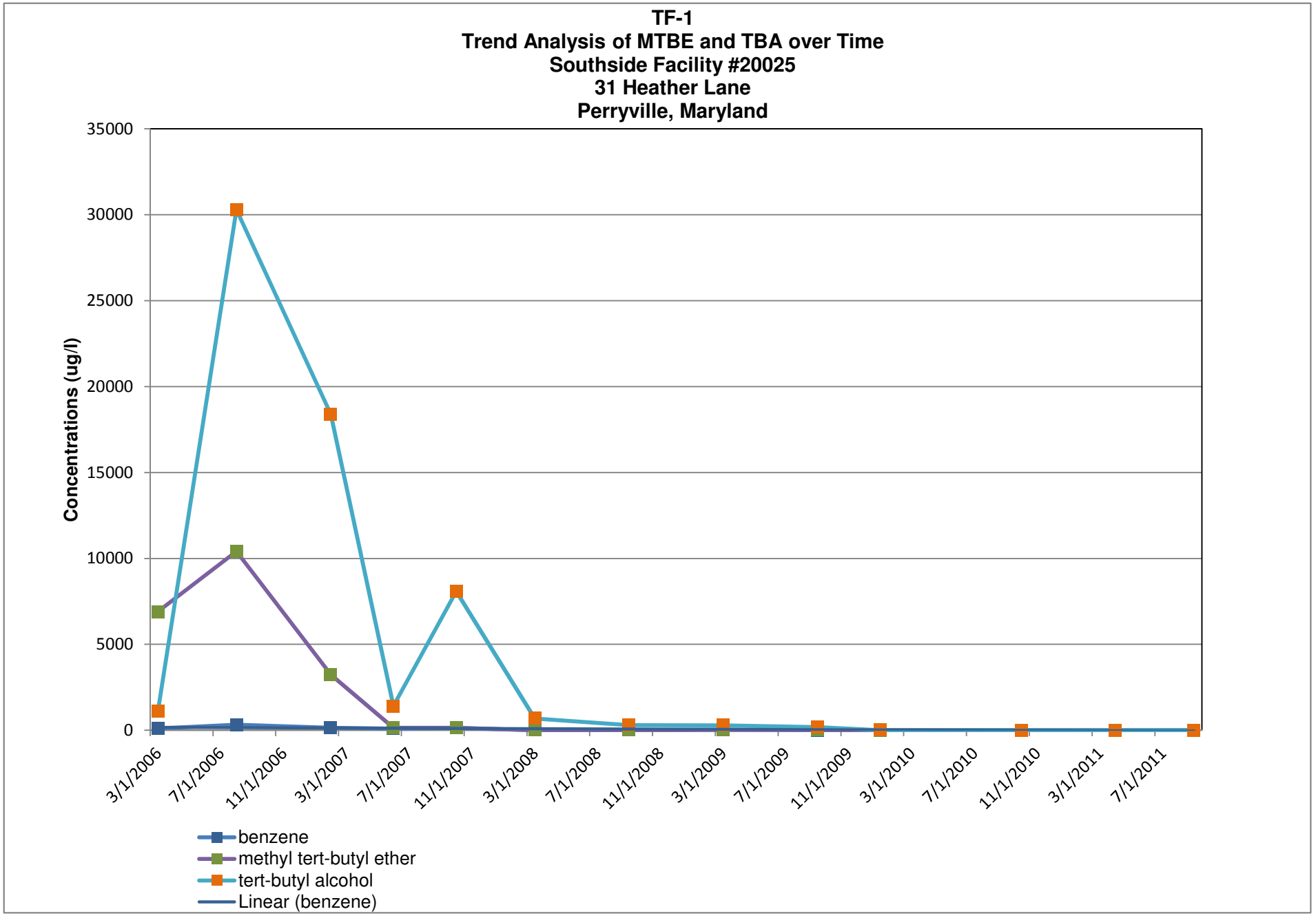
Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have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

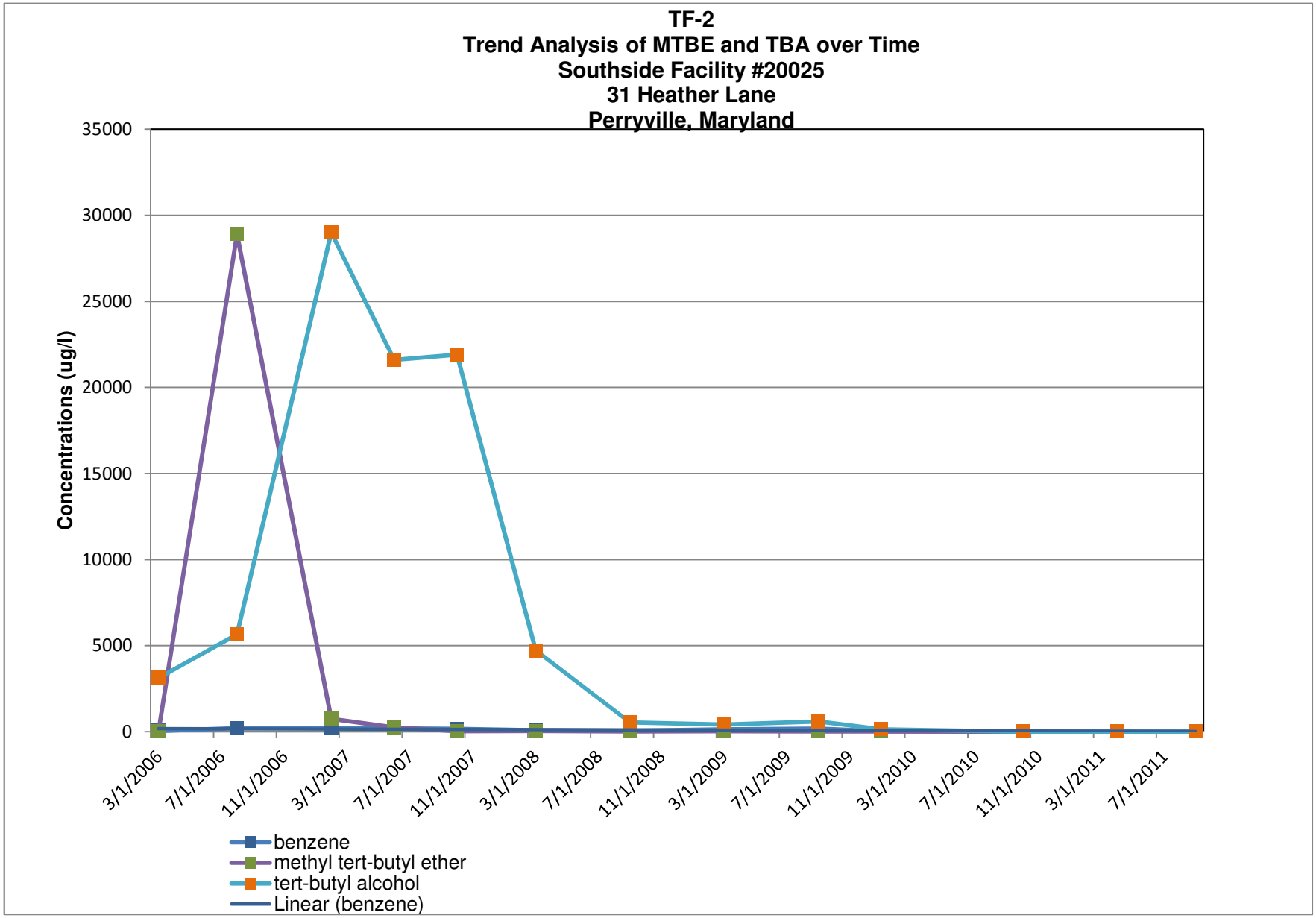
APPENDIX H
Trend Graphs

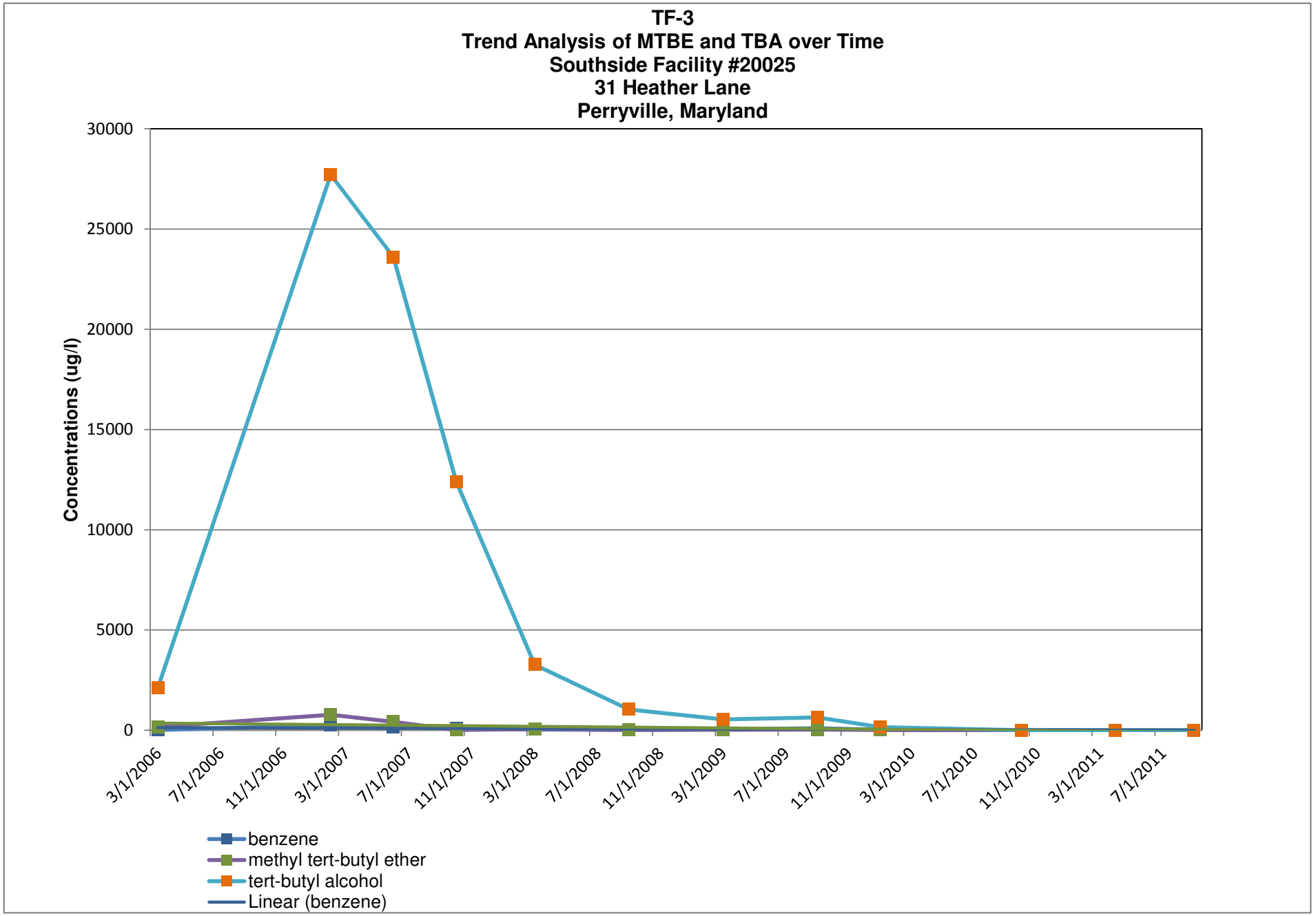

MW-2
Trend Analysis of MTBE Over Time
Southside Facility #20025
31 Heather Lane
Perryville, Maryland
Concentration (ug/l)
1000
100
10
1
y = 3E+16e-9E-04x
R² = 0.1504
8/1/2005
11/1/2005
2/1/2006
5/1/2006
8/1/2006
11/1/2006
2/1/2007
5/1/2007
8/1/2007
11/1/2007
2/1/2008
5/1/2008
8/1/2008
11/1/2008
2/1/2009
5/1/2009
8/1/2009
11/1/2009
2/1/2010
5/1/2010
8/1/2010
11/1/2010
2/1/2011
5/1/2011
8/1/2011
methyl tert-butyl ether
Expon. (methyl tert-butyl ether)


MW-4
Trend Analysis of MTBE and TBA over Time
Southside Facility #20025
31 Heather Lane
Perryville, Maryland
Concentration (ug/l)
100000
10000
1000
100
10
1
y = 1E+31e-0.002x
R² = 0.9552
y = 2E+25e-0.001x
R² = 0.8804
6/1/2007
8/1/2007
10/1/2007
12/1/2007
2/1/2008
4/1/2008
6/1/2008
8/1/2008
10/1/2008
12/1/2008
2/1/2009
4/1/2009
6/1/2009
8/1/2009
10/1/2009
12/1/2009
2/1/2010
4/1/2010
6/1/2010
8/1/2010
10/1/2010
12/1/2010
2/1/2011
4/1/2011
6/1/2011
8/1/2011
methyl tert-butyl ether
tert-butyl alcohol
Expon. (methyl tert-butyl ether)
Expon. (tert-butyl alcohol)


MW-6
Trend Analysis of MTBE and TBA over Time
Southside Facility #20025
31 Heather Lane
Perryville, Maryland
Concnetration (ug/l)
10000
1000
100
10
1
y = 2E+10e-4E-04x
R² = 0.0474
y = 5E+16e-8E-04x
R² = 0.1642
9/1/2009
10/1/2009
11/1/2009
12/1/2009
1/1/2010
2/1/2010
3/1/2010
4/1/2010
5/1/2010
6/1/2010
7/1/2010
8/1/2010
9/1/2010
10/1/2010
11/1/2010
12/1/2010
1/1/2011
2/1/2011
3/1/2011
4/1/2011
5/1/2011
6/1/2011
7/1/2011
8/1/2011
9/1/2011
methyl tert-butyl ether
tert-butyl alcohol
Expon. (methyl tert-butyl ether)
Expon. (tert-butyl alcohol)

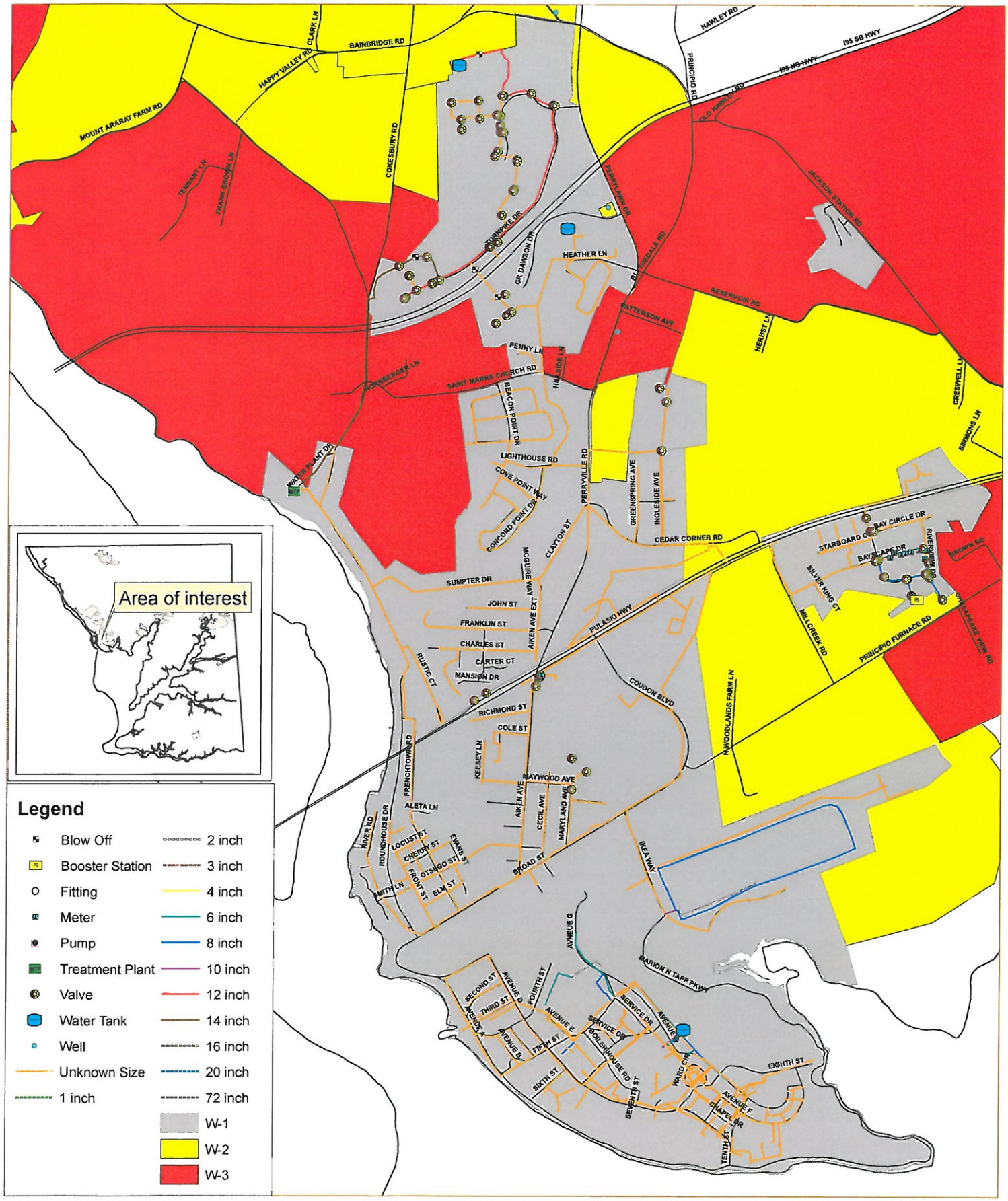

TF-1
Trend Analysis of MTBE and TBA over Time
Southside Facility #20025
31 Heather Lane
Perryville, Maryland
Concentrations (ug/l)
35000
30000
25000
20000
15000
10000
5000
0
3/1/2006
7/1/2006
11/1/2006
3/1/2007
7/1/2007
11/1/2007
3/1/2008
7/1/2008
11/1/2008
3/1/2009
7/1/2009
11/1/2009
3/1/2010
7/1/2010
11/1/2010
3/1/2011
7/1/2011
benzene
methyl tert-butyl ether
tert-butyl alcohol
Linear (benzene)


TF-2
Trend Analysis of MTBE and TBA over Time
Southside Facility #20025
31 Heather Lane
Perryville, Maryland
Concentrations (ug/l)
35000
30000
25000
20000
15000
10000
5000
0
3/1/2006
7/1/2006
11/1/2006
3/1/2007
7/1/2007
11/1/2007
3/1/2008
7/1/2008
11/1/2008
3/1/2009
7/1/2009
11/1/2009
3/1/2010
7/1/2010
11/1/2010
3/1/2011
7/1/2011
benzene
methyl tert-butyl ether
tert-butyl alcohol
Linear (benzene)


TF-3
Trend Analysis of MTBE and TBA over Time
Southside Facility #20025
31 Heather Lane
Perryville, Maryland
Concentrations (ug/l)
30000
25000
20000
15000
10000
5000
0
3/1/2006
7/1/2006
11/1/2006
3/1/2007
7/1/2007
11/1/2007
3/1/2008
7/1/2008
11/1/2008
3/1/2009
7/1/2009
11/1/2009
3/1/2010
7/1/2010
11/1/2010
3/1/2011
7/1/2011
benzene
methyl tert-butyl ether
tert-butyl alcohol
Linear (benzene)

APPENDIX I
Town of Perryville Water Service Map

2011 Master Water Plan
Existing Water Features - Perryville



Note: Not all features and line sizes/ diameters have been field verified.

0 1,250 2,500 5,000 Feet

September 2011

APPENDIX J
Waste Manifest

For Facility Use Only
I.D.# 62357

NON-HAZARDOUS MANIFEST

For Facility Use Only
Manifest# 69349

Date:

Reco BIOTECHNOLOGY
710 Hospital Street
Richmond, VA 23219
(804) 644-2800

Generator: Name Southside Oil # 20025 — Contact Name Natalie Hendricks
Address 31 Heather Ln — Telephone 443-880-0689
Perryville, MD
site: Exxon at above address

Transporter: Name IPS — Contact Name A.J Anonick
or Carrier Address Midlothian, VA — Telephone 804-335-1077

Destination:
Delivery Address Reco Biotechnology — Contact Reco Biotechnology
710 Hospital Street — Telephone (804) 644-2800
Richmond, VA 23219

Route: Exxon @ the Pilot Travel Center off I-95 in Perryville

NO. of Packages	(*) Container	Shipping Description	Soil Weight (Sub. to Cor.)
6	DM	Non-Regulated Material non-regulated None None (petroleum contaminated soil)	

* - DM = Drum
DT = Dump Truck/Trailer
SC = Steel Container
RC = Rail Car

Truck #: _____

*Gross Weight: _____
Tare Weight: _____
Net Weight: _____
* May attach weight tickets

Certification:
I/We certify that the above material is not a HAZARDOUS WASTE as defined by the Resource Conservation and Recovery Act (RCRA), Virginia Hazardous Waste Management Regulations or as defined by the state of origin.

PRINTED/TYPED NAME & TITLE — SIGNATURE — DATE

Truck Driver's Signature: _____ Date: 10-11-11

Discrepancies: _____

RECEIVED BY: Reco Biotechnology — D Hunt

SIGNED BY: _____ 10-11-11

DATE: 10/11/11

Aqua Clean of Virginia, LLC dba Reco Biotechnology

FACILITY COPY