

***A*dvantage *E*nvironmental
*C*onsultants, LLC**

**Site Characterization Report
Royal Farms No. 64
7950 Pulaski Highway
Rosedale, Maryland 21237
Facility ID 3975
OCP Case No. 10-0339-BA**

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1.0 INTRODUCTION

1.1 Purpose

Advantage Environmental Consultants, LLC (AEC) was contracted by Station Maintenance Solutions (SMS) on behalf of Royal Farms / Two Farms, Inc. to prepare a Site Characterization Report (SCR) for the Royal Farms No. 64 store located at 7950 Pulaski Highway in Rosedale, Maryland 21237 (herein referred to as the "Site").

This SCR was performed pursuant to correspondence from the Maryland Department of the Environment (MDE) Oil Control Program (OCP) to Royal Farms/Two Farms, Inc., dated December 17, 2009 and a Work Plan Approval Letter issued by the MDE OCP, dated January 11, 2010. This report was prepared in accordance with the MDE OCP guidelines set forth in the Maryland Environmental Assessment Technology (MEAT) for Leaking Underground Storage Tanks (LUSTs) document, Revised February 2003 and the Subsurface Investigation Work Plan, dated December 28, 2009, which was prepared for SMS and Royal Farms /Two Farms, Inc. by AEC.

The purpose of this SCR is to summarize initial abatement measures performed to date and characterize subsurface conditions at the Site and off-site properties (1205 and 1207 Chesaco Avenue). Initial abatement activities began on December 15, 2009 upon discovery of the petroleum release. These activities included the installation of recovery wells, liquid petroleum hydrocarbon (LPH) gauging and recovery, excavation of petroleum contaminated soil, installation of a temporary soil vapor extraction (SVE) system, indoor air screening, and dewatering sump and sump pump replacement in the residence located at 1205 Chesaco Avenue. Details of initial abatement measures are discussed in Section 2.0 of this report.

AEC conducted a subsurface investigation of the Site and off-site properties between January 22, 2010 and February 5, 2010. Twenty-four borings were advanced to depths ranging from 15 to 25 feet below ground surface (bgs). Temporary piezometers were installed in all of the borings in order to collect groundwater samples and data pertaining to the extent of LPH. Representative soil samples were collected from all boring locations. Details pertaining to investigative methods and investigation activity results are presented in Sections 4.0 and 5.0, respectively.

1.2 Site Location and Description

The Site is situated in a commercial/residential area located northwest of the intersection of Chesaco Avenue and Pulaski Highway in Rosedale, Baltimore County, Maryland. The Site is developed with a convenience store/gasoline fueling station and associated asphalt- and concrete-paved areas. The Site currently operates four 10,000-gallon fiber-glass reinforced plastic underground storage tanks (USTs) which distribute fuel to four product dispensers. All four USTs contain gasoline and were installed in 1993. A tank top upgrade was performed in 2007 and double walled piping was installed on the UST system.

The surrounding properties include residences to the north, and commercial properties to the south, east and west. A retaining wall separates the Site and the northern adjoining residence (1205 Chesaco Avenue). The surface elevation difference between the two properties ranges from approximately 2 to 10 feet which increases in a westerly direction. A topographic Site Vicinity Map is included as Figure 1 and a Site Features Map is included as Figure 2 in Appendix A.

Municipal water and sewer services are provided to the Site and vicinity by the Baltimore City/County Department of Public Works. Electric and natural gas utilities are provided to the parcel by Baltimore Gas & Electric (BGE). A Site Utilities Map is included as Figure 3 in Appendix A.

According to the United States Geological Survey (USGS) 7.5 Minute Series Baltimore East, MD Topographic Quadrangle (produced in 1974), the Site elevation is approximately 50 feet above mean sea level (msl). Surface drainage at the Site is generally to the northwest towards an unnamed tributary of Back River located approximately 800 feet northwest of the Site at its closest point. Back River drains into the Chesapeake Bay. No surface water bodies are present on the Site.

1.3 OCP Case History

On December 15, 2009 the MDE OCP opened a case in response to a report of evidence of a petroleum spill at 1205 Chesaco Avenue, adjacent and to the north of the Site. The Baltimore County Fire Department (BCFD) initially responded to a 911 call from the 1205 Chesaco Avenue resident and subsequently observed approximately 1.5 inches of gasoline in the basement dewatering sump at this residence. The dewatering sump had discharged petroleum impacted water onto the backyard, which then migrated via overland flow to a neighboring driveway (1207 Chesaco Avenue). At that time, basement dewatering sumps at adjacent residences were checked by the BCFD for the presence of LPH and field screened for gasoline vapors. No LPH or petroleum vapors were detected at the adjacent residences. The 1205 Chesaco residence has been unoccupied since the release was reported.

The UST observation wells (tank pit (TP) wells) and UST over-fill containment sumps at the Site were gauged by the MDE Emergency Response Division (ERD). LPH was observed in both TP wells and one of the containment sumps. The fuel dispensers were shut down on December 15, 2009 until the leak could be located and repaired. A tank test determined that a leak had occurred from an "O" ring at the top of the check valve of the pump on the regular-grade gasoline UST. A subsequent review of inventory records showed a loss of approximately 5,400 gallons of gasoline. Copies of all MDE correspondence received by AEC are included in Appendix B.

2.0 INITIAL ABATEMENT MEASURES

2.1 Introduction

LPH recovery from both TP wells and the residential basement dewatering sump began the day the spill was reported. A total of nine LPH recovery wells were installed on December 15 and 16, 2009: six on-Site surrounding the UST field; and three off-site along the driveway of the 1205 Chesaco Avenue property. Excavation activities were conducted to remove contaminated soil in the backyard of the 1205 Chesaco Avenue residence where the dewatering sump discharged.

On December 17, 2009, a temporary SVE system was installed to remove petroleum vapors from the foundation of the 1205 Chesaco Avenue residence. The system consisted of a subsurface horizontal piping run along the southern length of the basement foundation. Piping was also run to the three off-site monitoring wells (MW-3, MW-4, and MW-5) and the basement dewatering sump.

The residential basement dewatering sump and pump were removed and replaced with an explosion-proof pump and larger dewatering sump. Absorbent pads have been maintained in the sump, and a vapor-tight lid was installed to contain vapors and allow venting to the temporary SVE system. Water from the dewatering sump pump discharge is being treated within a granular activated carbon (GAC) bed which was installed in the excavation area discussed above. The following is a detailed summary of these activities.

2.2 Installation of LPH Recovery Wells

A total of nine monitoring wells were installed for LPH recovery on December 15 and 16, 2009. Six wells (MW-1, MW-2, MW-6, MW-7, MW-8, and MW-9) were installed on the Site surrounding the UST field. Three wells (MW-3, MW-4, and MW-5) were installed off-site along the driveway of the 1205 Chesaco Avenue property. The well locations are illustrated on Figure 2 in Appendix A.

The wells were constructed using 4-inch outside diameter (OD) poly vinyl chloride (PVC) screen and riser. All wells were screened to within two feet of the ground surface. The remainder of each well was constructed with solid PVC riser. No split-spoon samples were collected so these wells were not logged. Monitoring Well Installation Reports are included in Appendix C. AEC contracted CR Hugo of Knoxville, Maryland to install the recovery wells. All soil cuttings produced during the recovery well installation were stockpiled on plastic sheeting on the Royal Farms property prior to disposal. Manifests for the disposal of soil cuttings generated during the installation of the recovery wells are included in Appendix D.

2.3 LPH Recovery Efforts

LPH recovery activities began at the Site and the 1205 Chesaco Avenue property on December 15, 2009. AEC gauged all recovery wells with an electronic oil-water interface probe accurate to 0.01-feet prior to initiating daily LPH recovery activities. AEC also performed periodic gauging of the recovery wells during the course of LPH

recovery activities. The LPH recovery activities were performed with a vacuum truck operated by Petroleum Recovery and Remediation Management, Inc. of Harmans, Maryland. Initially, petroleum recovery activities were performed using 2-inch diameter vacuum hoses connected to a five port manifold. AEC modified the extraction method using a "stinger" tube which was lowered into the wells to a depth of 1-2 ft below the static water level. The stinger tube was sealed at the well head with a rubber fernco boot to allow for both fluid and vapor extraction. This modification was implemented on December 24, 2009.

Between December 15 and 18, 2009 LPH recovery activities were conducted continuously (24 hours per day). Between December 19, 2009 and January 7, 2010 these activities were conducted 7 days a week (8 hours a day). The MDE authorized a modification to this schedule via email (January 8, 2010) to 5 days a week (8 hours per day). The MDE authorized a second modification to this schedule via email (February 5, 2010) to 3 days a week (4 hours per day). As of February 19, 2010, an estimated total of 44,911 gallons of fluid have been extracted from the Site. 3,509 gallons of this material is estimated to be LPH. Fluid Recovery Data are summarized in Table 1 included in Appendix E. Groundwater and LPH Disposal Manifests are included in Appendix F.

2.4 LPH Bail-Down Testing

In order to determine the rate of LPH recovery in select monitoring wells at the Site, AEC conducted LPH bail-down tests on MW-2, MW-5 and MW-7 on February 12, 2010. Prior to the start of each test, static depth to LPH and depth to water measurements were made using an electronic interface probe accurate to 0.01-feet. Using a clear bailer, the LPH was removed and placed in a graduated cylinder to determine its volume. Efforts were made to minimize the volume of water removed from the well, and bailing ceased when the measurable LPH thickness in the well could not be further significantly reduced (as confirmed using the interface probe). LPH recovery was gauged by collecting depth to water and depth to LPH measurements at regular intervals. LPH bail-down test data is presented in Table 2 of Appendix E.

Using the elapsed time of collection and the LPH thickness data, graphs were created to estimate the recovery rates. These graphs are presented in Appendix G. LPH recovery trend lines were superimposed on the graphed LPH thickness measurements and an 80 percent LPH thickness recovery estimate was determined. Based on this analysis it was projected that 80 percent LPH recovery would occur at 53 hours in MW-2, 2.9 hours in MW-5 and 13.2 hours in MW-7. In order to normalize the LPH recovery rate with respect to LPH thickness in each well, the volume of static LPH removed was calculated. This value was divided by the 80 percent recovery estimate to determine the recovery rate in gallons per hour. The specific recovery rates for each well were 0.04 gallon/hour (gal/hr) in MW-2, 0.03 gal/hr in MW-5, and 0.01 gal/hr in MW-7. These values are in general agreement with respect to static LPH thickness verses time of recovery.

2.5 Excavation of Petroleum Impacted Soil

On December 16, 2009 SMS personnel excavated soils near the 1205 Chesaco Avenue sump effluent discharge area. The area of the excavation was approximately 5 feet wide by 15 feet long by 2 feet deep. Excavated soils were transported from the area of the excavation to the Royal Farms property where they were stockpiled on plastic sheeting to await disposal. Approximately 35.5 tons of soil (including soil cuttings generated during the installation of recovery wells) was transported and disposed of at Soil Safe, Inc. of Brandywine Maryland on December 24, 2009. Soil Disposal Manifests for soil excavated from the sump effluent area of the 1205 Chesaco Avenue residence are included in Appendix D.

Upon completion of the soil excavation activities (December 17, 2009), AEC collected five confirmatory soil samples from the excavation. One sample was collected from each of the four sidewalls and one sample was collected from the center of the excavation floor. Confirmatory soil sample locations are depicted on Figure 4 included in Appendix A. A discussion of confirmatory soil sample analytical results is included in Section 5.1 below.

In order to treat the dewatering sump effluent originating from the residence, the excavation area was lined with plastic sheeting and an approximately 8 inch thick lift of GAC was placed in the excavation. The treated dewatering sump discharge water was sampled on February 18, 2010. The results of this testing effort are discussed in Section 5.2 below.

2.6 Installation of Temporary SVE System

On December 17 and 18, 2009, a temporary SVE system was installed to remove petroleum vapors from the foundation of the 1205 Chesaco Avenue residence. The system consists of a vacuum blower connected via an underground piping system to a central collection and treatment unit located on the northern portion of the Site property. The piping system consists of a 2-inch diameter PVC subsurface horizontal screened piping run along the southern length of the basement foundation. The screen is 20-slot PVC and was installed at a depth of 18 inches bgs within a granular backfill. The surface was capped with asphalt millings. Piping was also run to the three off-site monitoring wells (MW-3, MW-4, and MW-5) and the basement sump. Each leg of the system is independently valved and connected to a central manifold. The manifold line runs to a moisture separator then to a 3 horsepower regenerative vacuum blower with an ambient relief valve. Collected vapors were initially discharged directly to the atmosphere through a stack. On January 7, 2010, two vapor phase GAC absorbers were added to the system between the vacuum blower and the effluent stack. The temporary SVE system has operated continuously since start-up on December 18, 2009.

AEC has received an Air Quality General Permit to Construct for Soil Vapor Extraction and Groundwater Air Stripping, dated February 12, 2010. A copy of the permit is included in Appendix B. AEC began a 14-day pilot study in accordance with the

referenced permit on February 22, 2010. Results of the 14-day pilot study will be provided upon completion.

2.7 Indoor Air Screening

On December 15, 2009, AEC began daily indoor air screening activities in the basement level of the 1205 Chesaco Avenue residence. Indoor air has been screened with a photoionization detector (PID) for volatile organic compounds (VOCs), and a multi-gas meter for carbon monoxide, hydrogen sulfide, lower explosive limit, and percent oxygen. Indoor air screening results indicated acceptable levels for all screened parameters within the basement level of the 1205 Chesaco Avenue residence.

2.8 Dewatering Sump Pump Replacement

On December 18, 2009, Potter Mechanical, a plumbing subcontractor for SMS, removed the basement dewatering sump and pump at the 1205 Chesaco Avenue residence. An explosion-proof pump and a larger dewatering sump were installed as the replacement for the original system. A vapor tight sump lid was installed to contain vapors and to allow venting to the temporary SVE system. As discussed above, water from the sump is being treated within the GAC bed located outside of the residence. On January 4, 2010 Clinton Electric, a subcontractor of SMS, installed an exhaust fan within the sump area enclosure. An absorbent pad is maintained in the dewatering sump and visually inspected on a daily basis. To date, no more than a very light LPH sheen has been intermittently observed within the dewatering sump.

3.0 REGIONAL AND LOCAL GEOLOGY AND HYDROGEOLOGY

3.1 Regional Geology and Hydrogeology

On a regional scale, the Site is located in the Atlantic Coastal Plain Physiographic Province. A review of available literature including the Geologic map of the Baltimore East Quadrangle, Maryland (1979) indicates the sand facies of the Patapsco Formation underlies the Site. This formation consists of irregularly distributed beds of sand, gravel, sandy clay, and clay. The clay layers are commonly reddish brown, tan, or gray, and the sand layers yellow, tan, or grayish white. The sandy components are well-sorted, medium to fine-grained quartz sand with locally abundant quartz gravel and clay clasts. The sands are planer to high-angle cross-bedded and in some outcrops show fining-upward sequences which are 10- to 15-feet thick. Most beds are lenticular and change rapidly in character over short distances.

The Site is located near the mapped contact with the clay facies of the older Arundel Formation. This formation is a grey, brown, black and red kaolinitic and illitic clay with quartz silt locally interbedded with quartz sand lenses and pods. The clays are typically poorly bedded to massive with occasional color mottling. The Arundel Clay commonly contains disseminated lignitic material, nodules and concretions of ironstone, and irregular bands of iron cemented sandstone or sandy gravel. Locally, this formation may contain sand lenses of moderate permeability, although the lenses are uncommon and small.

The Patapsco Formation of the Potomac Group is divided into four hydrogeologic units: the Upper Patapsco confining unit; the Upper Patapsco aquifer; the Middle Patapsco confining unit; and the Lower Patapsco aquifer. The Lower Patapsco aquifer is bounded by the clay of the Arundel confining unit. The Patapsco aquifers consist of interwoven and locally discontinuous sand layers characteristic of floodplain and meandering streams deposits which yield large quantities of water.

3.2 Local Geology

During AEC's subsurface investigation, the following conditions were encountered: orange- and red-brown silty clays with medium to high densities and varying amounts of sand and gravel. Underlying the silty clay was red- and orange-brown silty sands, sandy silts, or clay with grey and/or tan mottling and varying densities. A Trace of Cross-Sections is included as Figure 5 in Appendix A. Cross Sections A-A', B-B', C-C', and D-D' are included in Appendix A as Figures 6, 7, 8, and 9, respectively.

Cross section B-B' is oriented in a north-south trend and shows the silty clay and silty sand contact at an approximate elevation of 83 feet. This contact is continuous across the extent of this section. A high density clay layer is encountered at an elevation of 75 feet in boring B-4 but is not evident in the other borings represented in this section. Cross section D-D' is also oriented in a north-south trend but shows a more discontinuous lithology with respect to the silty clay and silty sand contact. Cross section A-A' is oriented in a east-west trend and shows the lower silty sand layer pinching out in an easterly direction. Cross section C-C' is also oriented in an east-west

trend and shows the lack of lower silty sand layer. The majority of the material represented in this section is clay or silty clay.

3.3 Local Hydrogeology

Groundwater level data from the February 2, 2010 monitoring event indicated that depth to groundwater in the on-Site wells ranged from 12.22 feet bgs in MW-1 to 13.66 feet bgs in MW-9. Depth to groundwater in the on-Site TP wells ranged from 10.18 feet bgs in TP-1 to 10.93 feet bgs in TP-2. Depth to groundwater in the off-site wells ranged from 5.93 feet bgs in MW-3 to 7.21 feet bgs in MW-5. The off-site wells are approximately 6 feet lower in elevation than the on-Site wells. These depths were compared to top of casing elevations with an arbitrary datum of 100 feet. Groundwater elevations in the on-Site wells ranged from 86.31 feet in MW-7 to 87.2 feet bgs in MW-8. Groundwater elevations in the off-site wells ranged from 86.57 feet in MW-3 to 86.76 feet bgs in MW-4.

During the February 2, 2010 gauging event, measurable LPH was present in wells MW-2 (0.31 feet), MW-4 (0.03 feet) and MW-5 (2.86 feet). The above and below referenced groundwater elevations have been corrected for the presence of LPH using a hydrocarbon density of 0.7 grams per milliliter. A Liquid Phase Hydrocarbon Distribution Map is included as Figure 10 in Appendix A. Historical Groundwater Elevation Data from monitoring wells and piezometers are summarized in Tables 3 and 4, respectively in Appendix E.

A groundwater gradient map was developed using the February 2, 2010 data and is provided as Figure 11 in Appendix A. Groundwater flow is shown to be generally towards the north with an eastern flow component in the vicinity of the UST field. This eastern flow component is counter to the general surface topography which is to the northwest. This may be the result of slight water table mounding in the granular back-fill of the UST field. The hydraulic gradient (change in head per unit distance (dh/dl)) for the northern flow component between MW-2 and MW-1 was 0.012 feet per foot during this monitoring event.

Groundwater recovery/slug tests were conducted on two monitoring wells, MW-2 and MW-5, on February 2nd and 3rd 2010, respectively. Prior to conducting the recovery/slug tests, depth to water was measured in each well (static water level). A vacuum-truck was then used to rapidly lower the water-level in each well. Water-level recovery measurements were recorded using a water level gauge accurate to 0.01 feet for a period of 52 minutes in MW-2 and 28 minutes in MW-5. Both tests realized at least 80 percent recovery to static water levels.

The groundwater level recovery data gathered during these tests was used to estimate hydraulic conductivity (K), transmissivity (T) and average linear velocity (V) parameters of the surrounding formation. The following describes the meaning and derivation of these parameters.

The foundation of groundwater hydraulics is based on Darcy's Law, which states that the flow rate through a porous medium is proportional to the head loss and inversely

proportional to the length of the flow path. The most common form of Darcy's equation can be expressed as:

$$Q = KA (dh/dl)$$

Where:

Q = flow rate
 K = hydraulic conductivity
 A = area normal to direction of flow
 dh/dl = hydraulic gradient

Rearranging Darcy's equation leads to:

$$K = Q/(dh/dl)(A)$$

Where K is hydraulic conductivity and describes the rate at which water can move through a permeable medium under a unit hydraulic gradient.

Because the term hydraulic conductivity fails to describe adequately the flow characteristics of an aquifer, C.V. Theis (1935) introduced the concept of transmissivity:

$$T = Kb$$

Where:

T = transmissivity
 K = hydraulic conductivity
 b = saturated thickness of the aquifer

Transmissivity represents the flow through a vertical strip of aquifer one unit wide. Where K may be considered as the hydraulic conductivity of a unit cross sectional area of the aquifer, T may be considered as the hydraulic conductivity of a unit width of the full thickness of the aquifer. The saturated thickness of the aquifer (b) is typically assumed to be equal to the screened interval of the well. The reasoning behind this assumption is that the portion of the aquifer actively contributing water to the well under a short duration and low impact test, is in the vicinity of the well screen.

The average linear velocity, or the velocity at which water moves through the pore spaces of an aquifer can be expressed as:

$$V = K(dh/dl)(1/n)$$

Where:

K = hydraulic conductivity
 dh/dl = hydraulic gradient
 n = effective porosity

The data obtained from the testing was analyzed using the aquifer testing program

AQTESOLV for Windows, v4.50. Bouwer and Rice (1976) for unconfined aquifers with steady-state flow, and Hvorslev (1951) for a fully or partially penetrating well in a homogeneous, anisotropic confined aquifer were the selected analysis methods.

The AQTESOLV output showed that the hydraulic conductivity on the Site ranges from 0.0011 feet/minute (ft/min) in MW-2 to 0.00067 ft/min in MW-5. The average Site-wide hydraulic conductivity for both analysis methods is 0.0009 feet/min (1.27 ft/day). This average hydraulic conductivity value is consistent with the encountered lithology (silty clay and silty sand) as compared to ranges of hydraulic conductivity values in the literature (Freeze and Cherry, 1979). The results of the program's calculations are summarized in Table 5 in Appendix E. The model output is presented in Appendix H.

Based on the results of the recovery/slug test analysis and the observed on-site lithology, the average linear velocity is estimated to be 0.000072 feet/min (0.104 ft/day). The average linear velocity was estimated using the average Site-wide hydraulic conductivity (0.0009 feet/min); a groundwater gradient of 0.012 feet per foot; and, an effective porosity of 15 percent. The effective porosity value (sand-silt mixture) was estimated from the literature (Freeze and Cherry, 1979).

4.0 INVESTIGATIVE METHODS

AEC performed a subsurface investigation, including the collection of soil samples from 24 boring locations, in order to delineate the extent of hydrocarbon impact to soil. In addition, temporary piezometers were installed in all of the borings in order to delineate the extent of liquid and dissolved phase hydrocarbon impact. Well permits were obtained from Baltimore County prior to commencing drilling activities.

4.1 Advancement of Direct Push Sampling Device

Drilling activities were conducted between January 22 and 28, 2010. Sample cores were collected in four-foot intervals using a skid-mounted Geoprobe drill rig, which utilizes a stainless steel, split spoon sampler. All sampling equipment was decontaminated in the field using non-phosphate liquinox and water prior to use. AEC contracted CR Hugo of Knoxville, Maryland to perform the drilling activities.

The Geoprobe system is a hydraulically powered percussion probing machine used to advance sampling tools through unconsolidated soils. The Geoprobe sample collection method involves a hydraulically pushed stainless steel hollow core, measuring four feet long, with a stainless steel cutting shoe on the leading edge. For each sampling interval, a disposable non-reactive plastic liner is placed inside the core and the cutting shoe is threaded on. The core is driven through the sampling interval, thereby filling the core with a section of undisturbed sample.

A total of 24 Geoprobe borings (B-1 through B-24) were advanced. Nine borings were advanced on the Site (B-1 through B-9); twelve borings were advanced on the 1205 Chesaco Avenue property (B-10 through B-19, B-23 and B-24); and, three borings were advanced on the 1207 Chesaco Avenue property (B-20 through B-22). The borings were advanced to depths ranging from 12 feet to 25 feet bgs. A Site Features Map illustrating the soil boring/temporary piezometer locations is included as Figure 2 in Appendix A. Soil Boring Logs are included in Appendix I.

4.2 Soil Sampling Methodology

An AEC Field Geologist logged the geologic conditions of the borings and field screened soil cores for VOCs using a PID. Soil samples were collected from each boring. The criteria for selecting the soil samples were based on elevated PID readings or evidence of impact in soil. If no PID readings were encountered, samples were collected immediately above the groundwater interface.

The selected samples were placed in laboratory grade, four-ounce wide mouth glass jars with Teflon-lined lids. The sample containers were then labeled with the corresponding boring number. Once collected, the sample containers were placed on ice in a cooler to await delivery to the laboratory. The samples were analyzed for VOCs and fuel oxygenates via USEPA Method 8260, Total Petroleum Hydrocarbons (TPH) Gasoline Range Organics (GRO) via USEPA Method 8015, and TPH Diesel Range Organics (DRO) via USEPA Method 8015.

4.3 Installation of Temporary Piezometers

AEC converted all of the soil borings into temporary piezometers. The depths of the piezometers varied as some of the boreholes partially collapsed upon completion of the soil sampling activities. All borings were advanced using two-inch diameter geoprobe sampling rods.

The temporary piezometers were constructed of one-inch diameter, PVC screen and riser. Screen and riser lengths varied based on the depth of the boring and the estimated water table depth. A sand filter pack was placed to approximately two feet above the screened interval. An approximate two-foot-thick bentonite seal was installed above the sand pack and the well was then grouted to the surface. The PVC well heads were then secured with a slip cap. The piezometer construction details are included on the Soil Boring Logs included in Appendix I.

Static groundwater was measured at depths within the temporary piezometers ranging from 0.15 feet bgs in boring B-21 to 17.06 feet bgs in boring B-9. The temporary piezometers were gauged a number of times following installation. The maximum measurable LPH thicknesses were detected in the following on-site temporary piezometers: B-2 at a thickness of 2.43 feet on January 30, 2010; B-6 at a thickness of 0.13 feet on January 29, 2010; and, B-9 at a thickness of 5.71 feet on January 28, 2010. The maximum measurable LPH thickness encountered in an off-site piezometer was in B-11 at a thickness of 1.03 feet on February 2, 2010 on the 1205 Chesaco Avenue property. All of the other temporary piezometers did not contain LPH during any of the gauging events.

Due to recent heavy snowfall, the temporary piezometers remain in place at the Site and off-site properties. Once the snow melts, the piezometers will be properly abandoned and the boreholes will be filled with bentonite to near the surface and then capped with a patch of like surrounding material.

4.4 Groundwater Sampling Methodology

Groundwater samples were collected from the temporary piezometers using a disposable high-density polyethylene (HDPE) bailer between February 1 and 5, 2010. At least 7 days elapsed between piezometers installation and sample collection. Temporary piezometers which contained LPH were not sampled.

The selected samples were placed in laboratory grade 40-milliliter glass vials with teflon-lined septa which were preserved with hydrochloric acid (VOCs and TPH GRO) or unpreserved one-liter amber jars (TPH DRO). No head-space was present in any of the VOC vials collected. The sample containers were then labeled with the corresponding boring number. Once collected, the sample containers were placed on ice in a cooler to await delivery to the laboratory. It should be noted that sufficient groundwater for the analysis of TPH DRO was not available at piezometer location B-5. The samples were analyzed for VOCs and fuel oxygenates via USEPA Method 8260, TPH GRO via USEPA Method 8015, and TPH DRO via USEPA Method 8015.

4.5 Sump Water Sampling Methodology

Water samples were collected from the sumps in the basements of the 1207, 1209 and 1209½ residences on December 23, 2009. Samples were collected from the sumps using disposable HDPE bailers. In addition, two samples were collected of the sump water originating from 1205 Chesaco Avenue residence. One of the samples was collected directly from the sump effluent line that drains to the area where contaminated soil was excavated (sample collected January 21, 2010). The second sample was collected after the sump effluent had passed through the GAC bed within the excavation (sample collected February 18, 2010). This sample was collected at the down-slope end of the GAC bed via a temporary slotted plastic sump. The dewatering sump pump was cycled a number of times to create flow within the GAC bed and once the temporary slotted plastic sump was adequately filled with water the sample was collected.

The samples were placed in 40-milliliter glass vials with teflon-lined septa preserved with hydrochloric acid (VOCs and TPH GRO) or unpreserved one-liter amber jars (TPH DRO). No head-space was present in any of the VOC vials collected. The sample containers were then labeled with the corresponding sump identification. Once collected, the sample bottles were placed on ice in a cooler to await delivery to the laboratory. The samples were analyzed for VOCs and fuel oxygenates via USEPA Method 8260, TPH GRO via USEPA Method 8015, and TPH DRO via USEPA Method 8015.

4.6 Equipment Decontamination Procedures

Prior to arriving at the site and between each soil boring, all hand augers, core barrels, cutting shoes, probe rods, tips, sleeves, pushrods, samplers, tools, and other downhole equipment was decontaminated using a Liquinox and water solution followed by a water rinse. Fuel, lubricants, and other similar substances were handled in a manner consistent with accepted safety procedures and standard operating practices.

4.7 Sample Handling Procedures

The analytical laboratory provided pre-preserved sample containers where appropriate. The sample labels were firmly attached to the container side, and the following information was legibly and indelibly written on the labels: Facility name, Sample identification, Sample type (soil or groundwater), Sampling date and time, Preservatives added, and, Sample collector's initials.

The following packaging procedures were followed: Samples were packaged to prevent leakage or vaporization from the containers, Samples were cushioned to avoid breakage, and ice was added to the cooler to keep the samples cool. After the samples were sealed and labeled, they were packaged for transport to Anabell Environmental, Inc. located in Gaithersburg, Maryland.

5.0 INVESTIGATION ACTIVITY RESULTS

5.1 Confirmatory Soil Sample Analytical Data

The results of the sump discharge area soil excavation's confirmatory soil sample laboratory analyses identified no benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tert-butyl ether (MTBE), naphthalene, TPH GRO, or TPH DRO concentrations in any of the confirmatory soil samples with the exception of sample C-5 (bottom sample). BTEX (1,285 micrograms per kilogram ($\mu\text{g}/\text{kg}$)), naphthalene (80 $\mu\text{g}/\text{kg}$), and TPH GRO (6 milligrams per kilogram (mg/kg)) were detected in soil sample C-5 at concentrations less than their respective MDE Residential Cleanup Standards for Soil (i.e., Generic Numeric Cleanup Standards for Groundwater and Soil – Interim Final Guidance Update No. 2.1 – June, 2008). MTBE and TPH DRO were not detected in confirmatory soil sample C-5 at concentrations exceeding their respective laboratory detection limits.

The results of the confirmatory soil sample laboratory analyses are illustrated on the Soil Quality Map – Sump Discharge Pit Excavation included as Figure 4 in Appendix A. The results of the confirmatory soil sample laboratory analyses are summarized in Table 6 included in Appendix E. Copies of the completed laboratory analytical reports and chain-of-custody form are provided in Appendix J.

5.2 Sump Water Sample Analytical Data

The results of the sump water sample laboratory analysis identified no BTEX, MTBE, naphthalene, TPH GRO, or TPH DRO concentrations in any of the sump water samples with the exception of sample Sump-1205 and the treated sump water sample Sump-1205. Benzene (85 micrograms per liter ($\mu\text{g}/\text{L}$)), toluene (1,500 $\mu\text{g}/\text{L}$), ethylbenzene (300 $\mu\text{g}/\text{L}$), total xylenes (2,800 $\mu\text{g}/\text{L}$), naphthalene (600 $\mu\text{g}/\text{L}$), TPH GRO (15 milligrams per liter (mg/L)), and TPH DRO (7.1 mg/L) were detected in sump water sample Sump-1205. All of the aforementioned constituents, with the exception of MTBE, ethylbenzene and total xylenes were detected at concentrations greater than their respective MDE Cleanup Standards for Type I and II Aquifers; however, no potable wells are located within the vicinity of the Site. MTBE was not detected in sample Sump-1205 at a concentration exceeding its laboratory detection limit.

Toluene (15 $\mu\text{g}/\text{L}$), total xylenes (110 $\mu\text{g}/\text{L}$), naphthalene (600 $\mu\text{g}/\text{L}$), 1,3,5-trimethylbenzene (16 $\mu\text{g}/\text{L}$), 1,2,4-trimethylbenzene (20 $\mu\text{g}/\text{L}$), and TPH GRO (0.5 mg/L) were detected in treated sump water sample Sump-1205. All of the aforementioned constituents, with the exception of TPH GRO were detected at concentrations less than their respective MDE Cleanup Standards for Type I and II Aquifers; however, no potable wells are located within the vicinity of the Site. Benzene, ethylbenzene, MTBE, and TPH DRO not detected in the treated sample Sump-1205 at a concentration exceeding their respective laboratory detection limits.

The results of the sump water sample laboratory analyses are illustrated on the Groundwater Quality Map included as Figure 12 in Appendix A. The results of the sump water sample laboratory analyses are summarized in Table 7 included in Appendix E.

Copies of the completed laboratory analytical reports and chain-of-custody form are provided in Appendix J.

5.3 Soil Sample Analytical Data

The results of the soil sample laboratory analyses identified varying concentrations of BTEX, naphthalene, TPH GRO, and TPH DRO in soil samples collected from the Site (borings B-1 through B-9). None of the aforementioned constituents were detected in soil sample B-1-12' at concentrations exceeding their respective laboratory detection limits. BTEX concentrations ranged from below laboratory detection limits (BDL) in sample B-1-12' to 35,800 µg/kg in sample B-6-11'. MTBE concentrations were BDL for all samples collected at the Site. Naphthalene concentrations ranged from BDL in samples B-1-12', B-4-13', and B-9-8' to 600 µg/kg in sample B-2-11'. TPH GRO concentrations ranged from BDL in samples B-1-12', B-3-5', and B-4-13' to 140 mg/kg in sample B-6-11'. TPH DRO concentrations ranged from BDL in samples B-1-12', B-2-11', B-3-5', B-4-13', B-6-11', B-7-5', and B-9-8' to 33 mg/kg in sample B-5-12'. None of the aforementioned constituents were detected at concentrations exceeding their respective MDE Non-Residential Cleanup Standards for Soil.

The results of the soil sample laboratory analyses identified varying concentrations of BTEX, naphthalene, TPH GRO, and TPH DRO in soil samples collected from the off-site properties (borings B-10 through B-24). None of the aforementioned constituents were detected in soil samples B-16-4', B-17-7', B-18-7', B-20-2', B-21-3', and B-24-9' at concentrations exceeding their respective laboratory detection limits. BTEX concentrations ranged from BDL in samples B-16-4', B-17-7', B-18-7', B-20-2', B-21-3', and B-24-9' to 6,730 µg/kg in sample B-13-8'. MTBE concentrations were BDL for all samples collected at the off-site properties. Naphthalene concentrations ranged from BDL in samples B-16-4', B-17-7', B-18-7', B-20-2', B-21-3', B-23-5' and B-24-9' to 170 µg/kg in sample B-11-15'. TPH GRO concentrations ranged from BDL in samples B-15-5', B-16-4', B-17-7', B-18-7', B-20-2', B-21-3', B-22-2', and B-24-9' to 16 mg/kg in sample B-13-8'. TPH DRO concentrations ranged from BDL in samples B-12-3', B-14-5', B-15-5', B-16-4', B-17-7', B-18-7', B-20-2', B-21-3', B-22-2' and B-24-9' to 110 mg/kg in sample B-13-8'. None of the detected concentrations of the aforementioned constituents were greater than their respective MDE Residential Cleanup Standards for Soil.

The results of the soil sample laboratory analyses are illustrated on the Soil Quality Map – Borings included as Figure 13 in Appendix A. The results of the soil sample laboratory analyses are summarized in Table 8 included in Appendix E. Copies of the completed laboratory analytical reports and chain-of-custody form are provided in Appendix J.

5.4 Groundwater Sample Analytical Data

The results of the groundwater sample laboratory analyses identified varying concentrations of BTEX, naphthalene, TPH GRO, and TPH DRO in groundwater samples collected from the Site (B-1, B-3, B-4, B-5, B-7, and B-8). None of the aforementioned constituents were detected in groundwater sample B-1 at concentrations exceeding their respective laboratory detection limits. Total BTEX

concentrations ranged from BDL in sample B-1 to 50,300 µg/L in sample B-5. MTBE concentrations ranged from BDL in samples B-1, B-4, and B-8 to 500 µg/L in samples B-3 and B-5. Naphthalene concentrations ranged from BDL in samples B-1 and B-7 to 1,200 µg/L in sample B-5. TPH GRO concentrations ranged from BDL in samples B-1 and B-7 to 70 mg/L in sample B-3. TPH DRO concentrations ranged from BDL in samples B-1, B-4, B-7, and B-8 to 60 mg/L in sample B-3. It should be noted that sufficient water for the analysis of TPH DRO in groundwater sample B-5 was not available. Some of the detected concentrations of the aforementioned constituents were greater than their respective MDE Cleanup Standards for Type I and Type II Aquifers; however, no potable wells are present in the vicinity of the Site.

The results of the groundwater sample laboratory analyses identified varying concentrations of BTEX, naphthalene, TPH GRO, and TPH DRO in groundwater samples collected from the off-site properties (B-10 and B-12 through B-24). None of the aforementioned constituents were detected in groundwater sample B-20 at concentrations exceeding their respective laboratory detection limits. Total BTEX concentrations ranged from BDL in sample B-20 to 18,500 µg/L in sample B-15. MTBE concentrations ranged from BDL in samples B-10, B-12, B-15 through B-19, B-20, and B-22 through B-24 to 80 µg/L in sample B-21. Naphthalene concentrations ranged from BDL in samples B-14, B-18, B-20, B-22, and B-24 to 580 mg/L in sample B-12. TPH GRO concentrations ranged from BDL in samples B-17, B-18, B-20, B-22 and B-24 to 51 mg/L in sample B-12. TPH DRO concentrations ranged from BDL in samples B-14, B-16 through B-22, and B-24 to 22 mg/L in sample B-12. Some of the detected concentrations of the aforementioned constituents were greater than their respective MDE Cleanup Standards for Type I and Type II Aquifers; however, no potable wells are present in the vicinity of the Site.

The results of the groundwater sample laboratory analyses are illustrated on the Groundwater Quality Map included as Figure 12 in Appendix A. The results of the groundwater sample laboratory analyses are summarized in Table 9 included in Appendix E. Copies of the completed laboratory analytical reports and chain-of-custody form are provided in Appendix J.

6.0 RISK DETERMINATION SUMMARY

6.1 Introduction

The MDE OCP produced the MEAT for LUSTs document (2003) to provide guidance in the event of a release of a hazardous substance from regulated UST systems. According to the MEAT document, the OCP requires the potential risk be measured at every facility that has a reported release in order to establish cleanup goals and to determine if remediation is necessary. The OCP evaluates risk by a "Seven Risk Factor" process. The seven factors that require consideration include LPH, Current and Future Use of Impacted Groundwater, Migration of Contamination, Human Exposure, Environmental Ecological Exposure, Impact to Utilities and Other Buried Services, and Other Sensitive Receptors. The following sections of this report state each of the seven risk factors, and presents AEC's evaluation of each factor as it pertains to the Site.

6.2 Liquid Phase Hydrocarbons

"LPH refers to a regulated substance that is present as a non-aqueous phase liquid. When LPH is found on-site, the liquid product must be removed to the maximum extent possible. OCP has determined this to be sheen. (MEAT for LUSTs, 2003)."

During the gauging event conducted on February 2, 2010, LPH was detected in the following wells and piezometers: MW-2 (0.31 feet), MW-4 (0.03 feet) and MW-5 (2.86 feet), B-2 (2.26 feet), B-6 (0.06 feet), B-9 (3.95 feet), and B-11 (1.03 feet). The other wells and piezometers did not indicate measurable LPH during this gauging event. Historically, LPH has also been detected in the following additional wells: TP-1 at thicknesses ranging from a sheen to 0.51 feet, TP-2 at thicknesses ranging from a sheen to 0.46 feet, MW-1 at thickness's ranging from a sheen to 0.67 feet, MW-3 at thicknesses ranging from 0.00 feet to 0.04 feet, MW-6 at thicknesses ranging from a sheen to 0.77 feet, and MW-7 at thicknesses ranging from 0.00 feet to 0.54 feet. Figure 10 (Appendix A), Liquid Phase Hydrocarbon Distribution Map, illustrates the LPH thicknesses on the February 2, 2010 gauging event and the maximum LPH thicknesses during all of the gauging events.

6.3 Current and Future Use of Impacted Groundwater

"If the groundwater impacted by the release is used for direct consumption within a half mile of the site or the site is located within an approved wellhead protection zone, a site assessment and CAP must be designed. Other uses of groundwater that would warrant remediation include industrial, agricultural, and surface water augmentation. If known, future use of the groundwater must be taken into consideration. If site-specific future use is unsure, regional trends must be considered. Generally, if future use is not clear, a more conservative approach to cleanup is applied (MEAT for LUSTs, 2003)."

A potable well survey has not been completed for the Site and vicinity; however, based on the heavily developed nature of the Site and vicinity, as well as direct observation of properties adjoining the Site, no potable wells are anticipated to exist within ½ mile of the Site. Furthermore, the Site and surrounding area are served by municipal water.

6.4 Migration of Contamination

“The ability of contamination to migrate off-site or to migrate to a receptor is a critical measure. If it can be demonstrated that the contamination is stationary and site conditions restrict the potential for migration, the need for cleanup may be reduced (MEAT for LUSTs, 2003).”

The subsurface investigation at the Site has indicated that petroleum constituents have migrated away from the release point across the northern and possibly eastern Site boundaries. This is demonstrated by the existence of LPH and dissolved phase petroleum constituents detected in several off-site wells and piezometers.

6.5 Human Exposure

“Any exposure to the public warrants site corrective action. There are several exposure pathways that must be considered. These pathways include but are not limited to inhalation, ingestion, and dermal contact (MEAT for LUSTs, 2003).”

Direct dermal contact and/or the ingestion of petroleum impacted groundwater is possible as impacted water in the dewatering sump at 1205 Chesaco Avenue is discharged to the ground surface near the northern boundary of the 1205 Chesaco Avenue property. Surface drainage at the Site is generally to the northwest towards an unnamed tributary of Back River, located approximately 800 feet northwest of the Site at its closest point. The tributary of Back River is not expected to be impacted by the Site's release.

Dermal contact and/or ingestion of impacted soil is unlikely as the entire Site area is paved with asphalt, gravel or concrete and soil impact is greatest at or near the water table which ranges from approximately 5 to 12 feet bgs. With the exception of construction excavation work, no complete dermal contact and/or ingestion of impacted soil exposure pathway is anticipated.

Vapor inhalation risk to the 1205 Chesaco Avenue residence is probable based on the existence of LPH underneath this structure. Vapor inhalation risk to the 1207 Chesaco Avenue residence and the on-Site building is possible based on elevated dissolved phase hydrocarbon levels in the vicinity of these structures. As a result of this possibility, the risk from subsurface VOC vapor intrusion into buildings (inhalation exposure pathway) was evaluated using the Johnson & Ettinger (J&E) vapor intrusion model (Version 3.1 dated February 22, 2004). The J&E Model (1991) is a one-dimensional analytical solution to convective and diffusive vapor transport into indoor spaces and provides an estimated attenuation coefficient that relates the vapor concentration in the indoor space to the vapor concentration at the source of chemicals of potential concern.

The model results were used to forward-calculate an incremental cancer risk or hazard index (HI) based on an initial soil or groundwater concentration. The incremental cancer risk is the incremental probability of an individual developing cancer over a lifetime as a result of exposure to a potential carcinogen. When assessing incremental

cancer risk, the MDE recommended range of risk is 10^{-6} to 10^{-5} . This range represents the upper confidence limit, whereas the lower bound estimate of excess lifetime cancer risk is zero. The HI is the summation of the hazard quotients for all chemicals to which an individual is exposed. A hazard index value of 1.0 or less than 1.0 indicates that no adverse human health effects (non-cancer) are expected to occur.

The J&E model chemical concentration input consisted of the most elevated groundwater and soil VOCs detected from the three borings installed on the 1207 Chesaco Avenue property. The groundwater VOC inputs were from boring B-21. The soil VOC inputs were from B-22.

The chemical properties of the VOCs automatically input into the calculation spreadsheet from the model's integrated Chemical Properties Lookup Table. The residential exposure duration and frequency, unsaturated zone soil properties, and structural properties of the building which were used for this evaluation were the default settings on the model. Table 10 in Appendix E identifies the unsaturated zone soil properties and structural properties of the building. Table 11 in Appendix E identifies the groundwater and soil VOC concentrations used in this analysis.

Evaluation of the results indicates that the incremental cancer risk for potential vapor inhalation exceeds the MDE's point of departure of 10^{-5} for benzene in soil. The groundwater benzene concentration did not exceed the incremental cancer risk point of departure. Evaluation of the cumulative non-cancer hazard indices for potential vapor inhalation indicates an HI of 1.8 for soil which exceeds the MDE's acceptable limit of 1.0. Table 11 in Appendix E summarizes the groundwater and soil J&E evaluation. The J&E model output spreadsheets for estimating subsurface vapor intrusion into buildings are presented in Appendix K.

6.6 Environmental Ecological Exposure

"The need to protect the natural resources of the State is mandated by Maryland law. If there is exposure to animal or plant life from the petroleum release or the degradation of a natural resource, corrective action is warranted (MEAT for LUSTs, 2003)."

AEC did not observe any signs of staining or vegetative stress in the grass-covered areas surrounding the Site or off-site properties. The most proximal natural surface body of water to the Site, an unnamed tributary of Back River located approximately 800 feet northwest of the Site at its closest point, is not expected to be impacted by the Site's release. AEC does not consider this release to represent a threat to animals or plant life in the vicinity of the Site.

6.7 Impact to Utilities and Other Buried Services

"The responsible party must correct adverse effects to utilities. Utility materials have been known to degrade from contact with petroleum products. Utilities may also act as conduits that lead to the migration of contamination. Migration along utilities may cause vapor impacts or other issues at nearby structures (MEAT for LUSTs, 2003)."

Electricity and communications service is supplied to the Site via overhead utilities located along Chesaco Avenue and Pulaski Highway. Based on observations made during Site investigation activities (miss utility markings and water meter/sewer manholes), the Site and vicinity are connected to the municipal water and sewer systems. Stormwater drains via sheet-flow into trench drains located near the Chesaco Avenue entrance to the Site. This stormwater drains into the stormwater system along Chesaco Avenue.

Depth to groundwater at the Site in the vicinity of the subsurface utilities is approximately 11 to 13 feet bgs. Depth to groundwater at the 1205 Chesaco Avenue residence is approximately 5 to 6 feet bgs. Utility trenches in the vicinity of the Site are not expected to be affected by the petroleum impact due to the fact that they are unlikely to be located at a depth greater than 3 to 4 feet bgs. Based on the assumed depth of on- and off-site utility trenches, impact to utilities and other buried services at the Site from a UST release is not considered to be a concern.

6.8 Other Sensitive Receptors

“Sensitive receptors such as surface water, historic structures, and subways are an indication that a site may warrant corrective action (MEAT for LUSTs, 2003).”

Natural surface bodies of water, historic structures, and subways are not located at the Site; as such, these receptors are not a concern. Additional sensitive receptors in the vicinity of the Site location were not observed during the site assessment. Based on the lack of receptors in the site vicinity that the UST release could possibly have affected, the release does not appear to pose a risk to other sensitive receptors.

6.9 Summary

Based on the results from the recent subsurface investigation and monitoring efforts and the evaluation of the seven risk factors, AEC has established that risk exists for the following MDE Risk Factors:

- Liquid Phase Hydrocarbons
- Migration of Contamination
- Human Exposure

AEC has not identified any risk associated with these remaining MDE Risk Factors:

- Current and Future Use of Impacted Groundwater
- Environmental Ecological Exposure
- Impact to Utilities and Other Buried Services
- Other Sensitive Receptors

The existence of LPH, both on- and off-site will necessitate continued removal of this material. The remedial end-point for LPH, dissolved phase and adsorbed phase mitigation will be developed in the CAP for the Site that will be provided under separate cover.

7.0 CONCLUSIONS

The known lateral extent of LPH at the Site and the 1205 Chesaco Avenue property consists of an area of approximately 2,200 square-feet. The area of LPH extends to at least 25 feet north, 25 feet west, and 13 feet east of the UST field on the Site. It should be noted that LPH was detected in piezometer B-2; however, the extent of LPH has not been fully delineated in the easterly direction. In addition, concentrations of both dissolved and adsorbed phase petroleum constituents indicative of LPH were detected in the groundwater and soil samples from B-5.

Dissolved phase hydrocarbons were identified on the Site, 1205 Chesaco Avenue, and 1207 Chesaco Avenue properties. The highest level of dissolved phase impact on the Site was identified in groundwater samples B-3 and B-5 collected from areas south of the UST field. The highest level of dissolved phase impact on the 1205 Chesaco Avenue property was identified in samples collected from the driveway of the residence (B-10, B-12, and B-23) and sample B-15 collected from the area adjacent to the south of the sump effluent discharge area. The highest level of dissolved phase impact on the 1207 Chesaco Avenue property was identified in groundwater sample B-21 collected from the area adjacent to the north of the 1205 Chesaco Avenue Sump effluent discharge area.

Additional LPH delineation through the installation and sampling of temporary piezometers is warranted in the vicinity of existing borings B-2 and B-5. Proposed borings placed to the east of B-2 along the Site's Chesaco Avenue entrance ramp and south of B-5 (and the dispensers) will be necessary to accomplish this task.

The J&E modeling has predicted a possible vapor intrusion issue within the 1207 Chesaco Avenue property. In order to test this prediction, vapor testing should be conducted. Since the shallow water table will preclude soil gas testing it will be necessary to collect indoor air samples within the residence. It is anticipated that the samples will be collected in six-liter stainless steel summa canisters with 8-hour regulators and analyzed via EPA Method TO-15.

Based on the results of a 1205 Chesaco Avenue dewatering sump effluent post-treatment sample, the GAC bed is only partially effective in reducing dissolved phase hydrocarbon levels. As an interim measure AEC will reconfigure the GAC bed to completely cover the discharge pipe with the existing GAC. This will allow more residence/contact time for water treatment. A permanent solution, which will probably entail the installation of appropriately sized GAC vessels placed in the basement, will be designed in the forthcoming CAP.

In order to prepare for the CAP preparation, AEC recommends developing a work plan for further LPH delineation and vapor intrusion testing.

8.0 REFERENCES

Bouwer, H. and R.C. Rice, 1976. A slug test method for determining hydraulic conductivity of unconfined aquifers with completely or partially penetrating wells, *Water Resources Research*, vol. 12, no. 3.

Freeze, R.A. and Cherry, J.A., 1979. *Groundwater*. Prentice Hall, Inc. Englewood Cliffs, New Jersey.

Hvorslev, M.J., 1951. Time Lag and Soil Permeability in Ground-Water Observations, Bull. No. 36, *Waterways Exper. Sta. Corps of Engineers*, U.S. Army, Vicksburg, Mississippi.

Johnson, P. C, and R. A. Ettinger. 1991. Heuristic Model for Predicting the Intrusion Rate of Contaminant Vapors in Buildings. *Environ. Sci. Technol.* 25: 1445-1452.

MDE. 2003. *Maryland Environmental Assessment Technology for Leaking Underground Storage Tanks*.

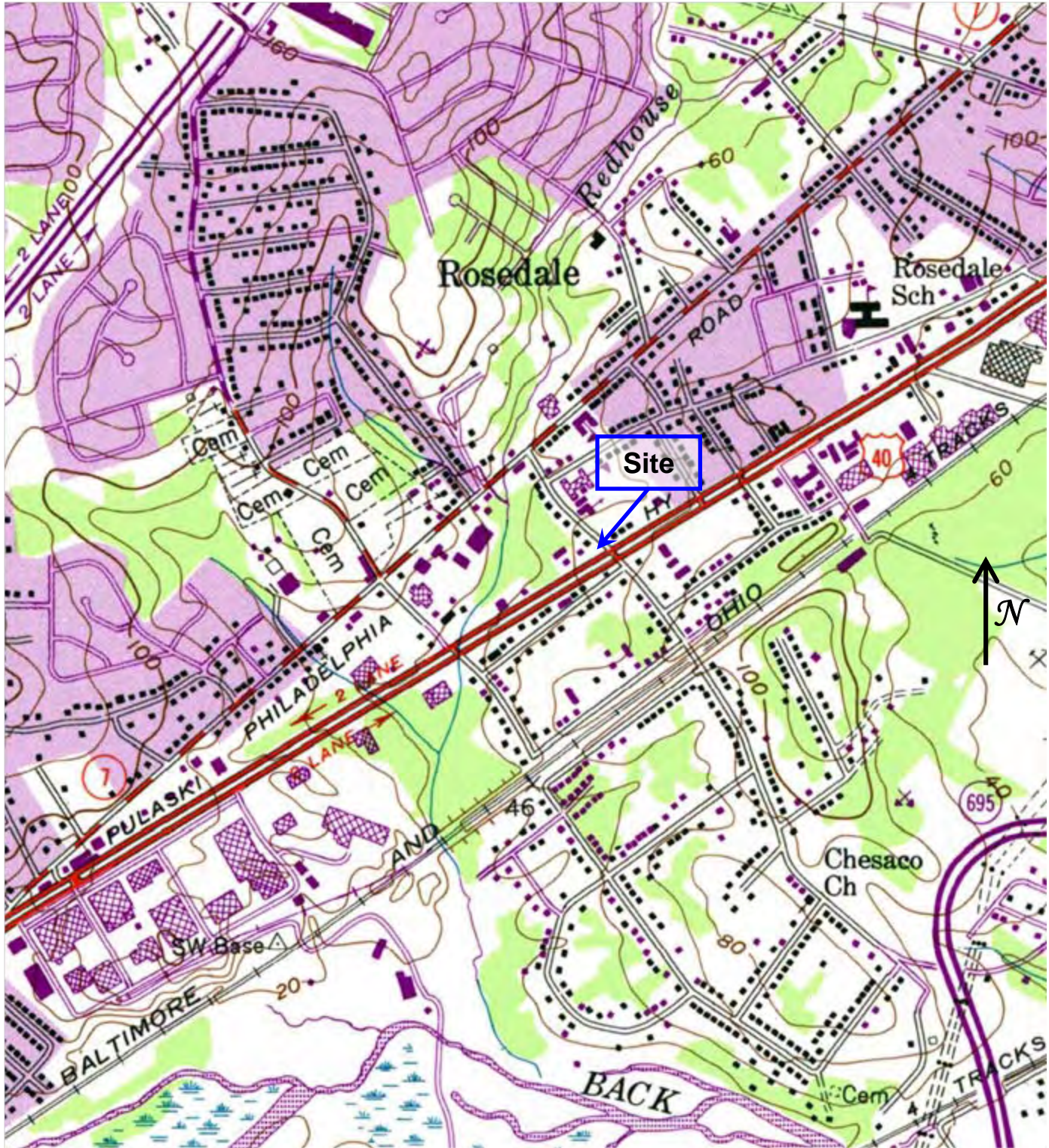
MDE. 2008. *Generic Numeric Cleanup Standards for Groundwater and Soil – Interim Final Guidance Update No. 2.1*.

Theis, C.V., 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage, *Am. Geophys. Union Trans.*, vol. 16.

Reinhardt, J. 1946 (revised 1979). *Geologic map of the Baltimore East Quadrangle, Maryland*. Maryland Geological Survey.

USEPA. 2004. *Johnson and Ettinger model Version 3.1 Revised User's Guide for Evaluating Subsurface Vapor Intrusion into Buildings*.

**APPENDIX A
FIGURES**



USGS Topographic Quad Map, Baltimore East, MD, 1974

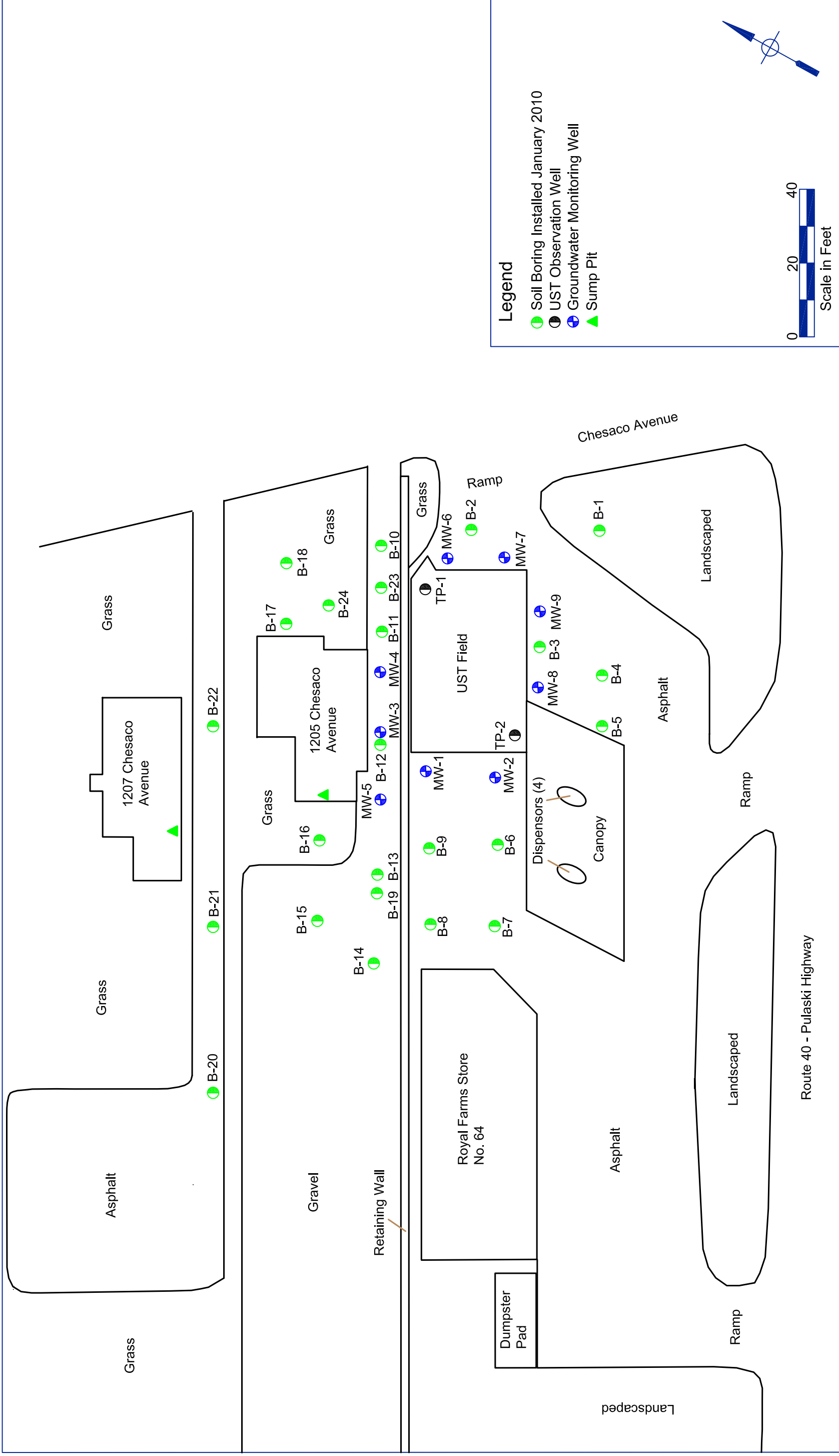
Advantage Environmental Consultants, LLC
 8610 Washington Boulevard, Suite 217
 Jessup, MD 20794
 (301) 776-0500 Office
 (301) 776-1123 Fax

Figure 1 - Site Vicinity Map
 Royal Farms Store 64
 7950 Pulaski Highway
 Baltimore, Maryland 21237

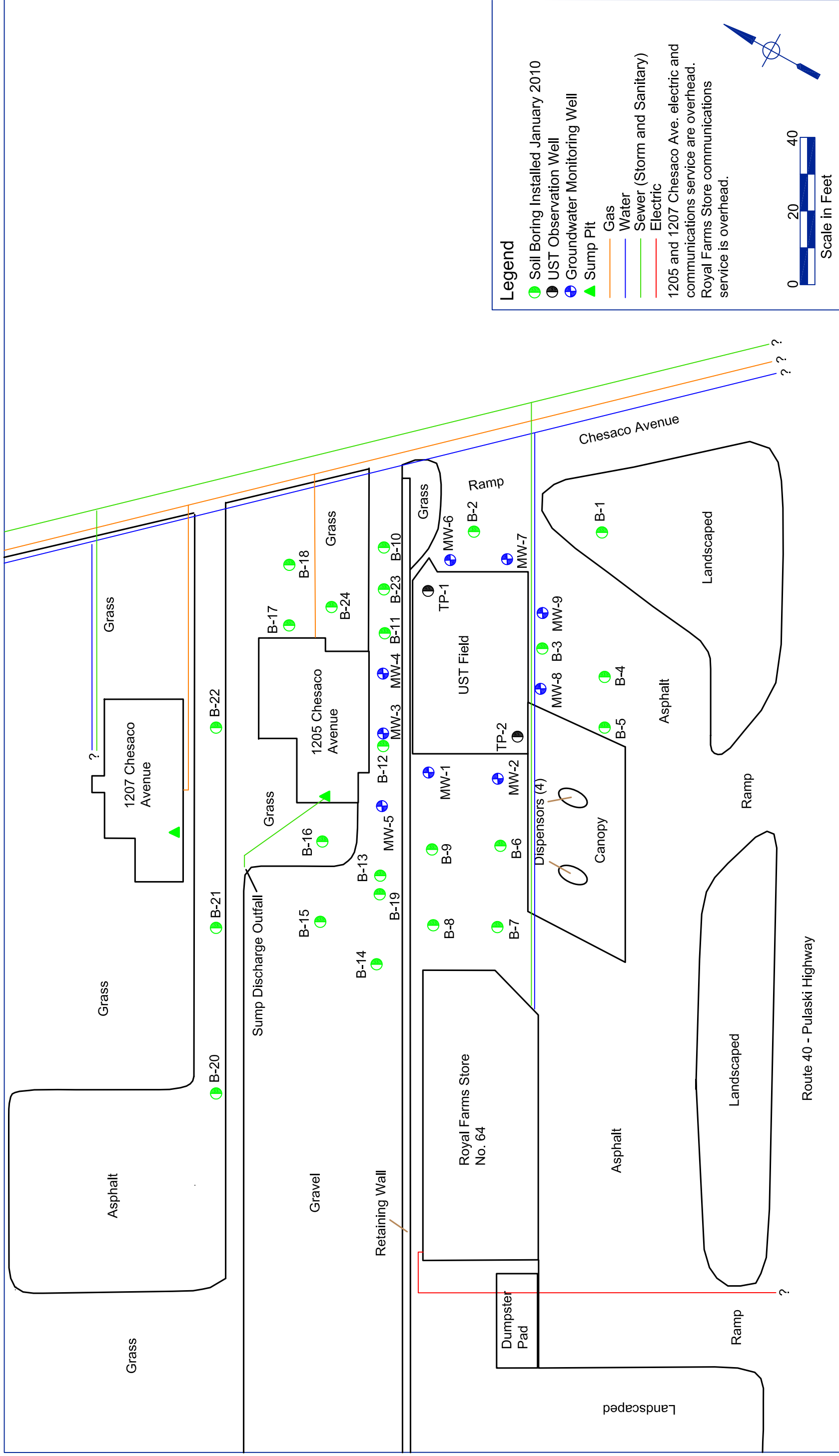
Work Order No.:
 05-056

Report Date:
 12/2009

Drawn By:
 WEG



Advantage Environmental Consultants, LLC 8610 Washington Blvd. Suite 217 Jessup, MD 20794 Phone 301-776-0500 Fax 301-776-1123	Project No.: 05-056	Drawn by: JSS
	Task No.: RF64	Date: 2-3-10
	File: Site Features	Revision No.: 1



Legend

- Soil Boring Installed January 2010
 - UST Observation Well
 - ⊕ Groundwater Monitoring Well
 - ▲ Sump Pit
 - Gas
 - Water
 - Sewer (Storm and Sanitary)
 - Electric
- 1205 and 1207 Chesaco Ave. electric and communications service are overhead.
Royal Farms Store communications service is overhead.

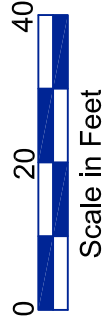
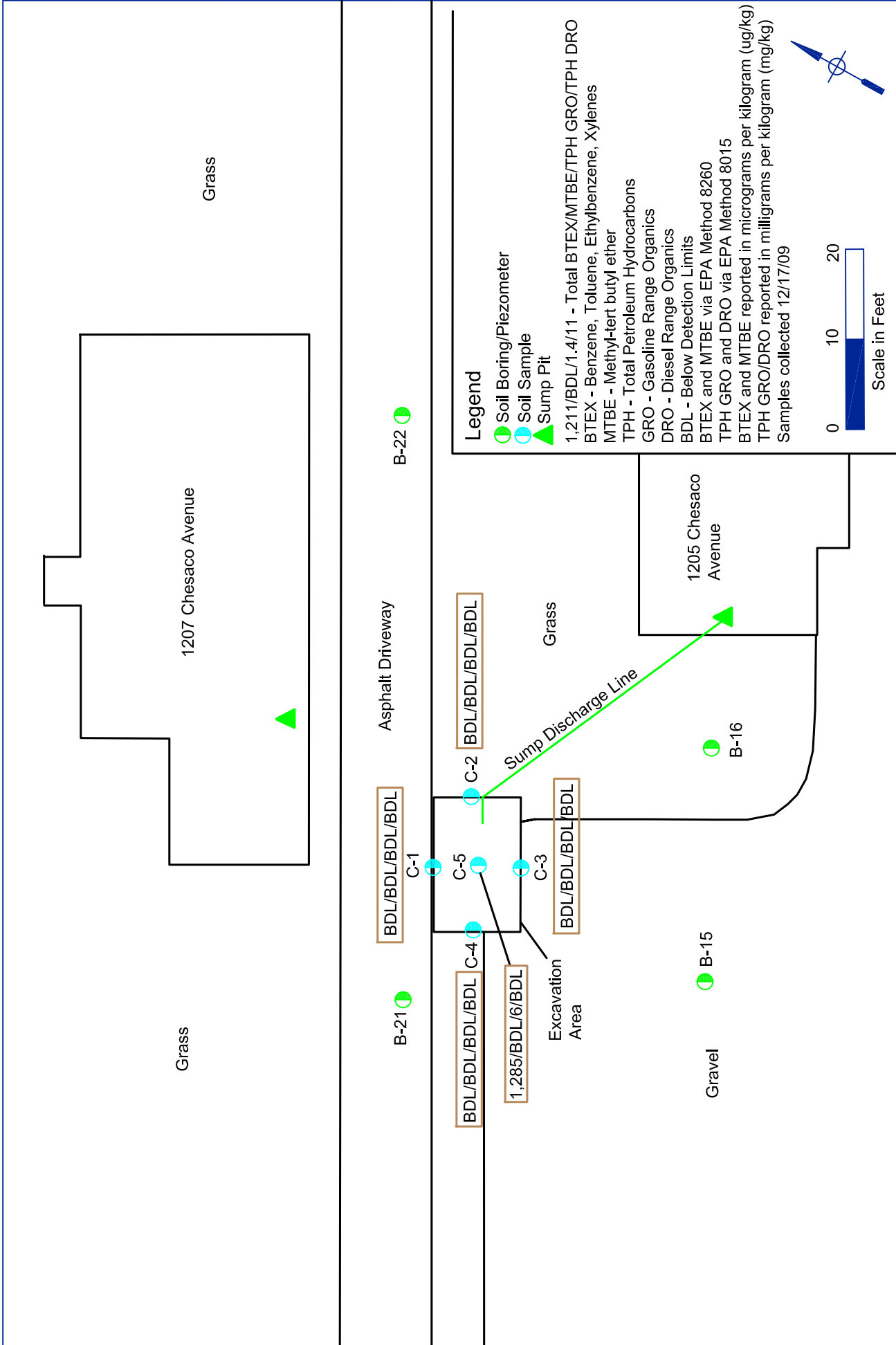


Figure 3 - Site Utilities Map
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, MD 21237

Project No.: 05-056	Drawn by: JSS
Task No.: RF64	Date: 2-3-10
File: Site Features	Revision No.: 1

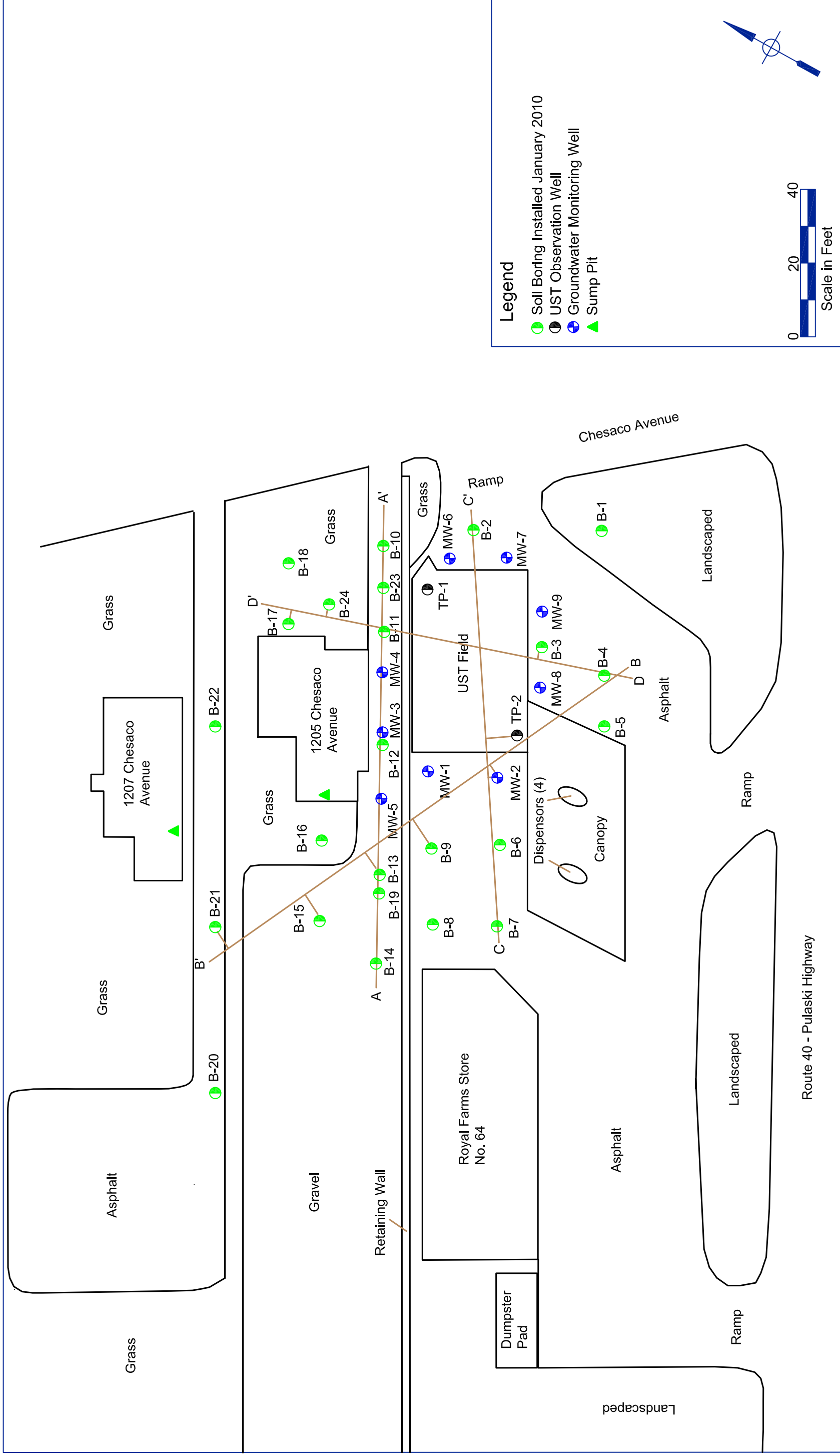
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 Jessup, MD 20794
 Phone 301-776-0500 Fax 301-776-1123



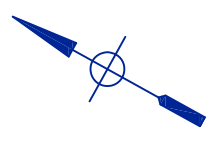
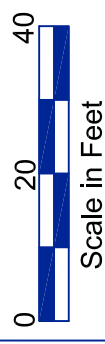
Advantage Environmental Consultants, LLC
 8610 Washington Blvd. Suite 217
 Jessup, MD 20794
 Phone 301-776-0500 Fax 301-776-1123

Project No.: 05-056	Drawn by: JSS
Task No.: RF64	Date: 2-3-10
File: Soil 1	Revision No.: 1

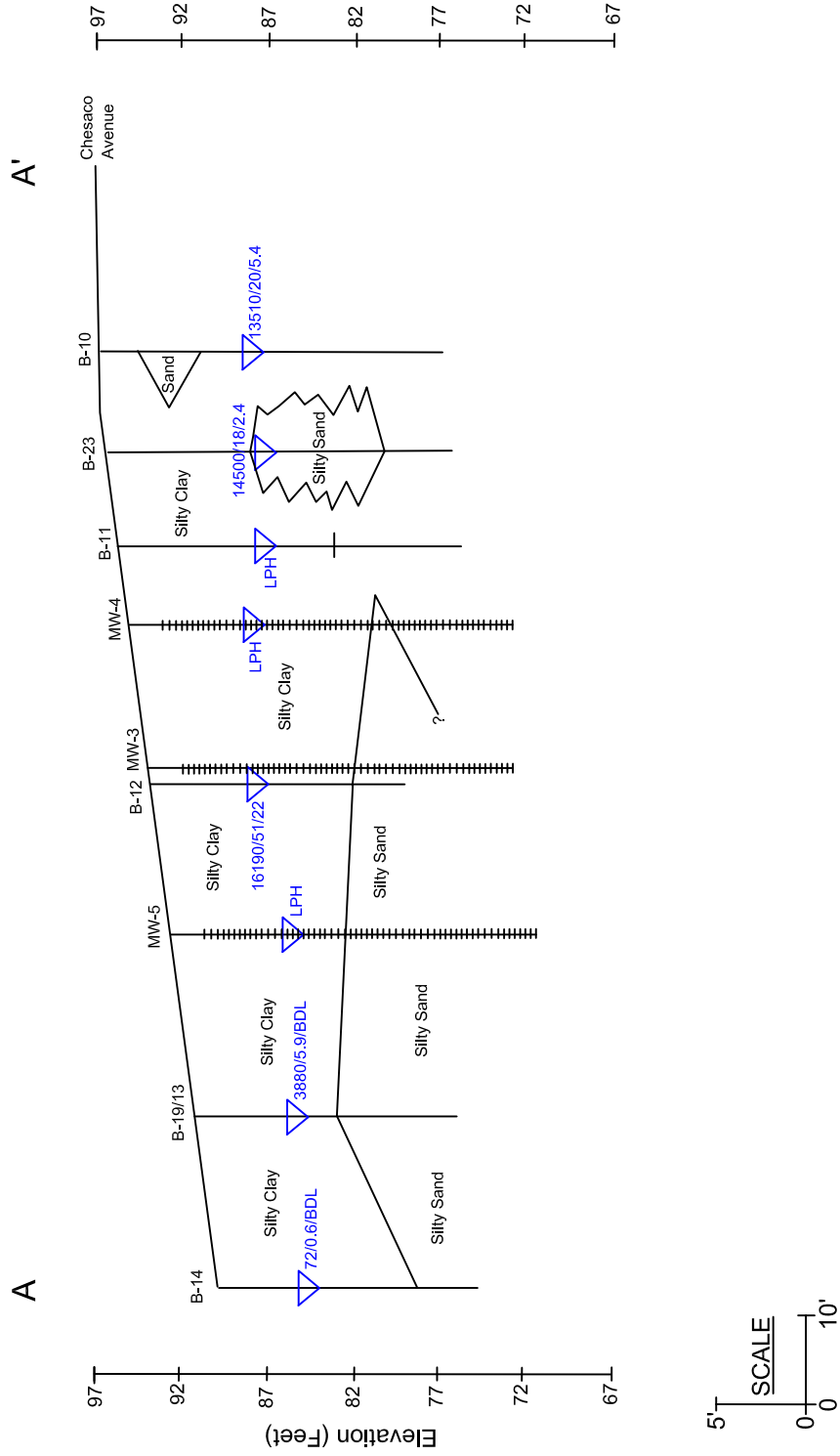
Figure 4 - Soil Quality Map - Sump Discharge Pit Excavation
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, MD 21237



- Legend**
- Soil Boring Installed January 2010
 - UST Observation Well
 - Groundwater Monitoring Well
 - ▲ Sump Pit



<p>Advantage Environmental Consultants, LLC 8610 Washington Blvd. Suite 217 Jessup, MD 20794 Phone 301-776-0500 Fax 301-776-1123</p>	Project No.: 05-056 Task No.: RF64 File: Trace	Drawn by: JSS Date: 2-3-10 Revision No.: 1	<p>Figure 5 - Trace of Cross-Sections Royal Farms No. 64 7950 Pulaski Highway Baltimore, MD 21237</p>
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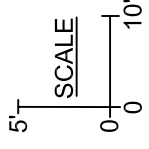
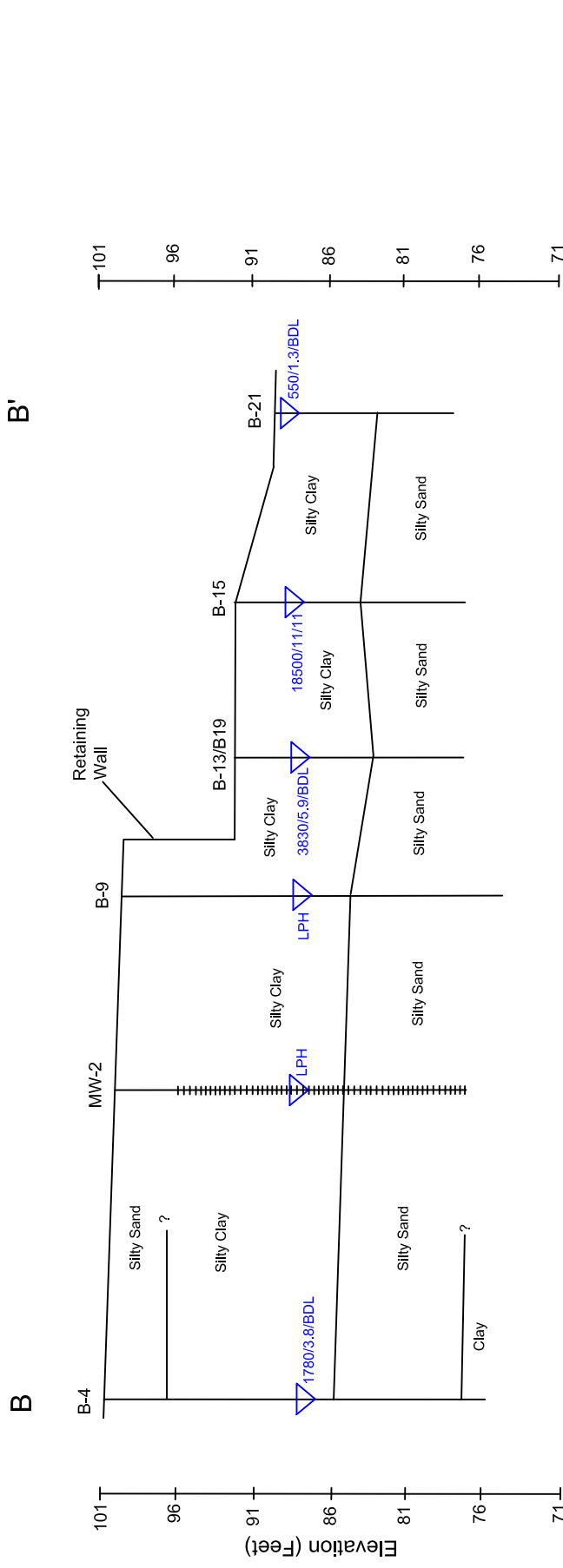


Legend

- ≡ Screen
- B=Boring/Temporary Piezometer
- MW=Monitoring Well
- ▽ Water Level 2-2-2010

Groundwater Samples Collected 2-1-10 through 2-5-10
 2340/1.2/30 = Total BTEX/TPH GRO/TPH DRO concentration.
 Total BTEX in micrograms per liter (ug/l)
 TPH GRO and DRO in milligrams per liter (mg/l)
 Samples Analyzed by EPA Method 8260 (BTEX) and 8015 (TPH)
 BDL = Below Detection Limits
 LPH = Liquid Phase Hydrocarbon

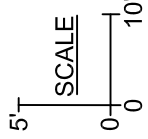
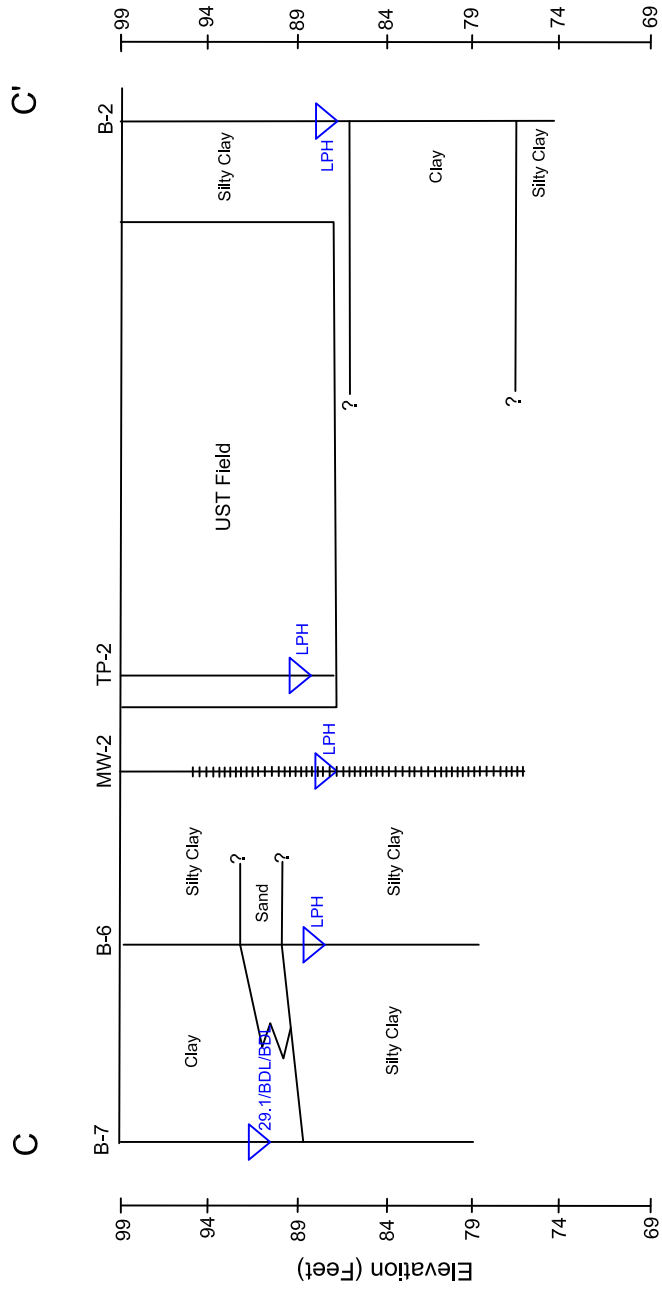
<p>Advantage Environmental Consultants, LLC 8610 Washington Boulevard, Suite 217 Jessup, Maryland 20794 301-776-0500</p>		<p>Drawn by: JSS</p>	<p>Checked by: JSS</p>
		<p>Date: 2-15-10</p>	<p>Revision: First</p>
<p>Figure 6 - Cross Section A-A' Royal Farms No. 64 7950 Pulaski Highway Baltimore, Maryland 21237</p>			



Groundwater Samples Collected 2-1-10 through 2-5-10
2340/1.2/30 = Total BTEX/TPH GRO/TPH DRO concentration.
 Total BTEX in micrograms per liter (ug/l)
 TPH GRO and DRO in milligrams per liter (mg/l)
 Samples Analyzed by EPA Method 8260 (BTEX) and 8015 (TPH)
 BDL = Below Detection Limits
 LPH = Liquid Phase Hydrocarbon

- Legend**
 [Screen symbol] Screen
 [Boring symbol] B=Boring/Temporary Piezometer
 [MW symbol] MW=Monitoring Well
 [Triangle symbol] Water Level 2-2-2010

Advantage Environmental Consultants, LLC 8610 Washington Boulevard, Suite 217 Jessup, Maryland 20794 301-776-0500		Drawn by: JSS	Checked by: JSS
		Date: 2-15-10	Revision: First
Figure 7 - Cross Section B-B' Royal Farms No. 64 7950 Pulaski Highway Baltimore, Maryland 21237			

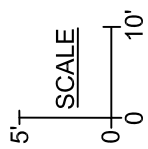
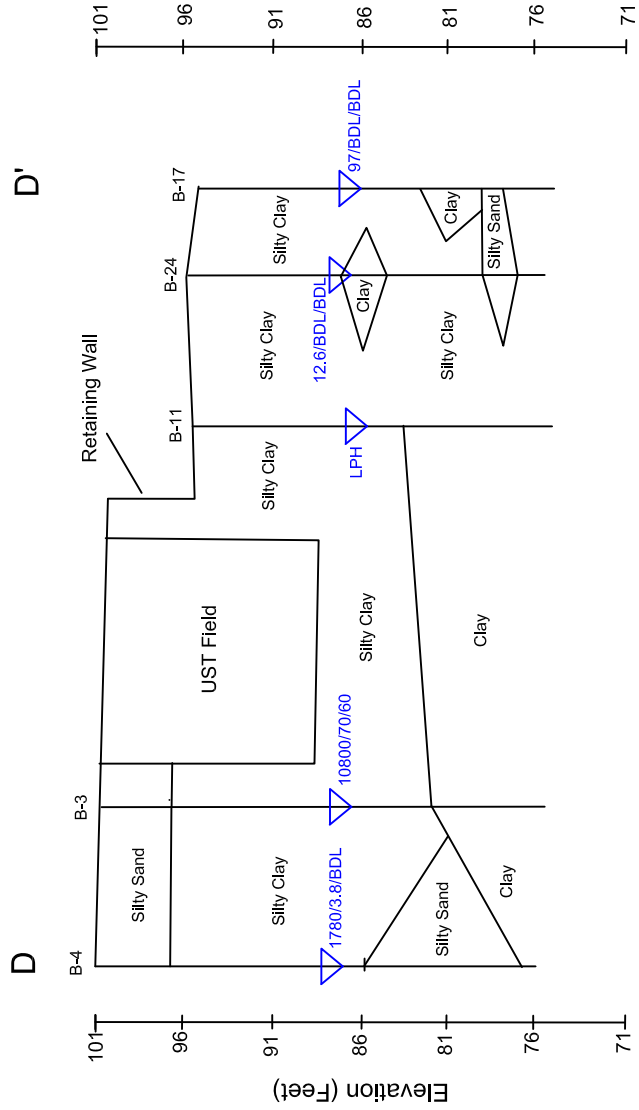


- Legend
- ≡ Screen
 - B=Boring/Temporary Piezometer
 - MW=Monitoring Well
 - ▽ Water Level 2-2-2010

Groundwater Samples Collected 2-1-10 through 2-5-10
 2340/1.2/30 = Total BTEX/TPH GRO/TPH DRO concentration.
 Total BTEX in micrograms per liter (ug/l)
 TPH GRO and DRO in milligrams per liter (mg/l)
 Samples Analyzed by EPA Method 8260 (BTEX) and 8015 (TPH)
 BDL = Below Detection Limits
 LPH = Liquid Phase Hydrocarbon

<p>Advantage Environmental Consultants, LLC 8610 Washington Boulevard, Suite 217 Jessup, Maryland 20794 301-776-0500</p>		<p>Drawn by: JSS</p>	<p>Checked by: JSS</p>
		<p>Date: 2-15-10</p>	<p>Revision: First</p>

Figure 8 - Cross Section C-C'
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, Maryland 21237



Groundwater Samples Collected 2-1-10 through 2-5-10
 2340/1.2/30 = Total BTEX/TPH GRO/TPH DRO concentration.
 Total BTEX in micrograms per liter (ug/l)
 TPH GRO and DRO in milligrams per liter (mg/l)
 Samples Analyzed by EPA Method 8260 (BTEX) and 8015 (TPH)
 BDL = Below Detection Limits
 LPH = Liquid Phase Hydrocarbon

- Legend
- ≡ Screen
 - B=Boring/Temporary Piezometer
 - MW=Monitoring Well
 - ▽ Water Level 2-2-2010

<p>Advantage Environmental Consultants, LLC 8610 Washington Boulevard, Suite 217 Jessup, Maryland 20794 301-776-0500</p>	<p>Drawn by: JSS</p>	<p>Checked by: JSS</p>
	<p>Date: 2-15-10</p>	<p>Revision: First</p>

Figure 9 - Cross Section D-D'
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, Maryland 21237

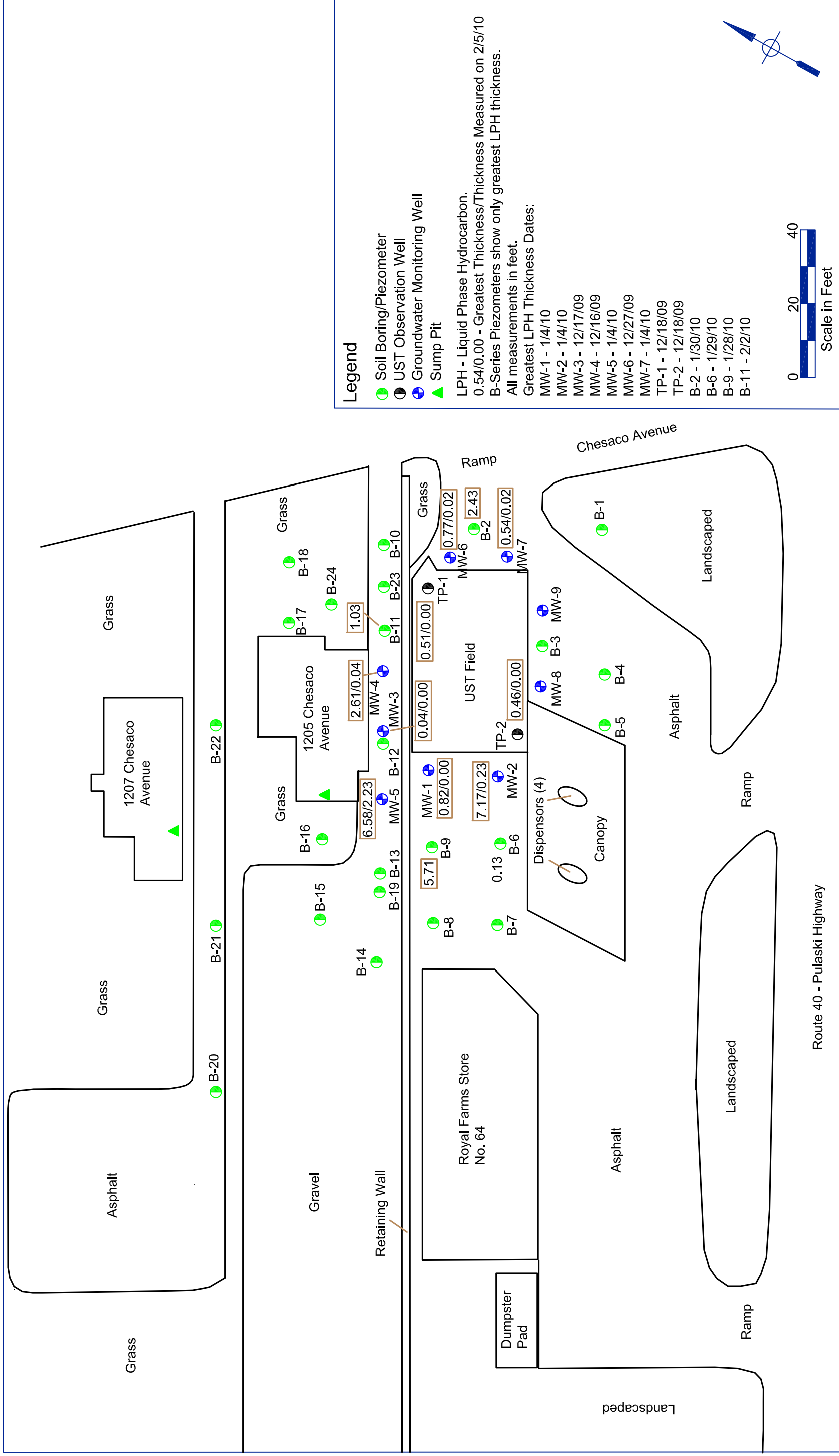
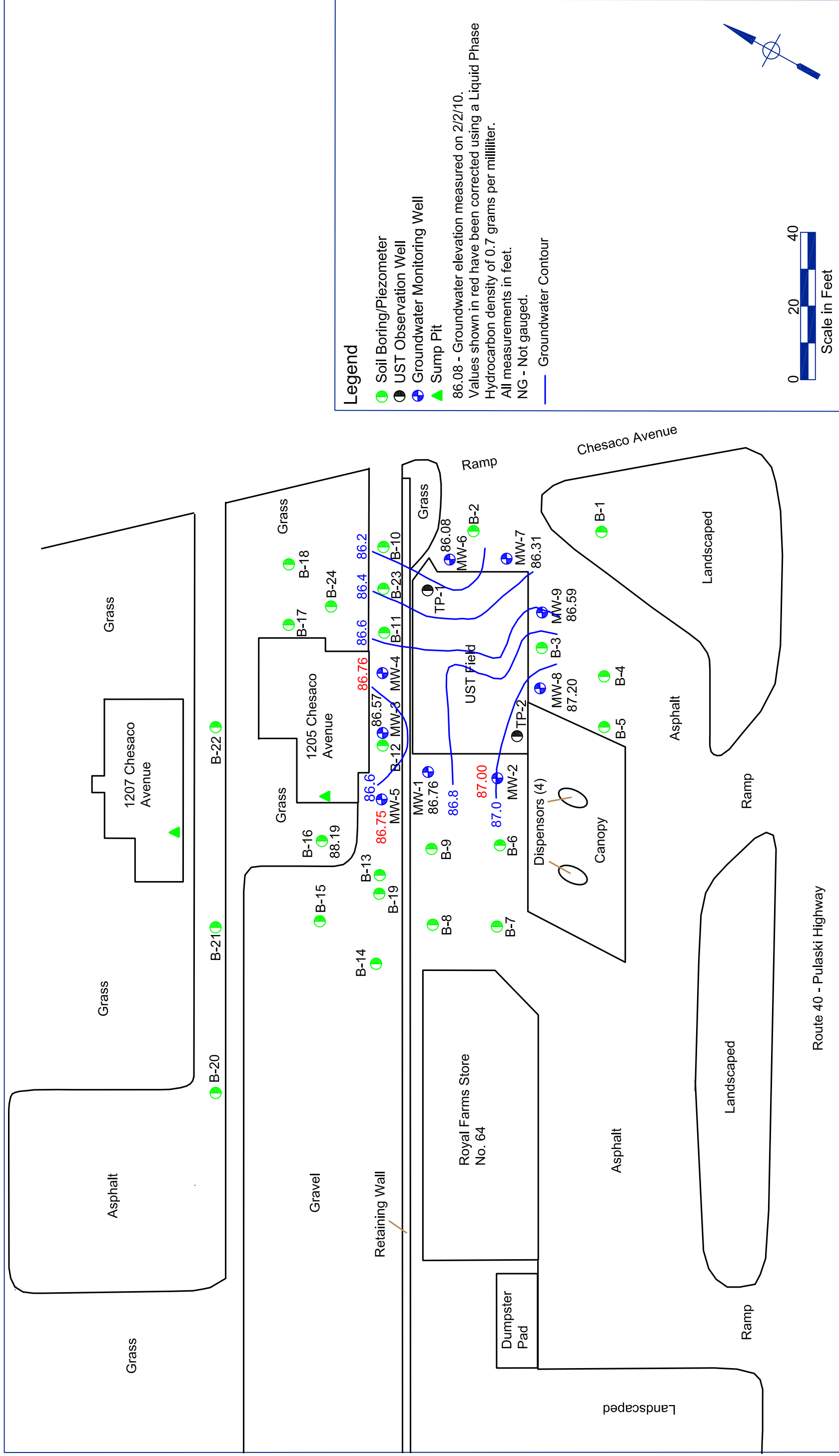


Figure 10 - Liquid Phase Hydrocarbon Distribution Map
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, MD 21237

Project No.: 05-056	Drawn by: JSS
Task No.: RF64	Date: 2-3-10
File: LPH 1	Revision No.: 1

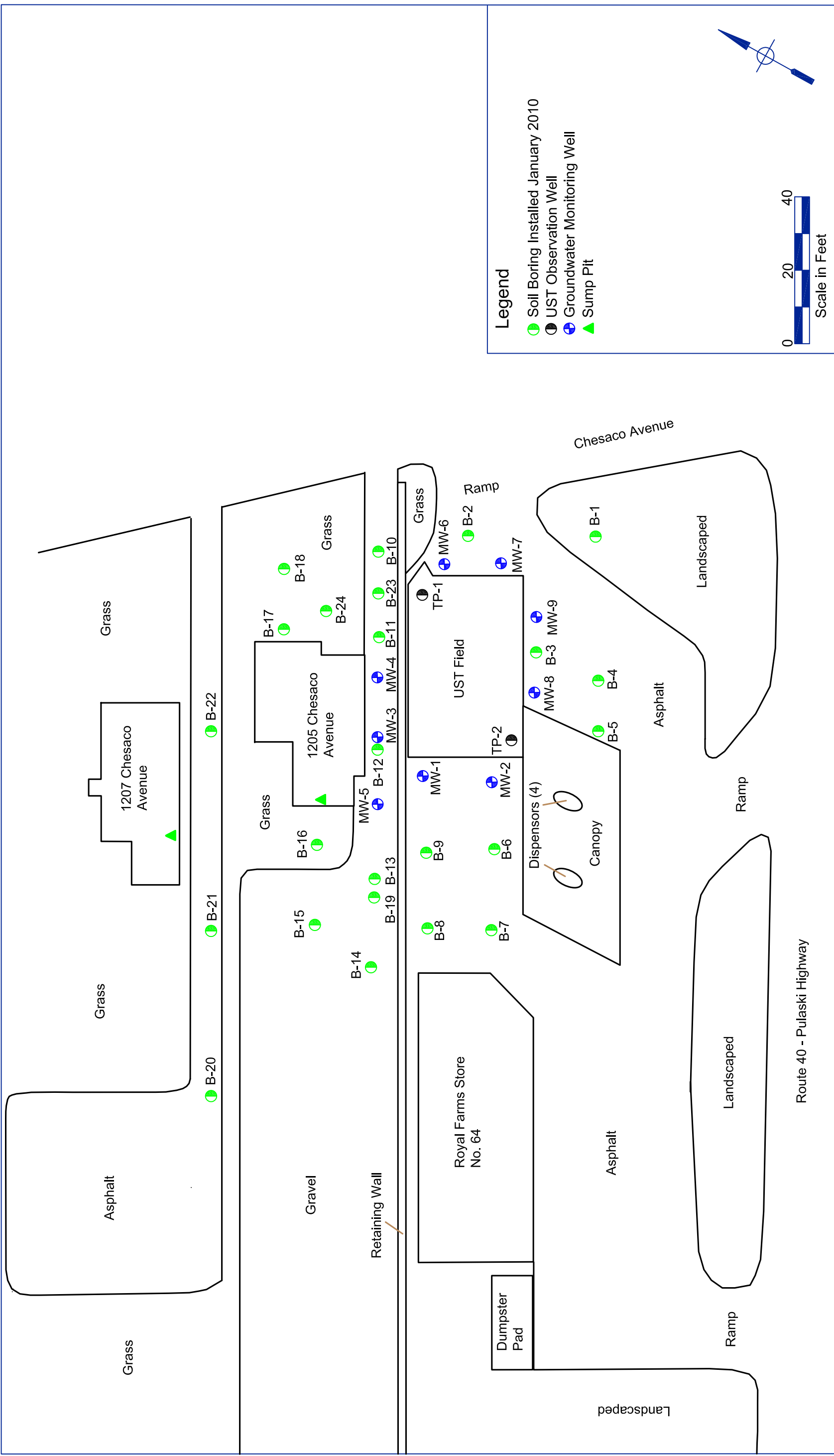
Advantage Environmental Consultants, LLC
 8610 Washington Blvd. Suite 217
 Jessup, MD 20794
 Phone 301-776-0500 Fax 301-776-1123



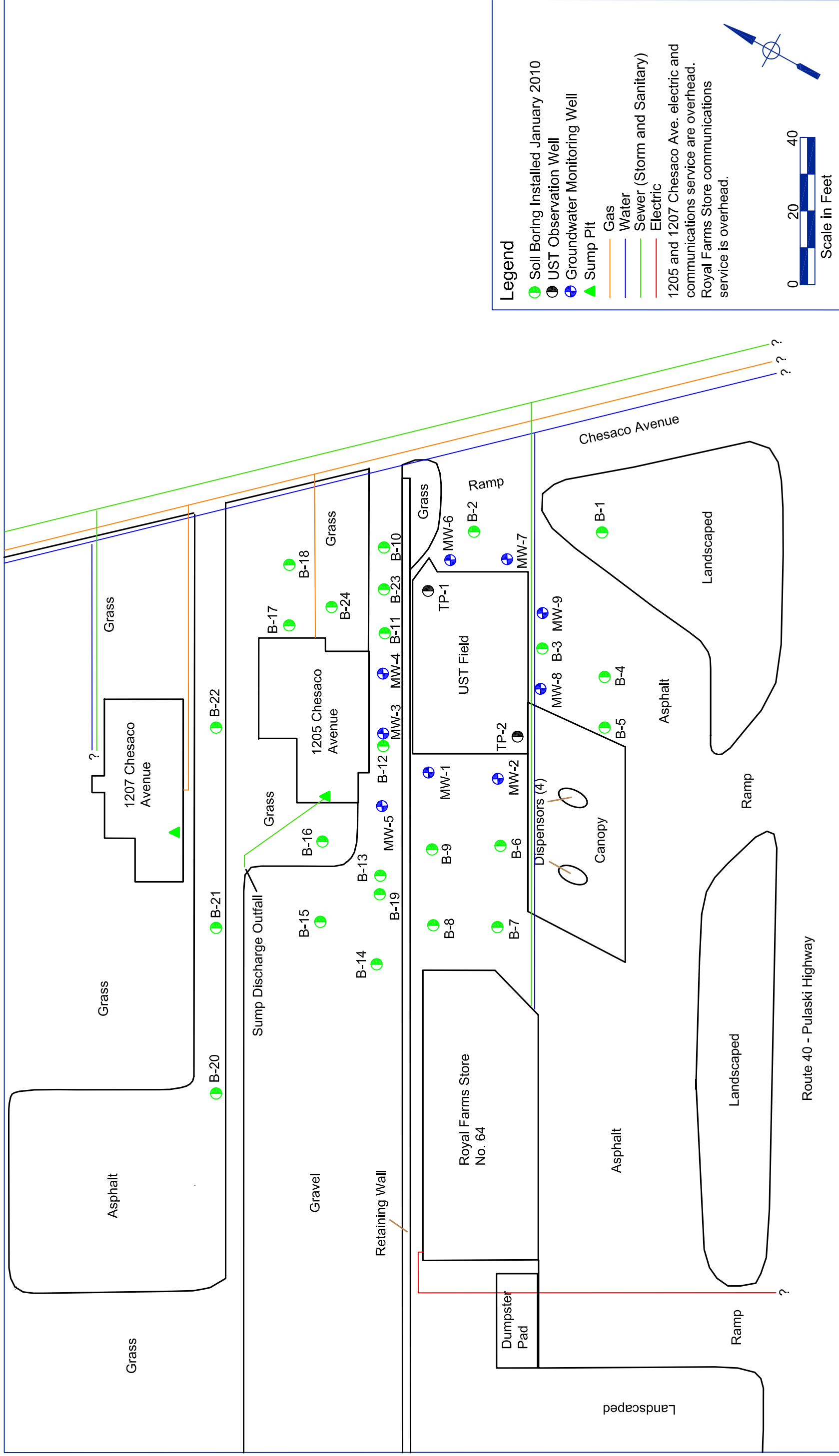
Advantage Environmental Consultants, LLC
 8610 Washington Blvd. Suite 217
 Jessup, MD 20794
 Phone 301-776-0500 Fax 301-776-1123

Figure 11 - Groundwater Gradient Map
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, MD 21237

Project No.: 05-056	Drawn by: JSS
Task No.: RF64	Date: 2-3-10
File: Grad 1	Revision No.: 1



<p>Advantage Environmental Consultants, LLC 8610 Washington Blvd. Suite 217 Jessup, MD 20794 Phone 301-776-0500 Fax 301-776-1123</p>	<p>Project No.: 05-056</p>	<p>Drawn by: JSS</p>
	<p>Task No.: RF64</p>	<p>Date: 2-3-10</p>
	<p>File: Site Features</p>	<p>Revision No.: 1</p>



Legend

- Soil Boring Installed January 2010
- UST Observation Well
- ⊕ Groundwater Monitoring Well
- ▲ Sump Pit
- Gas
- Water
- Sewer (Storm and Sanitary)
- Electric

1205 and 1207 Chesaco Ave. electric and communications service are overhead.
Royal Farms Store communications service is overhead.

Scale in Feet: 0, 20, 40

<p>Advantage Environmental Consultants, LLC 8610 Washington Blvd. Suite 217 Jessup, MD 20794 Phone 301-776-0500 Fax 301-776-1123</p>	<p>Project No.: 05-056 Task No.: RF64 File: Site Features</p>		<p>Drawn by: JSS Date: 2-3-10 Revision No.: 1</p>		<p>Figure 3 - Site Utilities Map Royal Farms No. 64 7950 Pulaski Highway Baltimore, MD 21237</p>
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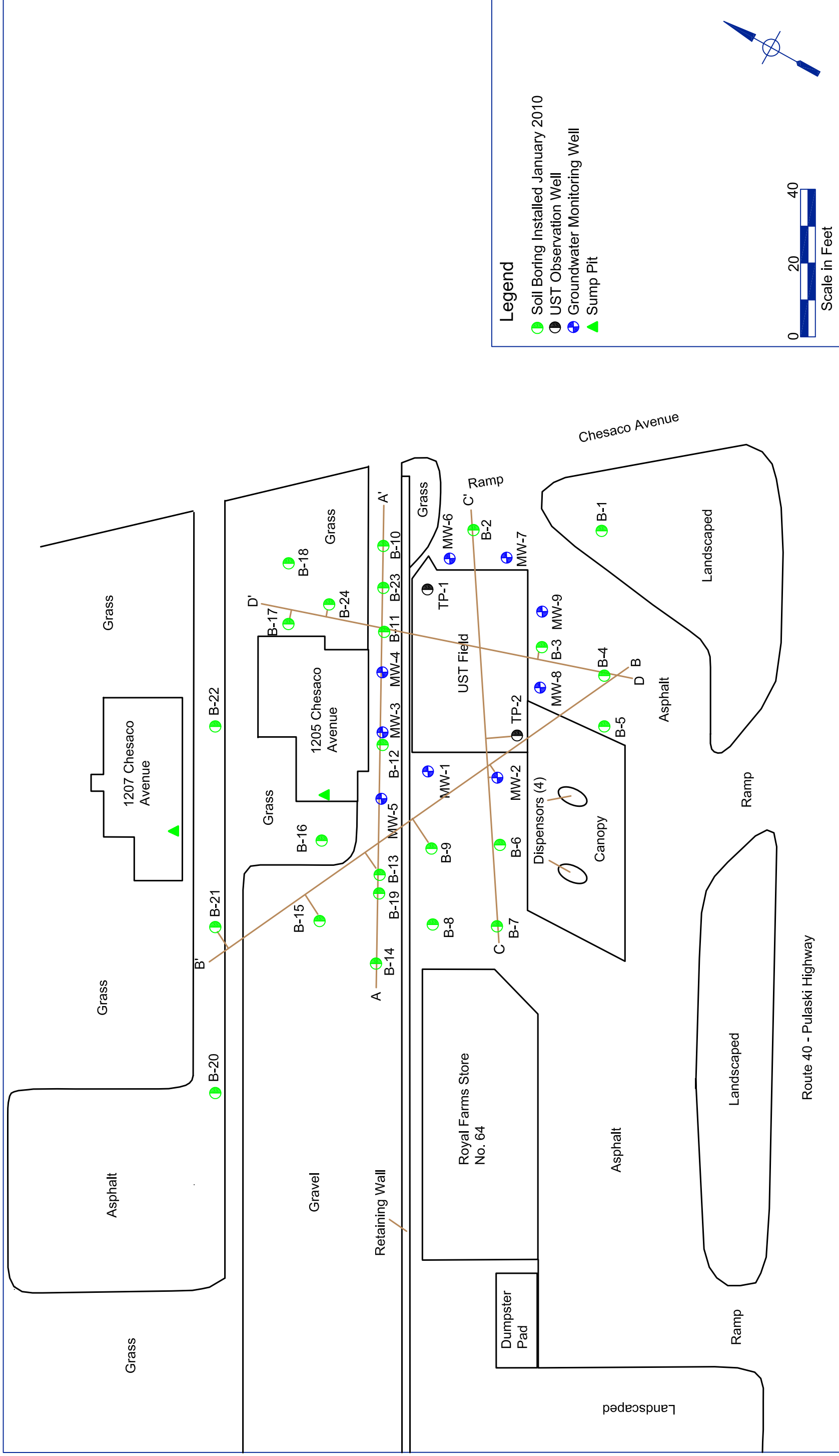


Figure 5 - Trace of Cross-Sections
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, MD 21237

Project No.: 05-056	Drawn by: JSS
Task No.: RF64	Date: 2-3-10
File: Trace	Revision No.: 1

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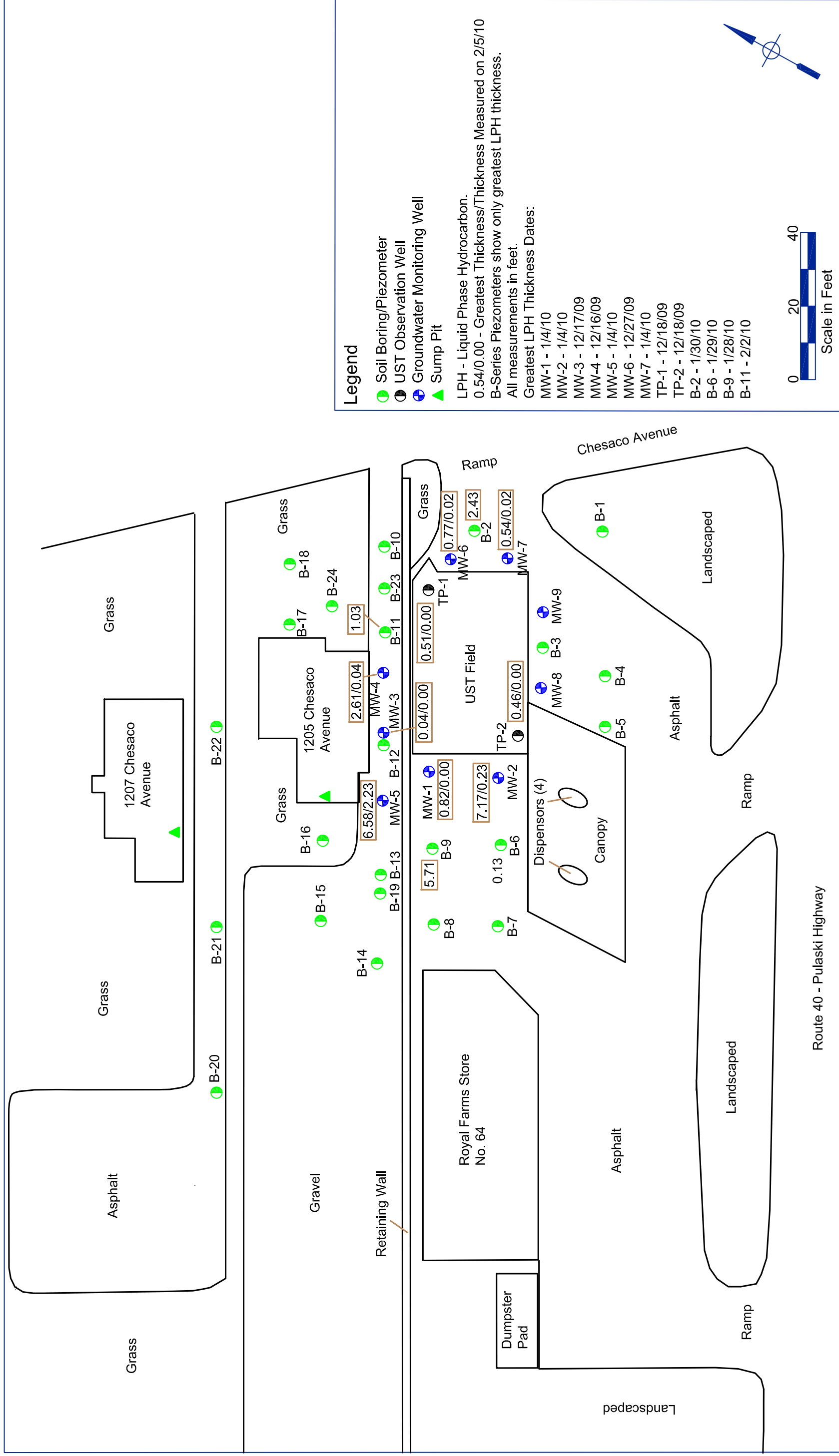
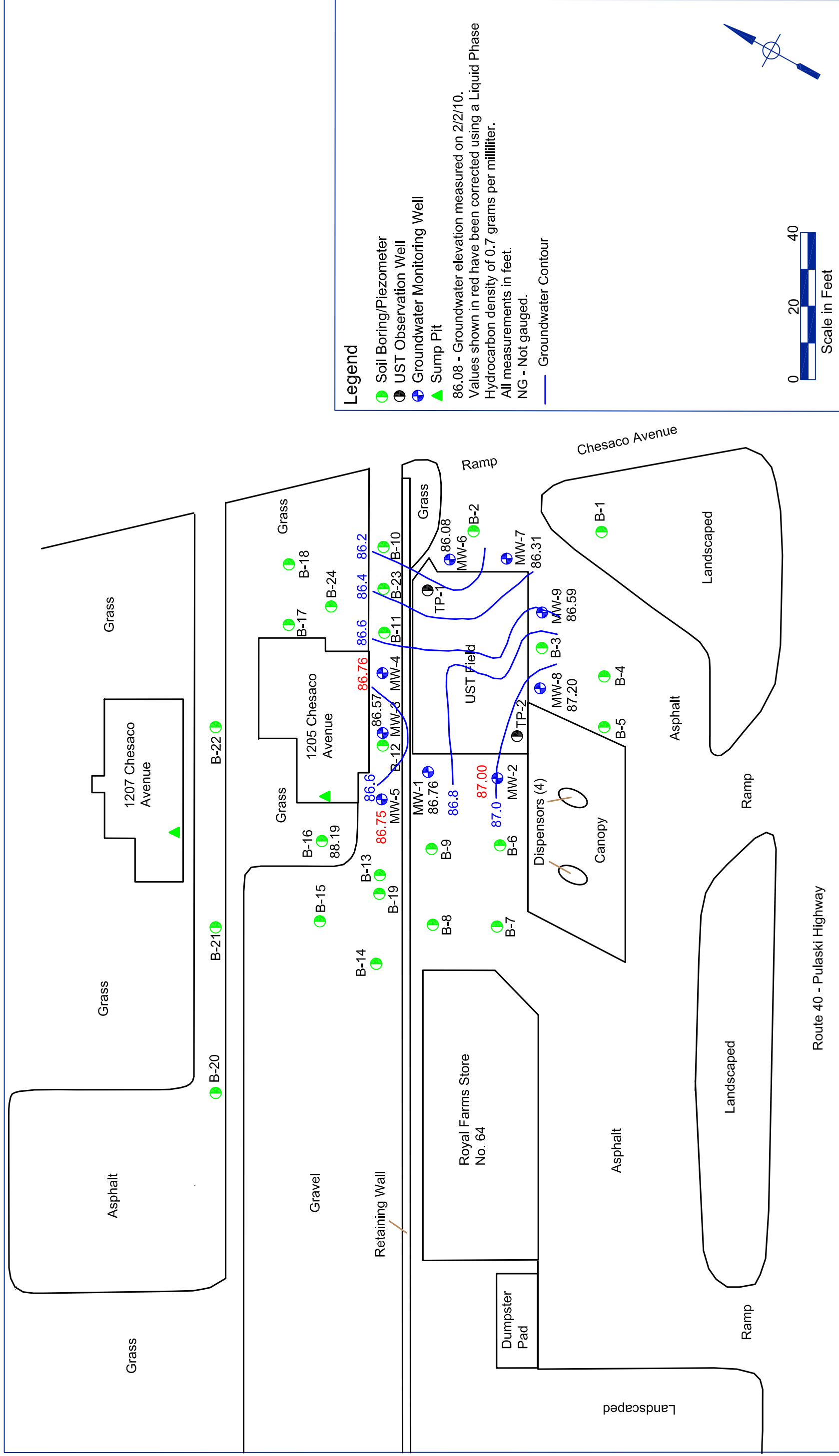


Figure 10 - Liquid Phase Hydrocarbon Distribution Map
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, MD 21237

Project No.: 05-056	Drawn by: JSS
Task No.: RF64	Date: 2-3-10
File: LPH 1	Revision No.: 1

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Advantage Environmental Consultants, LLC
 8610 Washington Blvd. Suite 217
 Jessup, MD 20794
 Phone 301-776-0500 Fax 301-776-1123

Figure 11 - Groundwater Gradient Map
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, MD 21237

Project No.: 05-056	Drawn by: JSS
Task No.: RF64	Date: 2-3-10
File: Grad 1	Revision No.: 1

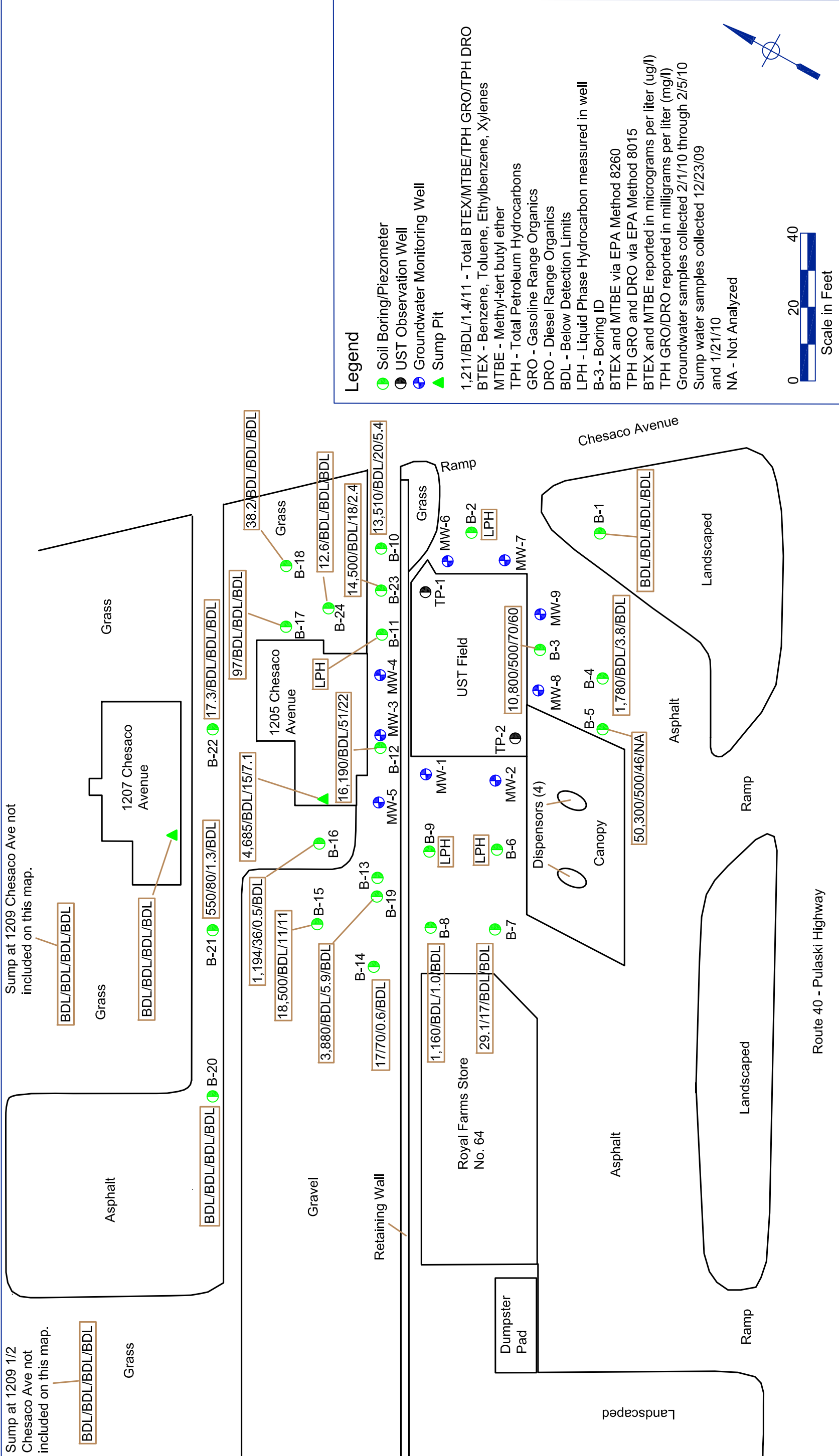


Figure 12 - Groundwater Quality Map
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, MD 21237

Project No.: 05-056	Drawn by: JSS
Task No.: RF64	Date: 2-3-10
File: GW 1	Revision No.: 1

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 8610 Washington Blvd. Suite 217
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 Phone 301-776-0500 Fax 301-776-1123

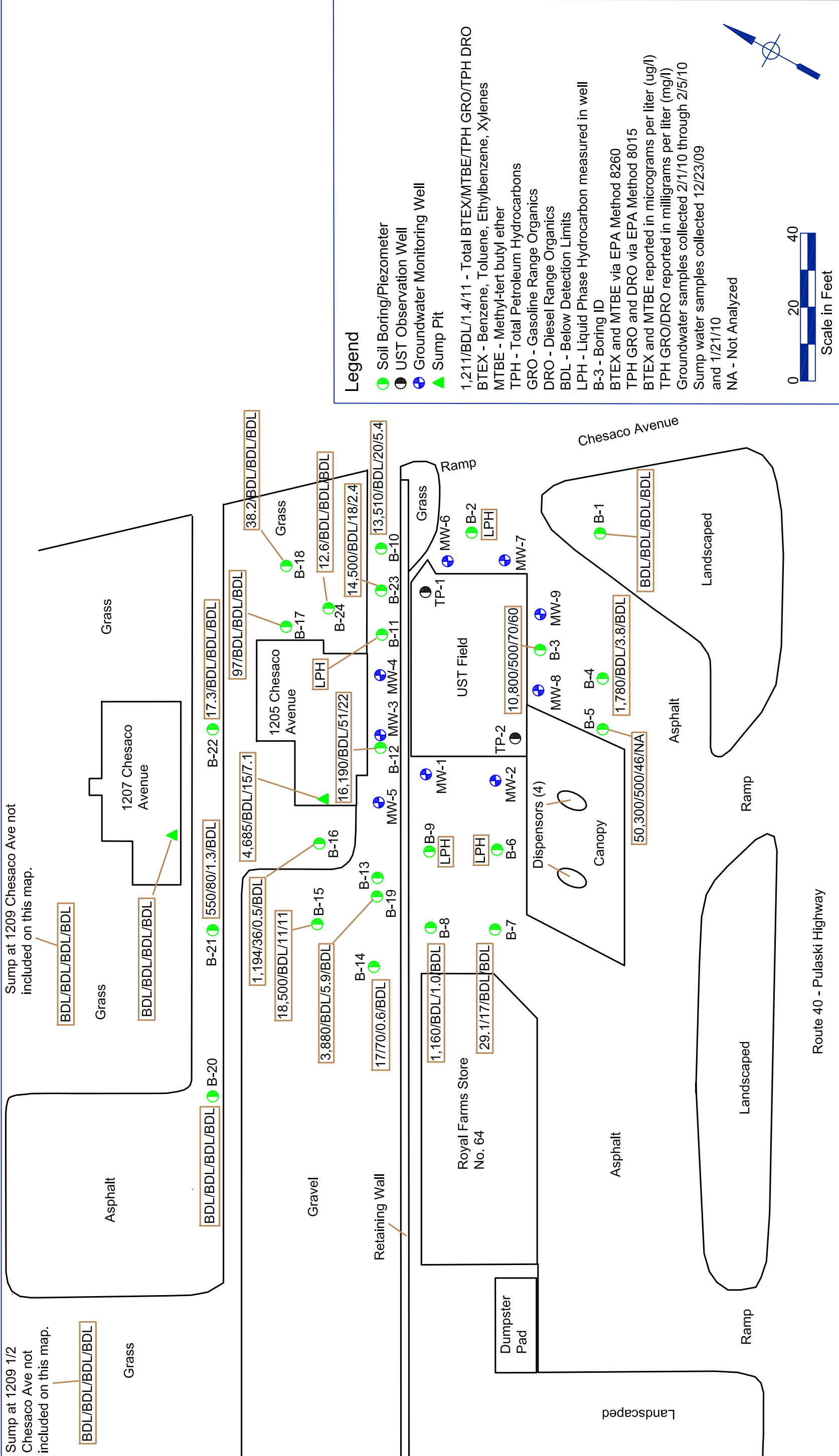


Figure 12 - Groundwater Quality Map
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, MD 21237

Project No.: 05-056	Drawn by: JSS
Task No.: RF64	Date: 2-3-10
File: GW 1	Revision No.: 1

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 8610 Washington Blvd. Suite 217
 Jessup, MD 20794
 Phone 301-776-0500 Fax 301-776-1123

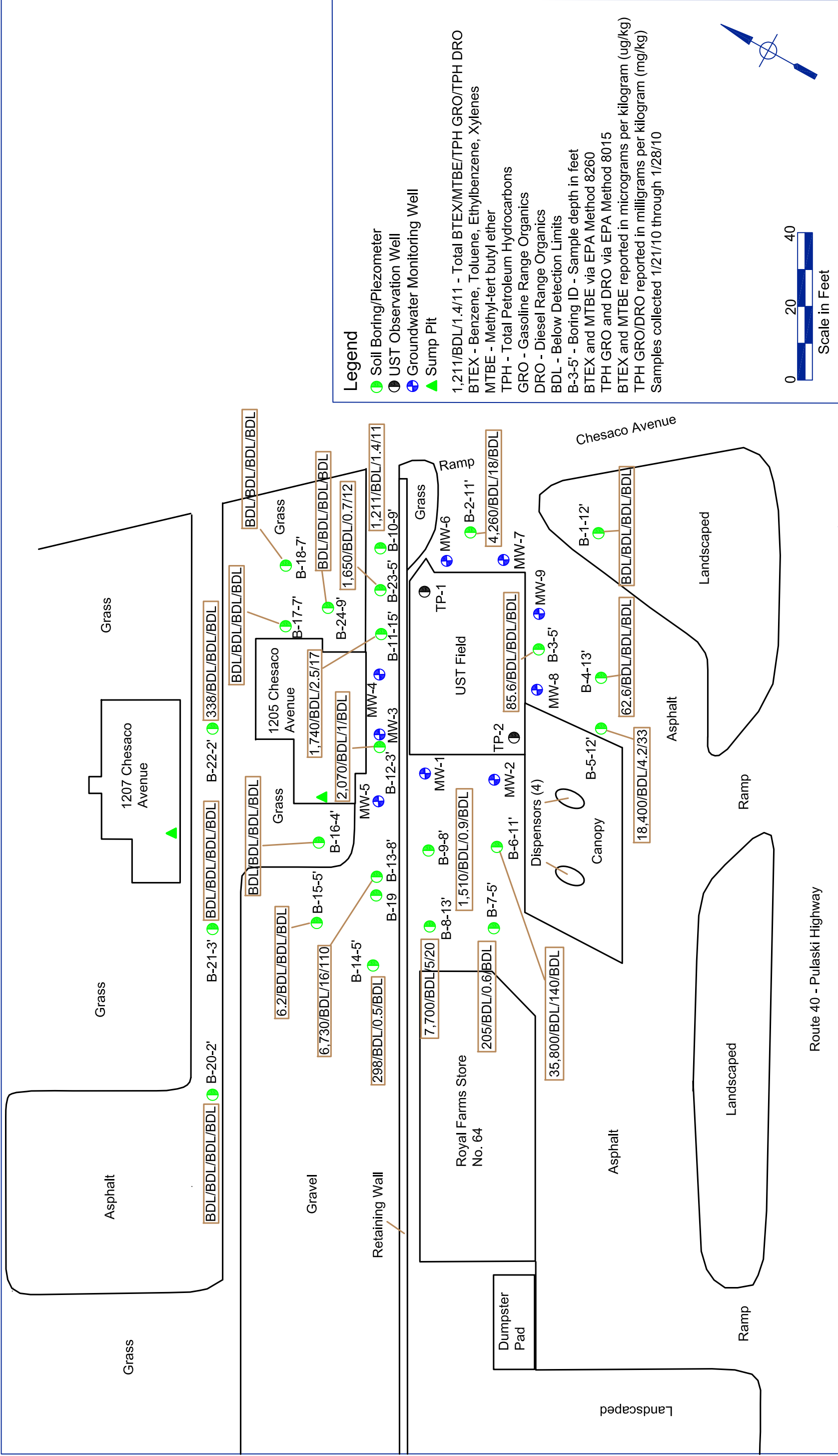


Figure 13 - Soil Quality Map
 Royal Farms No. 64
 7950 Pulaski Highway
 Baltimore, MD 21237

Project No.: 05-056	Drawn by: JSS
Task No.: RF64	Date: 2-3-10
File: Soil 1	Revision No.: 1

Advantage Environmental Consultants, LLC
 8610 Washington Blvd. Suite 217
 Jessup, MD 20794
 Phone 301-776-0500 Fax 301-776-1123

Route 40 - Pulaski Highway

APPENDIX B
MDE CORRESPONDENCE

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard, Suite 620 • Baltimore Maryland 21230-1719
(410) 537-3442 • 1-800-633-6101 • [http:// www. mde. state. md. us](http://www.mde.state.md.us)

WASTE MANAGEMENT ADMINISTRATION Oil Control Program Report of Observations

Case # 10-0329DA

Type of Inspection/Observations: Well Installation/Product Recovery

Date: 12/14/09

Site/Facility Name: Royal Farms

Facility ID # _____

Location: 7950 Pulaski Hwy Rosedale

Page # 1 of 1

Remarks: MDE-ocp Inspectors Jenny Martin, Ray Kozlowski and Ellen Jackson were on-site to observe well installation and product recovery activities in response to a release from the regular UST sump. Three monitoring wells (MW-1, MW-2 and MW-3) were installed over night. LPH was detected in each well. Today on and off site wells MW-4, MW5 ~~MW5~~ MW-6 MW-7 were installed. Measurable product has been detected on-site all day and off-site in MW-4. A vacuum extraction truck continuously removed LPH from all monitoring wells. Liquid level measurements were collected throughout the day by Advantage Environmental. Soils were field screened with a PID during well installation by Advantage Environmental. Soils at the sump discharge were hand excavated. The number and location of soil samples will be determined by the Department when the excavation is complete.

Requirements:

- Continue installation of two additional monitoring/recovery wells as discussed on-site. Field screen soils as drilling is conducted.
- Continue to periodically collect liquid level measurements from all monitoring and tank field wells
- Continue to monitor the residential sump for LPH
- Continue to remove LPH via vacuum extraction.

If you have any questions contact Jenny Martin (o) 410 537 3413
(c) 410 365 1238

Observer: Jenny S. Martin

Person Interviewed: _____





**Maryland Department of the Environment
Land Management Administration
Oil Control Program
1800 Washington Boulevard, Suite 620
Baltimore MD 21230-1719
(410) 537-3443**

Case No. / Facility No.: 10-0339-BA / 3975
Date: December 17, 2009

Facility Name: Royal Farms Store, 7950 Pulaski Highway, Baltimore County

RE: Summary of Meeting

Attendees: Herb Meade, MDE-OCP Administrator,
Tom Walter, Chief of Compliance,
Chris Ralston, Chief of Remediation,
Ellen Jackson, Remediation Section Supervisor,
Dwayne Stambaugh, Station Maintenance Solutions, and
Jeff Stein, Advantage Environmental Consultants

A meeting was held to discuss site activities conducted to date and activities planned with regard to the release of suspected 5,400 gallons of gasoline released at the above referenced facility in which an adjacent residential property (1205 Chesaco Ave.) was impacted.

The following updates were provided:

Off-site property:

- Basement sump that contained LPH was pumped out again and this morning inspection showed sheen and water.
- No LEL levels were detected this morning.
- Trenching activities are occurring to tie all three monitoring wells together for soil vapor recovery. Two of the three monitoring wells contain LPH and is periodically recovered via vac truck events.

On-site Station Property:

- Station back in use with exception to the one tank in which the release was identified.
- Six monitoring wells were installed (2 at each side surround the tank field). LPH detected at 3 of the 6 wells. A figure was provided by Jeff during the meeting attached. LPH still detected at the tank field pipes. Vac truck periodically recovering product from wells and pipes with LPH.
- Estimated LPH recovered at this time is 2,500 gallons (approximately 15,000 gallons of total liquids recovered).

Action Items for Implementation:

Off-site Property:

- Priority is to stabilize the site and implement temporary remedial measures to ensure the home is safe for occupancy.
- MDE-ERD, BA Cnty Fire Department, and MDE-OCP will conduct a house inspection to deem the home safe. BGE will be contacted to turn on the electricity so that the home heating system can be turned on.
- Basement sump will be re-constructed (possible new sump may need to be installed and soil removed if necessary for proper disposal). An explosion-proof sump is on order and should be on-site by tomorrow. Adsorbent pad will be maintained in the sump and a radon lid will be placed on the sump. The sump will be vented with piping that will extend out thorough the basement wall and outside of the home.
- A horizontal soil vapor abatement system will also be installed. This consists of subsurface piping that will be placed along the southern length of the basement foundation as well at the western corner of the basement wall at a depth to extract gasoline vapors from the house foundation. This piping will extend to the retention wall and to the Royal Farm property. The vent pipe leading from the sump will be connected to this horizontal soil vapor abatement system. A carbon unit, if available will treat vapors extracted from the indoor sump and outside horizontal vapor system.
- All three monitoring wells (MW3, MW4, and MW5) will also be connected to the soil vapor abatement system. Well heads will be modified such that control of soil vapor extraction of each well and horizontal piping run can be controlled and sampling ports installed so that monitoring can be conducted at each well head and vapor leg (foundation horizontal piping run should have separate control valves and sampling ports from the monitoring wells).
- It is anticipated the soil vapor abatement system is to be in-use by the weekend. Monitoring will be conducted of the soil vapor effluent using an LEL and PID, as well as at various sampling ports. The basement sump will be periodically and routinely inspected for LEL/PID readings and presence of LPH and operation.
- The sump will discharge to the area excavated in the backyard that will be lined with carbon.

On-site Activities:

- Product will continue to be removed from monitoring wells with LPH and the two tank field wells with a vac truck; however, the extraction hose must be modified so that a stinger PVC pipe can be attached and lowered into the wells to a depth of 1-2 ft below water. In addition the system should be sealed at the well head with a flush mount cover to allow a seal for total fluid extraction. The piping run should include a site glass for liquid observation.

Other action items discussed:

- All site monitoring wells (9 in total) and tank field pipes will be periodically monitored and wells/pipes and product recovery must continue via enhanced vac truck events.
- Monday, a conference call will be conducted to discuss interim on-site remedial options that have been discussed (dual phase extraction using a 100 cfm blower that must be manned or a 300 cfm liquid ring pump and separator that may be obtained).
- Basement sumps will be sampled and analyzed for full VOCs including oxygenates (8260) and TPH DRO/DRO (8015) from the two adjacent properties from the impacted home.
- Department will issue a directive letter to conduct a full horizontal and vertical delineation of contamination on-site and offsite. Use of a direct push rig to conduct the assessment was suggested and agreed that is the best approach.
- Monitoring well construction was discussed. The wells were installed using 4.25" OD, which provides insufficient sand pack in the annular space. In addition, all wells were set with 5-ft riser and 20-ft screen. Future wells may be required with shorter casing. All future monitoring wells and recovery wells will be installed as per MDE-OCP specifications – any deviations must obtain MDE-OCP written approval.
- Advantage Environmental Consultants must obtain permits for the installed wells through Baltimore County DEPRM.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

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WASTE MANAGEMENT ADMINISTRATION
Oil Control Program
Report of Observations

Case # 10/23/09

Type of Inspection/Observations: Prep for Spill Site Visit

Date: 10-03-09 BA

Site/Facility Name: 7950 PALASKI Hwy BA County

Facility ID # _____

Location: _____

Page # 1 of 2

Remarks: Visited site to get an update on interim cleanup activities at the above referenced site.

VAC truck site. TONY of ADVANTAGE ENVIRONMENTAL CONSULTANTS/AEC
ONSITE. STATUS IS AS NOTED BELOW.

- wells gauged that HAD LPH this morning
MW1 (0.16) ; MW2 (5.09-FT) ; MW4 (0.60-FT) ; MW5 (1.19-FT)

Begin vac @ 0730 - ~ 530.

- Sept has not been accessible for inspection for LPH at this time. House not currently occupied - consultant has access only when homeowner stops by. LEL & PID were measured this morning and no readings detected inside basement.

- Have been pumping @ MW-3 - try to get that developed a little.

- Soil vapor extraction ~~site~~ in operation (sump horizontal trench. When it was started, AEC recorded approx 1300 units vapor & this morning was 1200 units.

Actions to be completed 30 minutes

- Expect Carbon to be delivered on Monday for SVE located
- Expect Soil to be removed from site today. All Soil Disposal receipts will be submitted to the Dept.

- Anticipate continued daily vac truck visits. If a vac truck cannot be obtained Christmas Day, the Dept anticipates that a site visit to inspect site and conduct gauge & ball to be conducted.

- Continue email updates during Holiday and on Monday morning.

- Expect stinker tubes to be implemented with vac truck on Monday

Observer: [Signature], Regional Section Head
Person Interviewed: [Signature] / AEC

MARYLAND DEPARTMENT OF THE ENVIRONMENT

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WASTE MANAGEMENT ADMINISTRATION

Oil Control Program

Report of Observations

Case # 10 0339BA

Type of Inspection/Observations: SITE VISIT CRT

Date: 12-23-09

Site/Facility Name: Royal Farms ⁷⁹⁵⁰ PULASKI

Facility ID #

Location:

Page # 2 of 2

Remarks: Jeff ~~Seaman~~ arrived onsite - He informed me that approx
- Daily vac truck events will continue daily (730-530)
with exception of Friday, SAT & Sunday. A vac truck has
been scheduled for 12HR starting at 1000 hrs.

- Note - Jeff onsite and plans to construct structure to be
today for use this weekend.

- Jeff will continue Daily email updates to the
Dept.

- He is ordering a fan unit to ^{assist} ~~assist~~ in neutralizing the
house.

NOTE: MABLE 9 ALSO been placed today for a development.

Observer:

Person Interviewed: AEC

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WASTE MANAGEMENT ADMINISTRATION Oil Control Program Report of Observations

Case # 10-0329 BA

Type of Inspection/Observations: Site Visit

Date: 12/30/09

Site/Facility Name: Royal Farms Rosedale

Facility ID # _____

Location: 7450 Pulaski Hwy

Page # 1 of 2

Remarks: MDE-OCF personnel Janey Martin and Ellen Jackson met onsite with Jeff Stein and Tony of AEC environmental (representing Royal Farms) to discuss site activities and plans for the holiday weekend. This morning's gauging data: MW-5 3.37 ft LPH, MW-2 4 ft LPH, MW-4 0.05 ft LPH, MW-1 0.03 ft LPH, MW-7 0.01 ft LPH, TEL 0.09 ft LPH, product was not detected in remaining wells. AEC was given a key to access the impacted residence. The sump was checked today and a sheen of gasoline was observed on the water. Sump has been operating effectively. According to Tony of AEC this morning no LEL readings were detected, the PID reading was 30 units in the basement. Blower fans are set up to vent the basement of odors/vapors. Today a vacuum truck was equip with stinger tubes to remove product water and vapors in all wells containing LPH. SVE system was operational today; however over the weekend the system was inundated with rain and snow melt water. This coming Monday a carbon unit will be installed on the SVE blower effluent (a mis-delivery occurred this week.) Next week wells not containing LPH will be developed using a surge block.

• Proposal for Weekend Activities & Additional Items •

1.) Friday, Saturday & Sunday AEC proposed to conduct no vac events or site visits. The Department approves this because it is the Department's understanding the residence (1205) will remain unoccupied.

Observer: Janey Martin, Ellen Jackson

Person Interviewed: Jeff Stein



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WASTE MANAGEMENT ADMINISTRATION
Oil Control Program
Report of Observations

Case # 10-0339BA

Type of Inspection/Observations: Site Visit

Date: 12/30/09

Site/Facility Name: Royal Farms Rosedale

Facility ID # _____

Location: 7950 Pulaski Hwy

Page # 2 of 2

Remarks:

2.) EFR will resume on Monday for the approved 8-hour duration. Any deviation from this must be submitted to the Department in writing, ^{if review} include all data collected to date (i.e. gauging & product recovery data)

~~9m~~

3) Basement of impacted residence will be properly ~~vented~~ 9M vented over the weekend.

Observer: Jan Mont. (A)

Person Interviewed: Jeff Stein





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

Martin O'Malley
Governor

Shari T. Wilson
Secretary

Anthony G. Brown
Lieutenant Governor

Robert M. Summers, Ph.D.
Deputy Secretary

January 11, 2010

Mr. Dwayne Stambaugh
Station Maintenance Solutions
222 South Springdale Road
New Windsor MD 21776

RE: WORK PLAN APPROVAL
Case No. 2010-0339-BA
Royal Farm Store No. 64
7950 Pulaski Highway, Rosedale
Baltimore County, Maryland
Facility I.D. No. 3975

Dear Mr. Stambaugh:

The Oil Control Program recently completed a review of the case file for the above-referenced property, including the *Subsurface Investigation Work Plan - December 28, 2009*. This case was opened on December 15, 2009 in response to a spill report received by the Department for the residential property located at 1205 Chesaco Avenue, adjacent to Royal Farm Store No. 64. The Baltimore County Fire Department responded and observed approximately 1.5 inches of gasoline in the basement sump at the 1205 Chesaco Avenue residence. The sump discharged gasoline and water onto the backyard, which then migrated to a neighboring driveway (1207 Chesaco Avenue). At that time, basement sumps at adjacent residences were checked for the presence of free product and field screened for gasoline vapors. To date, no product or vapors have been detected in the adjacent residences.

The tank field pipes at the subject property were gauged by the Department's Emergency Response Division and free product was detected in both pipes. The site is an active service station that currently operates four 10,000-gallon fiberglass reinforced plastic underground storage tanks (USTs). All four USTs contain gasoline and were installed in 1993. A tank top upgrade was conducted in 2007 and double walled piping was installed. The station was shut down on December 15, 2009 until the leak could be located and repaired. A review of the inventory records showed a loss of approximately 5,400 gallons of gasoline. A tank test determined that the leak occurred from an "O" ring at the top of the check valve of the pump on the regular tank.

Product recovery activities began the day the spill was reported and included vacuum extraction to remove product from both tank field pipes and the residential basement sump. Monitoring wells were installed for product recovery that evening. A total of nine recovery wells have been installed: six on-site surrounding the tank field; and three off-site along the driveway of the 1205 Chesaco Avenue property. Vacuum extraction and hand bailing are being used to remove free product from all wells that contain product and periodically from the basement sump. Excavation activities were conducted to remove contaminated soil in the backyard where the sump discharged.

On December 17, 2009, a temporary soil vapor extraction (SVE) system was installed to remove petroleum vapors from the foundation of the impacted residence. The system consisted of a subsurface horizontal piping run along the southern length of the basement foundation. Piping was also run to the three off-site monitoring wells (MW-3, MW-4, and MW-5) and the basement sump. Vapors are removed and piped to the station where they are treated using a carbon unit.

The Department understands the residence has been unoccupied since the release was reported. The residential basement sump and pump were removed and a replacement explosion-proof pump and larger sump were installed. Absorbent pads are maintained in the sump, and a lid was installed to contain vapors and to vent to the temporary SVE system. Water from the sump pump discharge is being treated with carbon.

The Department hereby approves the *Subsurface Investigation Work Plan - December 28, 2009* to delineate the horizontal and vertical extent of petroleum contamination both on-site and off-site, contingent upon the following modifications;

- (1) The Department understands that temporary well points will be installed at each direct push location for the detection of product. If product is absent, groundwater samples will be collected. These well points must be left in place for at least one week to assess the presence of liquid phase hydrocarbon (LPH).
- (2) Royal Farms must obtain all necessary drilling permits.
- (3) All soil and groundwater generated during soil boring and sampling activities must be properly disposed per State and local regulations.
- (4) Soil samples must be collected from off-site boring locations. Soil exhibiting the highest field screening measurements must be collected for analysis. If no photo-ionization detector (PID) readings are observed, samples must be collected at the groundwater interface. Soil samples must be analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates, using EPA Method 8260 and for total petroleum hydrocarbons/diesel- and gasoline-range organics (TPH/DRO and TPH/GRO) using EPA Method 8015B.
- (5) Discharge permits must be obtained for the soil vapor extraction effluent.

- (6) A water sample must be collected from the sump water discharge and analyzed for full-suite volatile organic compounds (VOCs), including fuel oxygenates, using EPA Method 8260 and for total petroleum hydrocarbons/diesel- and gasoline-range organics (TPH/DRO and TPH/GRO) using EPA Method 8015B. Please include in the *Site Characterization Report* a schedule for replacement of the GAC bed.
- (7) Contact the case manager at least five (5) working days prior to conducting the soil boring investigation to field mark the boring locations.

The completed *Site Characterization Report* must be submitted to the Department **no later than February 26, 2010**. The *Site Characterization Report* must include all the data collected to date, summary tables for gauging and EFR events, and all data collected from the soil boring investigation. Once the *Site Characterization Report* has been reviewed, the Department requests a meeting to be held to discuss the data and future remedial actions (i.e. submittal of a *Corrective Action Plan*). Please note that all monitoring wells installed on-site or found to contain free product must have 4-inch-diameter casing to allow for product removal. Off-site wells where free product is not detected may be constructed using 2-inch-diameter casing. Previously installed wells both on and off-site will likely need to be replaced due to improper construction. All wells must be installed, constructed, and developed per the Oil Control Program's well specifications [see the Department's *Maryland Environmental Assessment Technology (MEAT)* guidance document, which may be accessed at: http://www.mde.state.md.us/assets/document/MEAT_Guidance.pdf].

Notify the Oil Control Program at least five (5) working days prior to conducting any work at this site so we have an opportunity to observe field activities. When submitting documentation to the Oil Control Program, submit two hard copies and an electronic copy on a compact disc (CD). If you have any questions, please contact the case manager, Ms. Jenny Martin, at 410-537-3413 (email: jmartin@mde.state.md.us) or me at 410-537-3482 (ejackson@mde.state.md.us).

Sincerely,



Ellen Jackson, Central Region Section Head
Remediation and State-Lead Division
Oil Control Program

JM/nln

cc: Mr. Jeffery Stein (Advantage Environmental Consultants, LLC)
Mr. Robert Rinehart (Royal Farms)
Mr. Anthony Ratajczak (1205 Chesaco Avenue)
Mr. Robert Weltchek (Weltchek Mallahan & Weltchek, LLC)
Mr. Kevin Koepenick (Baltimore County DEPRM)
Mr. Christopher H. Ralston
Mr. Herbert M. Meade
Mr. Horacio Tablada

MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard, Suite 620 • Baltimore Maryland 21230-1719
(410) 537-3442 • 1-800-633-6101 • http:// www. mde. state. md. us

WASTE MANAGEMENT ADMINISTRATION
Oil Control Program
Report of Observations

Case # 10-033913A

Type of Inspection/Observations: Soil boring investigation

Date: 1/21/10

Site/Facility Name: Royal Farms Rose Dale

Facility ID # _____

Location: 7950 Pulaski Hwy

Page # 1 of 3

Remarks: Writer on site to observe soil boring activities approved in the January 11, 2010 directive letter. Met on-site with Ellen Jackson, Regional Supervisor and Tony of AEC, Royal Farms Environmental consultant. Soil borings are being continuously advanced using a Powerprobe 9630 skid drill rig. Soil cores are continuously field screened and one soil sample is collected for lab analysis per each boring location. Today three soil borings and temporary well points were advanced. All on-site borings were advanced to 25 ft bgs. Well points were set as deep as possible, given soil swelling and boring collapse (at depth). All soils were logged by AEC.

1/27/10

Writer on-site to observe off-site soil boring activities. On Monday & Tuesday (1/25-26) points were advanced on the 1205 Chesaco Ave property. One temporary well point in the driveway close to Chesaco Ave, contained ~.5 ft LPH, according to Tony of AEC. Temporary well point B-9 (located on-site near MW-1 & MW-2) contained 4.8 ft LPH today. Today three borings were advanced on the driveway of the off-site property 1207 Chesaco Ave. No PID readings above 0.2 were detected in the first 2 soil borings. Note that the December 2009 approved work plan had 4 boring locations on the 1205 property, but the property owner requested that Royal Farms only

Observer: Jim G. Manf.

Person Interviewed: [Signature] see p. 2



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WASTE MANAGEMENT ADMINISTRATION Oil Control Program Report of Observations

Case # 10-0339BA

Type of Inspection/Observations: Soil Boring Investigation Date: 1/27/10

Site/Facility Name: Royal Farms Rose Dale Facility ID # _____

Location: 7950 Pulaski Hwy. Page # 2 of 3

Remarks: install 3 temporary well points along the driveway.
As such, the proposed well point closest to Chesaco
Ave. will not be installed. Borings on the RW7 driveway
were advanced to ~15 ft bgs.

Today the basement sump at the 1205 Chesaco property
was inspected. Petroleum odors and a sheen on the sorbent
pad in the sump were noted. A ventilation fan has been
installed over the sump and runs continuously to mitigate
vapors and odors. The residence is still unoccupied.
Additional points are to be installed on-site tomorrow. The need
for additional off-site points will be evaluated by AEC based
on gauging data and presence of LPH.

Photographs taken
1/28/10

Writer on-site to observe continued soil boring investigation
activities. The final 2 borings were installed on-site today
in the vicinity of MW-1 & MW-2. Two additional borings
were advanced in the front yard of the 1205 Chesaco Ave
property, in the vicinity of point B-11 where LPH was
detected. To date LPH has been detected in 3 on-site
borings (B-2, B-6 & B-9) and 1 off site boring (B-11).

Observer: Jay S. Mat Person Interviewed: Art Bell

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**WASTE MANAGEMENT ADMINISTRATION
Oil Control Program
Report of Observations**

Case # 10-0339 BA

Type of Inspection/Observations: Soil Boring

Date: 1/24/10

Site/Facility Name: Royal Farms Rosegate

Facility ID # _____

Location: 795B Pulaski Highway

Page # 3 of 3

Remarks: _____

All boring points / temporary wells will be left in place for one week to determine if LPH enters the well(s). Groundwater samples may be collected either after the one week period or a sample can be collected now, and then a second round of sampling can be conducted prior to the abandonment of the well points. As discussed on-site today.

Ellen Jackson, regional supervisor MDE-OCF, visited the site to observe the locations of the temporary well points.

If you have any questions pertaining to the work plan or the January 11, 2010 approval letter please contact case manager Jenny Martin 410 537 3413

Observer: Jenny Martin

Person Interviewed: Ant Bli

**MARYLAND DEPARTMENT OF THE ENVIRONMENT**

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Martin J. O'Malley
GovernorShari T. Wilson
SecretaryAnthony G. Brown
Lt. GovernorRobert M. Summers, Ph.D.
Deputy Secretary

February 12, 2010

Two Farms, Inc.
3611 Roland Avenue
Baltimore, MD 21211

Dear Sir or Madam:

The Department has received your completed Request for Coverage form and fee for an Air Quality General Permit to Construct for Soil Vapor Extraction and Groundwater Air Stripping equipment for the following location:

Source Name:	Royal Farms Store #64
Street Address:	7950 Pulaski Highway Baltimore, MD 21237
County:	Baltimore
I.D. No.:	005-9-1391

The permit is effective as stated in Part IV(B) of the General Permit. The cancelled check or other receipt, a copy of the Request for Coverage, the permit document, this letter, and any other supporting documents should be retained on site.

If you have any questions, please call John W. Scherer Jr. at 410-537-3230.

Sincerely,

Karen Irons, P.E., Administrator
Air Quality Permits Program
Air And Radiation Management Administration

KI/jws

cc: ✓ Advantage Environmental Consultants

APPENDIX C
MONITORING WELL INSTALLATION REPORTS

Monitoring Well Installation Report

PROJECT #: 05-056
RF-64

Advantage
Environmental
Consultants, LLC

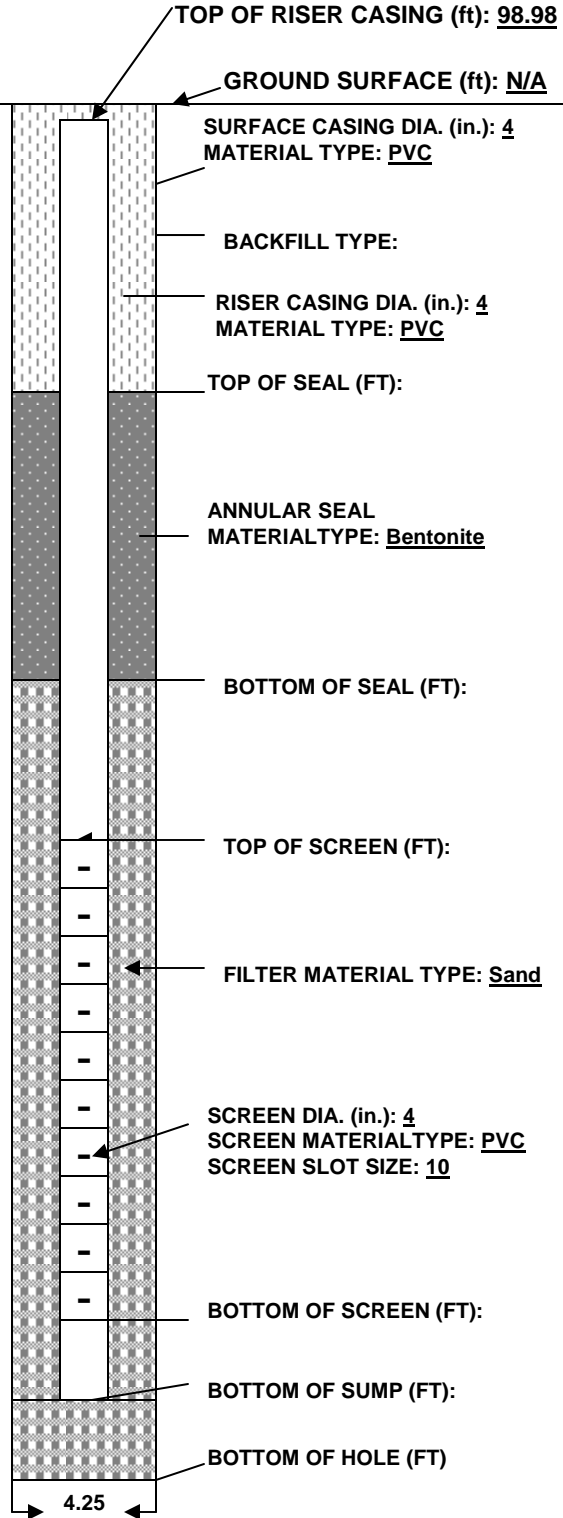
DRILLING CONTRACTOR: CR Hugo, Inc.
AEC SUPERVISOR: Sarah Katchpole

WELL ID: MW-1

DATE BEGUN: 12/15/09
DATE FINISHED: 12/15/09

Reference Points & Elevations

WATER LEVEL (ft): 12.22
DEPTH OF WELL (ft): 22.82
DRILLING METHOD: HSA



DEPTH (ft)	ELEV. (ft)
0.50	98.38
1.00	97.38
2.00	96.38
22.82	76.16
N/A	N/A
22.82	76.16

DATE DEVELOPED: N/A
METHOD DEVELOPED: N/A

Monitoring Well Installation Report

PROJECT #: 05-056
RF-64

Advantage
Environmental
Consultants, LLC

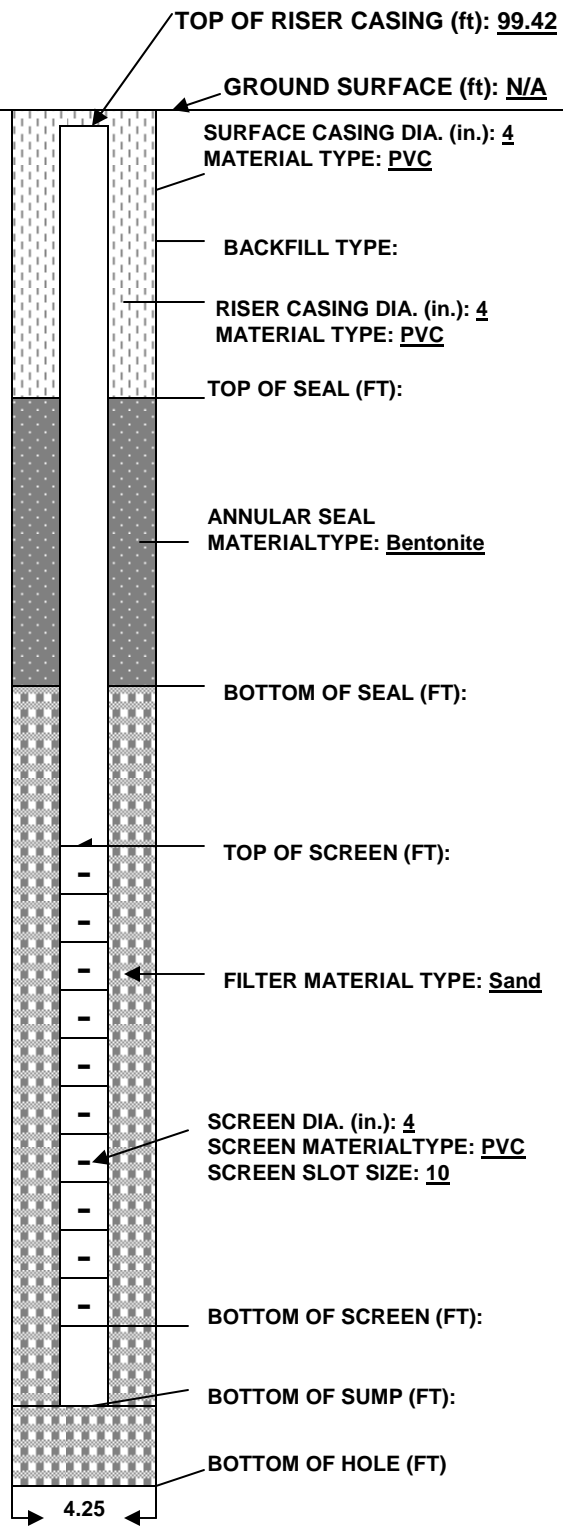
DRILLING CONTRACTOR: CR Hugo, Inc.
AEC SUPERVISOR: Sarah Katchpole

WELL ID: MW-2

DATE BEGUN: 12/15/09
DATE FINISHED: 12/15/09

Reference Points & Elevations

WATER LEVEL (ft): 12.64
DEPTH OF WELL (ft): 22.90
DRILLING METHOD: HSA



DEPTH (ft)	ELEV. (ft)
0.50	98.92
1.00	97.92
2.00	96.92
22.90	76.52
N/A	N/A
22.90	76.52

DATE DEVELOPED: N/A
METHOD DEVELOPED: N/A

Monitoring Well Installation Report

PROJECT #: 05-056
RF-64

Advantage
Environmental
Consultants, LLC

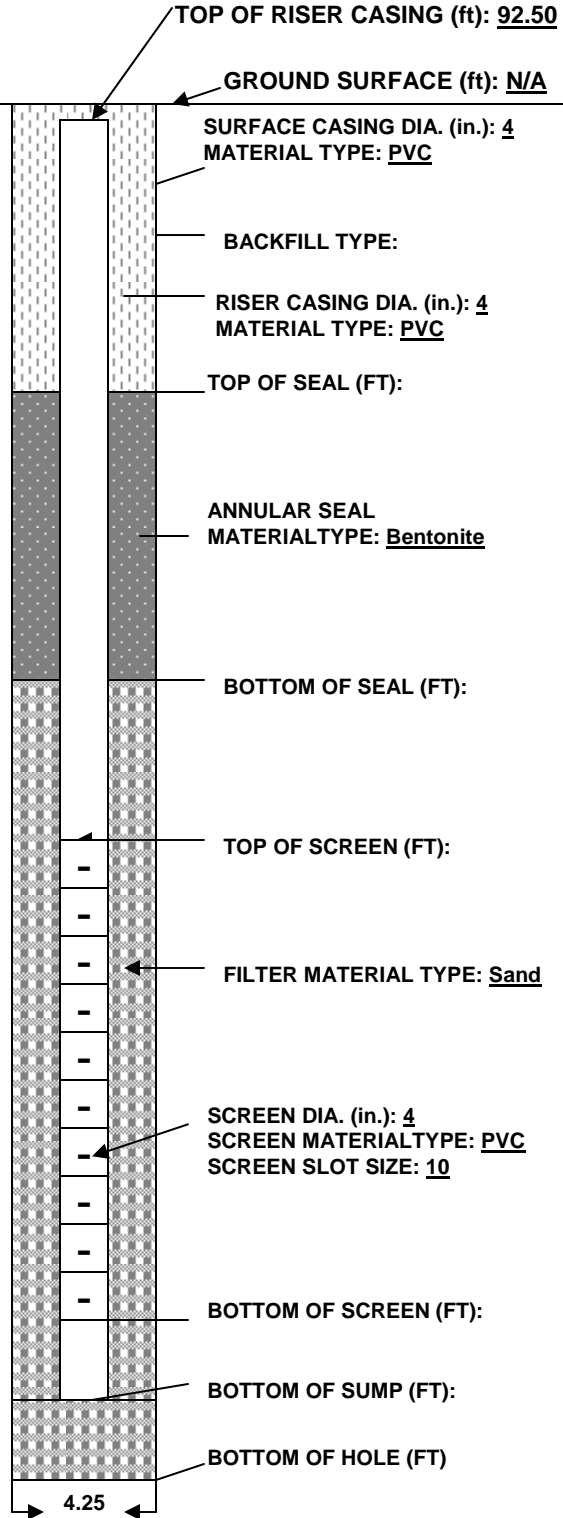
DRILLING CONTRACTOR: CR Hugo, Inc.
AEC SUPERVISOR: Sarah Katchpole

WELL ID: MW-3

DATE BEGUN: 12/16/09
DATE FINISHED: 12/16/09

Reference Points & Elevations

WATER LEVEL (ft): 5.93
DEPTH OF WELL (ft): 20.90
DRILLING METHOD: HSA



DEPTH (ft)	ELEV. (ft)
0.50	92.00
1.00	91.00
2.00	90.00
20.90	71.60
N/A	N/A
20.90	71.60

DATE DEVELOPED: N/A
METHOD DEVELOPED: N/A

Monitoring Well Installation Report

PROJECT #: 05-056
RF-64

Advantage
Environmental
Consultants, LLC

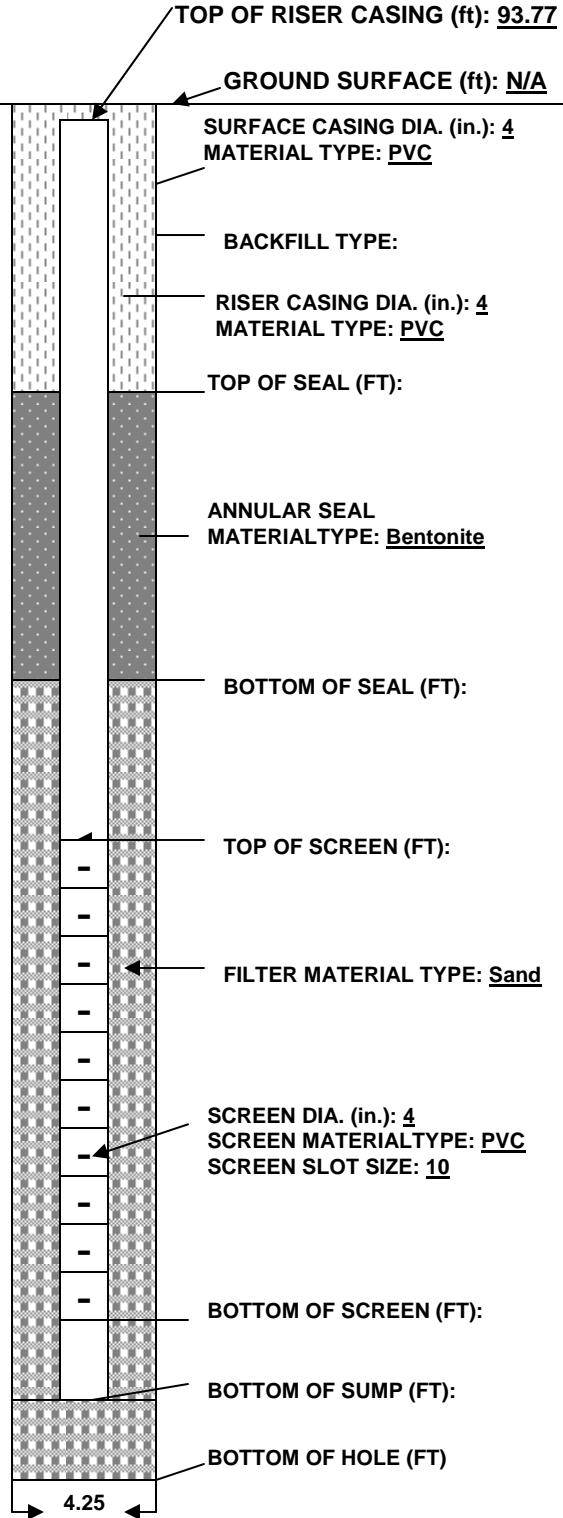
DRILLING CONTRACTOR: CR Hugo, Inc.
AEC SUPERVISOR: Sarah Katchpole

WELL ID: MW-4

DATE BEGUN: 12/16/09
DATE FINISHED: 12/16/09

Reference Points & Elevations

WATER LEVEL (ft): 7.03
DEPTH OF WELL (ft): 23.03
DRILLING METHOD: HSA



DEPTH (ft)	ELEV. (ft)
0.50	93.27
1.00	92.77
2.00	91.77
23.03	70.74
N/A	N/A
23.03	70.74

DATE DEVELOPED: N/A
METHOD DEVELOPED: N/A

Monitoring Well Installation Report

PROJECT #: 05-056
RF-64

Advantage
Environmental
Consultants, LLC

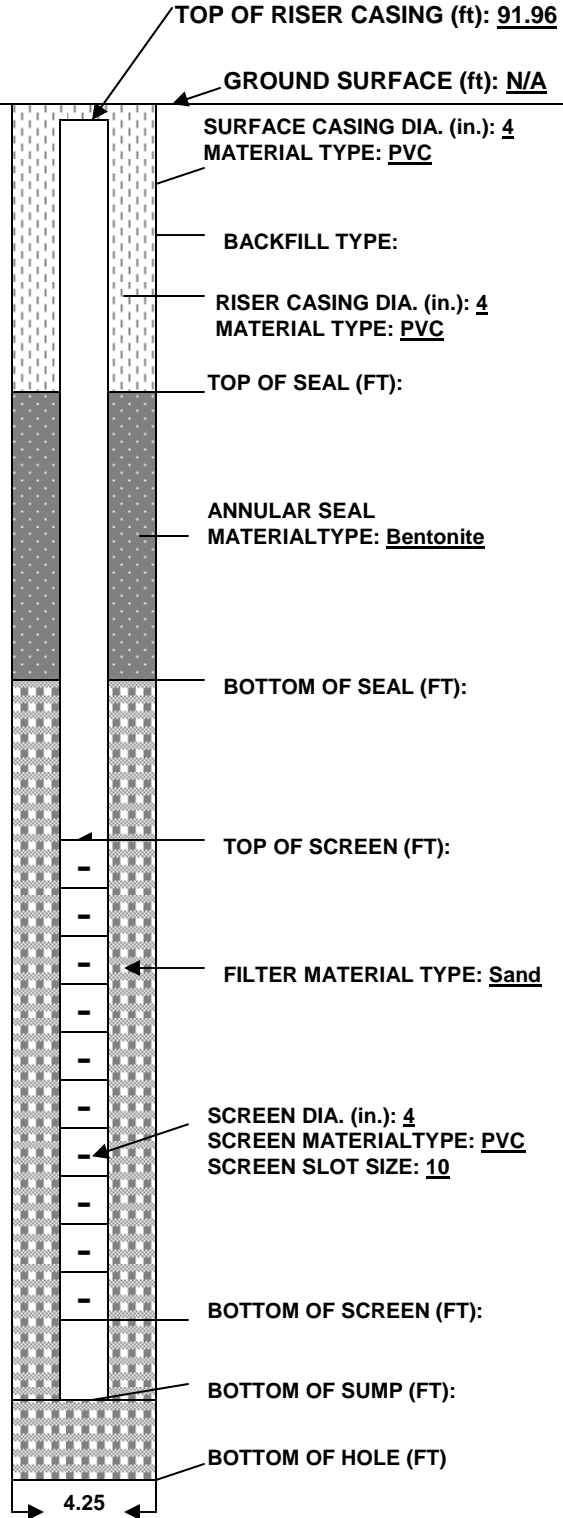
DRILLING CONTRACTOR: CR Hugo, Inc.
AEC SUPERVISOR: Sarah Katchpole

WELL ID: MW-5

DATE BEGUN: 12/16/09
DATE FINISHED: 12/16/09

Reference Points & Elevations

WATER LEVEL (ft): 8.21
DEPTH OF WELL (ft): 21.77
DRILLING METHOD: HSA



DEPTH (ft)	ELEV. (ft)
0.50	91.46
1.00	90.96
2.00	89.96
21.77	70.19
N/A	N/A
21.77	70.19

DATE DEVELOPED: N/A
METHOD DEVELOPED: N/A

Monitoring Well Installation Report

PROJECT #: 05-056
RF-64

Advantage
Environmental
Consultants, LLC

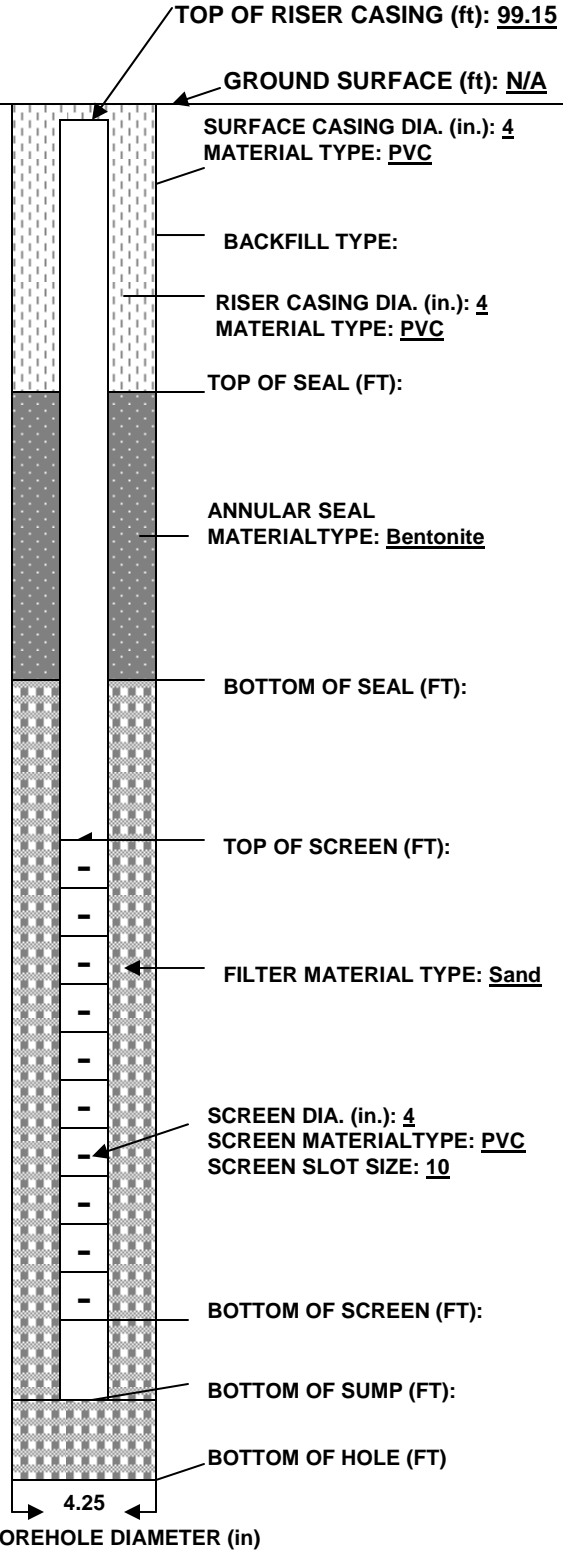
DRILLING CONTRACTOR: CR Hugo, Inc.
AEC SUPERVISOR: Sarah Katchpole

WELL ID: MW-6

DATE BEGUN: 12/16/09
DATE FINISHED: 12/16/09

Reference Points & Elevations

WATER LEVEL (ft): 13.07
DEPTH OF WELL (ft):
DRILLING METHOD: HSA



DEPTH (ft)	ELEV. (ft)
0.50	98.65
1.00	98.15
2.00	97.15
	70.19
N/A	N/A
21.77	70.19

DATE DEVELOPED: N/A
METHOD DEVELOPED: N/A

Monitoring Well Installation Report

PROJECT #: 05-056
RF-64

Advantage
Environmental
Consultants, LLC

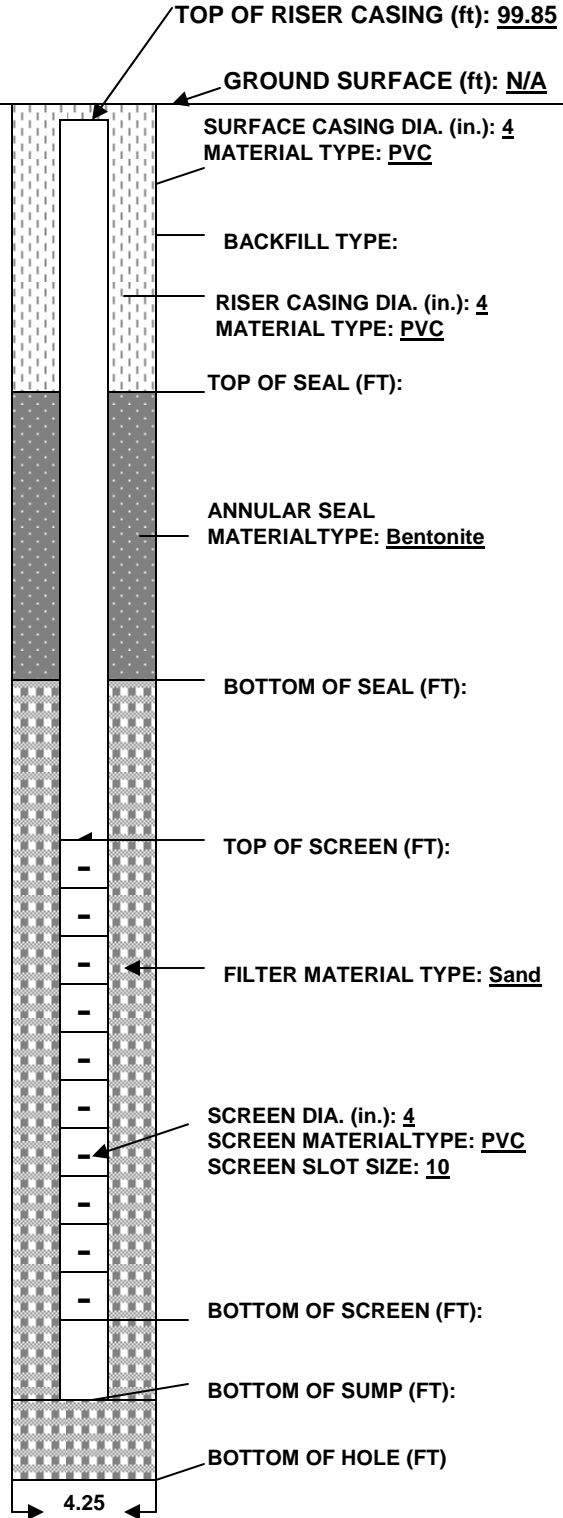
DRILLING CONTRACTOR: CR Hugo, Inc.
AEC SUPERVISOR: Sarah Katchpole

WELL ID: MW-7

DATE BEGUN: 12/17/09
DATE FINISHED: 12/17/09

Reference Points & Elevations

WATER LEVEL (ft): 13.99
DEPTH OF WELL (ft): 23.71
DRILLING METHOD: HSA



DEPTH (ft)	ELEV. (ft)
0.50	99.35
1.00	98.85
2.00	97.85
23.71	76.14
N/A	N/A
23.71	76.14

DATE DEVELOPED: N/A
METHOD DEVELOPED: N/A

Monitoring Well Installation Report

PROJECT #: 05-056
RF-64

Advantage
Environmental
Consultants, LLC

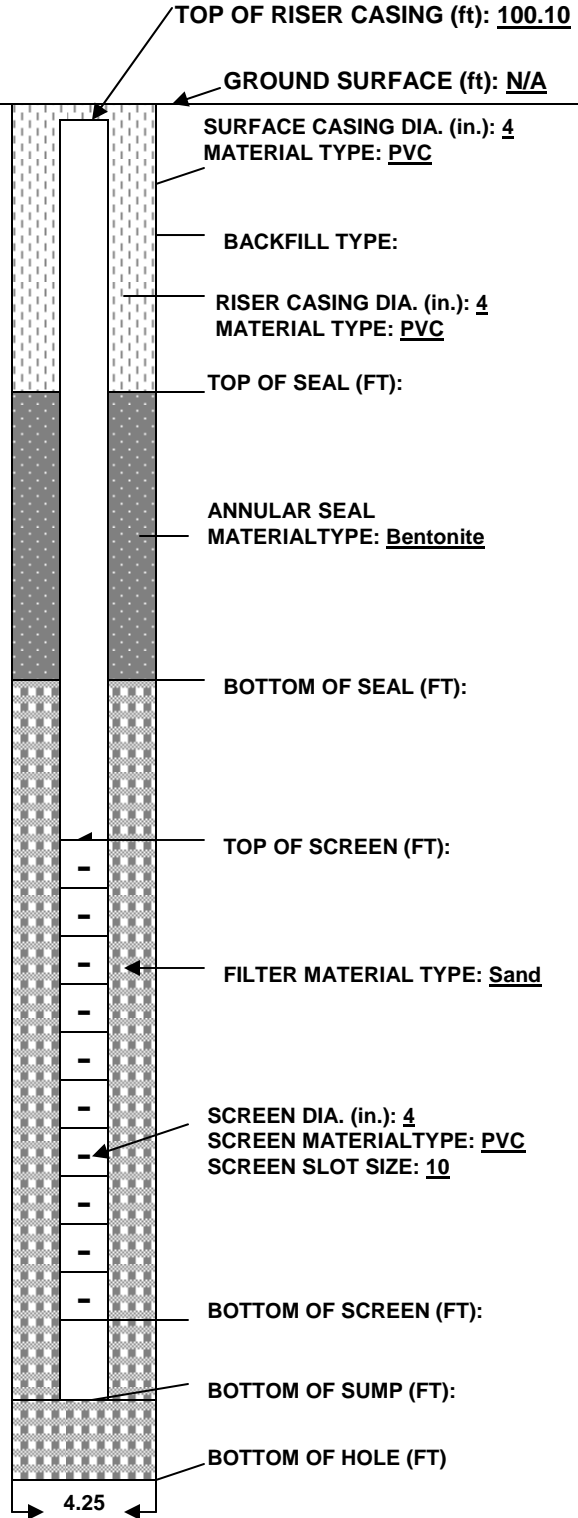
DRILLING CONTRACTOR: CR Hugo, Inc.
AEC SUPERVISOR: Sarah Katchpole

WELL ID: MW-8

DATE BEGUN: 12/17/09
DATE FINISHED: 12/17/09

Reference Points & Elevations

WATER LEVEL (ft): 12.90
DEPTH OF WELL (ft): 21.34
DRILLING METHOD: HSA



DEPTH (ft)	ELEV. (ft)
0.50	99.60
1.00	99.10
2.00	98.10
21.34	78.76
N/A	N/A
21.34	78.76

DATE DEVELOPED: N/A
METHOD DEVELOPED: N/A

Monitoring Well Installation Report

PROJECT #: 05-056
RF-64

Advantage
Environmental
Consultants, LLC

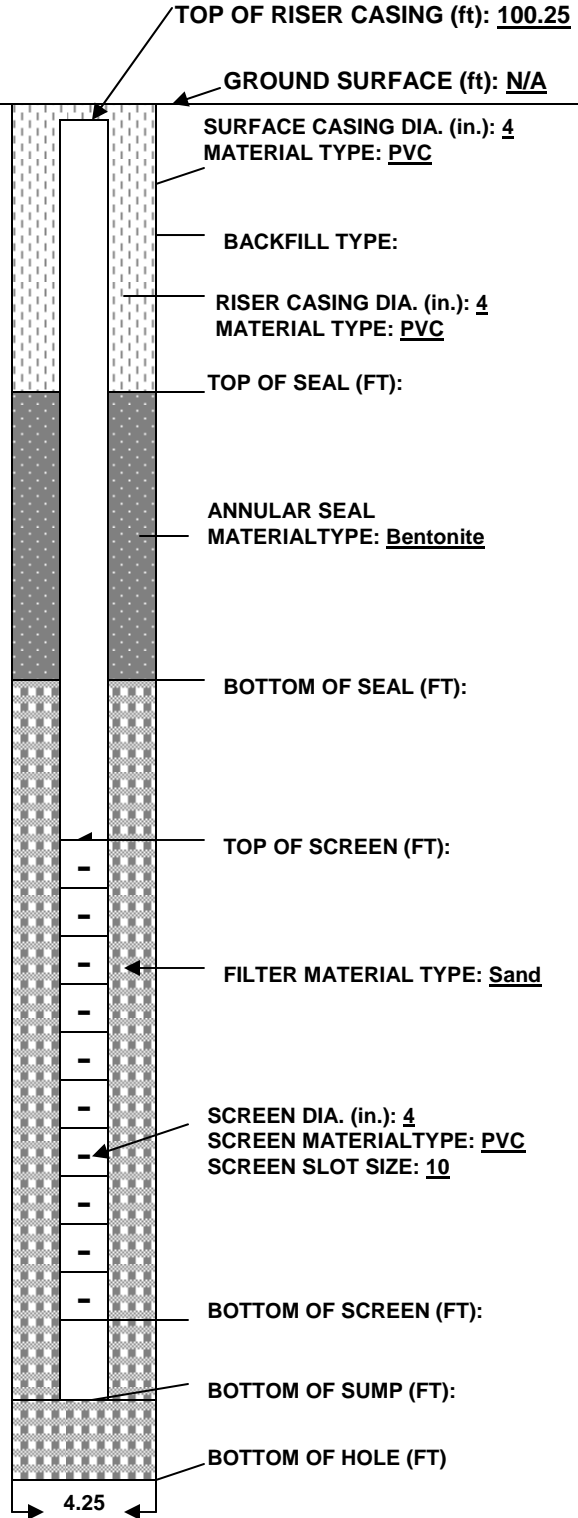
DRILLING CONTRACTOR: CR Hugo, Inc.
AEC SUPERVISOR: Sarah Katchpole

WELL ID: MW-9

DATE BEGUN: 12/17/09
DATE FINISHED: 12/17/09

Reference Points & Elevations

WATER LEVEL (ft): 13.88
DEPTH OF WELL (ft): 24.39
DRILLING METHOD: HSA



DEPTH (ft)	ELEV. (ft)
0.50	99.75
1.00	99.25
2.00	98.25
24.39	75.86
N/A	N/A
24.39	75.86

DATE DEVELOPED: N/A
METHOD DEVELOPED: N/A

APPENDIX D
SOIL DISPOSAL MANIFESTS

SOIL SAFE, INC.

NON-HAZARDOUS MATERIAL MANIFEST

GENERATOR

Log Number

1

112377

Generator Name _____ Shipping Location Royal FarmsAddress _____ Address 7915 Pulaski HwyRoseville, MD

Phone No. _____ Phone No. _____

Approval
Number
W5
1908

Description of Material

Non-Regulated Petroleum
Contaminated Soil

Non DOT/RCRA RegulatedGROSS 33.42 T
TARE 18.16 T
NET 15.26 T

05:55AM 12/24/2009

GROSS
TARE
NET
TONNAGE

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Generator Authorized Agent Name _____ Signature _____ Shipment Date _____

TRANSPORTER

Transporter Name A32 Environmental Driver Name (Print) Vic AAddress 311 S. Haven St Vehicle License No./State 193 ED 70Baltimore MD 21224 Truck Number 219

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature _____ Shipment Date _____ Driver Signature _____ Delivery Date 12/24/09

DESTINATION

Site Name Brandywine Phone No. 301-782-3036Address 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent Serge M. Signature _____ Receipt Date 12/24/09

White - Facility

Green - Facility

Yellow - Generator

Pink - Broker

Goldenrod - Contractor

Blue - Trucking Co.

SOIL SAFE, INC.

Log Number
13

NON-HAZARDOUS MATERIAL MANIFEST

112376

GENERATOR

Generator Name _____

Shipping Location Royal Farms

Address _____

Address 7915 Rutaski Hwy

Kesedale MD

Phone No. _____

Phone No. _____

Approval Number
WS
1908

Description of Material
Non-Regulated Petroleum
Contaminated Soil
Non DOT/RCRA Regulated

		GROSS
GROSS	38.67 T	
TARE	18.16 T	TARE
NET	20.51 T	NET
09:56AM 12/24/2009		TONNAGE

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Royal Farms
Generator Authorized Agent Name

[Signature]
Signature

12/24/09
Shipment Date

TRANSPORTER

Transporter Name A22 Environmental

Driver Name (Print) [Signature]

Address 311 S. Haven St

Vehicle License No./State 193 ED 70

Baltimore MD 21224

Truck Number [Signature]

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

[Signature]
Driver Signature

Shipment Date

[Signature]
Driver Signature

12-24-09
Delivery Date

DESTINATION

Site Name Brandywine Phone No. 301-782-3036

Address 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Sosge M.
Name of Authorized Agent

[Signature]
Signature

12/24/09
Receipt Date

White - Facility Green - Facility Yellow - Generator Pink - Broker Goldrod - Contractor Blue - Trucking Co.

**APPENDIX E
DATA TABLES**

Table 1 - Fluids Recovery Data Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237

Well No.	Date	Estimated Total Fluids Recovery	Estimated Water Recovery	Estimated LPH Recovery	Recovery Method
Tank Pit Sumps	12/15/2009	148.0	0.0	148.0	Vac-Truck
MW-1	12/15/2009	0.0	0.0	0.0	Vac-Truck
	12/16/2009	606.0	593.9	12.1	Vac-Truck
	12/17/2009	223.3	218.8	4.5	Vac-Truck
	12/18/2009	312.6	306.3	6.3	Vac-Truck
	12/21/2009	58.3	57.2	1.2	Vac-Truck
	12/22/2009	55.0	53.9	1.1	Vac-Truck
	12/23/2009	68.8	67.4	1.4	Vac-Truck
	12/24/2009	299.8	293.8	6.0	Vac-Truck
	12/25/2009	166.5	163.2	3.3	Vac-Truck
	12/26/2009	410.8	402.6	8.2	Vac-Truck
	12/27/2009	157.3	154.1	3.1	Vac-Truck
	12/28/2009	104.8	102.7	2.1	Vac-Truck
	12/29/2009	466.7	457.4	9.3	Vac-Truck
	12/30/2009	0.0	0.0	0.0	Vac-Truck
	12/31/2009	0.0	0.0	0.0	Vac-Truck
	1/4/2010	200.0	180.0	20.0	Vac-Truck
	1/5/2010	121.0	119.8	1.2	Vac-Truck
	1/6/2010	145.2	143.7	1.5	Vac-Truck
	1/7/2010	410.0	405.9	4.1	Vac-Truck
	1/8/2010	187.5	185.6	1.9	Vac-Truck
	1/11/2010	140.0	138.6	1.4	Vac-Truck
	1/12/2010	156.0	154.4	1.6	Vac-Truck
	1/13/2010	158.0	156.4	1.6	Vac-Truck
	1/14/2010	175.0	173.3	1.8	Vac-Truck
	1/15/2010	152.0	150.5	1.5	Vac-Truck
	1/18/2010	142.0	140.6	1.4	Vac-Truck
	1/19/2010	0.0	0.0	0.0	Vac-Truck
	1/20/2010	0.0	0.0	0.0	Vac-Truck
	1/21/2010	0.0	0.0	0.0	Vac-Truck
	1/22/2010	264.0	264.0	0.0	Vac-Truck
	1/25/2010	0.0	0.0	0.0	Vac-Truck
	1/26/2010	0.0	0.0	0.0	Vac-Truck
	1/27/2010	0.0	0.0	0.0	Vac-Truck
	1/28/2010	0.0	0.0	0.0	Vac-Truck
	1/29/2010	0.0	0.0	0.0	Vac-Truck
	2/1/2010	0.0	0.0	0.0	Vac-Truck
	2/2/2010	0.0	0.0	0.0	Vac-Truck
	2/3/2010	0.0	0.0	0.0	Vac-Truck
	2/4/2010	0.0	0.0	0.0	Vac-Truck
	2/5/2010	0.0	0.0	0.0	Vac-Truck
	2/12/2010	0.0	0.0	0.0	Hand-Bail
	2/15/2010	0.0	0.0	0.0	Vac-Truck
	2/16/2010	0.0	0.0	0.0	Hand-Bail
	2/17/2010	0.0	0.0	0.0	Vac-Truck

Table 1 - Fluids Recovery Data Summary
Gasoline Fueling Station – Royal Farms #64
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Well No.	Date	Estimated Total Fluids Recovery	Estimated Water Recovery	Estimated LPH Recovery	Recovery Method
	2/18/2010	0.0	0.0	0.0	Hand-Bail
	2/19/2010	0.0	0.0	0.0	Vac-Truck
	Total	5328.6	5084.1	244.5	Vac-Truck
MW-2	12/15/2009	0.0	0.0	0.0	Vac-Truck
	12/16/2009	606.0	575.7	30.3	Vac-Truck
	12/17/2009	223.3	212.1	11.2	Vac-Truck
	12/18/2009	312.6	297.0	15.6	Vac-Truck
	12/21/2009	58.3	49.6	8.7	Vac-Truck
	12/22/2009	55.0	46.8	8.3	Vac-Truck
	12/23/2009	68.8	58.4	10.3	Vac-Truck
	12/24/2009	299.8	254.8	45.0	Vac-Truck
	12/25/2009	166.5	141.5	25.0	Vac-Truck
	12/26/2009	410.8	349.2	61.6	Vac-Truck
	12/27/2009	157.3	133.7	23.6	Vac-Truck
	12/28/2009	104.8	89.1	15.7	Vac-Truck
	12/29/2009	466.7	396.7	70.0	Vac-Truck
	12/30/2009	100.0	85.0	15.0	Vac-Truck
	12/31/2009	100.0	85.0	15.0	Vac-Truck
	1/4/2010	200.0	170.0	30.0	Vac-Truck
	1/5/2010	121.0	102.9	18.2	Vac-Truck
	1/6/2010	145.2	123.4	21.8	Vac-Truck
	1/7/2010	410.0	348.5	61.5	Vac-Truck
	1/8/2010	187.5	159.4	28.1	Vac-Truck
	1/11/2010	140.0	119.0	21.0	Vac-Truck
	1/12/2010	156.0	132.6	23.4	Vac-Truck
	1/13/2010	158.0	134.3	23.7	Vac-Truck
	1/14/2010	175.0	148.8	26.3	Vac-Truck
	1/15/2010	152.0	129.2	22.8	Vac-Truck
	1/18/2010	142.0	120.7	21.3	Vac-Truck
	1/19/2010	207.5	176.4	31.1	Vac-Truck
	1/20/2010	200.0	170.0	30.0	Vac-Truck
	1/21/2010	250.0	212.5	37.5	Vac-Truck
	1/22/2010	264.0	224.4	39.6	Vac-Truck
	1/25/2010	217.5	184.9	32.6	Vac-Truck
	1/26/2010	207.5	176.4	31.1	Vac-Truck
	1/27/2010	245.0	208.3	36.8	Vac-Truck
	1/28/2010	177.5	150.9	26.6	Vac-Truck
	1/29/2010	200.0	170.0	30.0	Vac-Truck
	2/1/2010	171.4	154.3	17.1	Vac-Truck
	2/2/2010	293.5	264.2	29.4	Vac-Truck
	2/3/2010	243.0	218.7	24.3	Vac-Truck
	2/4/2010	242.5	218.3	24.3	Vac-Truck
	2/5/2010	162.0	145.8	16.2	Vac-Truck
	2/12/2010	3.0	0.0	3.0	Hand-Bail
	2/15/2010	228.8	205.9	22.9	Vac-Truck
	2/16/2010	0.3	0.0	0.3	Hand-Bail

Table 1 - Fluids Recovery Data Summary
Gasoline Fueling Station – Royal Farms #64
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Well No.	Date	Estimated Total Fluids Recovery	Estimated Water Recovery	Estimated LPH Recovery	Recovery Method
	2/17/2010	316.7	285.0	31.7	Vac-Truck
	2/18/2010	0.3	0.0	0.3	Hand-Bail
	2/19/2010	146.8	132.1	14.7	Vac-Truck
	Total	8429.7	7138.1	1062.9	Vac-Truck
MW-4	12/15/2009	0.0	0.0	0.0	Vac-Truck
	12/16/2009	606.0	545.4	60.6	Vac-Truck
	12/17/2009	223.3	201.0	22.3	Vac-Truck
	12/18/2009	0.0	0.0	0.0	Vac-Truck
	12/21/2009	58.3	52.5	5.8	Vac-Truck
	12/22/2009	55.0	49.5	5.5	Vac-Truck
	12/23/2009	68.8	67.0	1.7	Vac-Truck
	12/24/2009	299.8	269.8	30.0	Vac-Truck
	12/25/2009	166.5	149.9	16.7	Vac-Truck
	12/26/2009	410.8	369.7	41.1	Vac-Truck
	12/27/2009	157.3	141.6	15.7	Vac-Truck
	12/28/2009	104.8	94.3	10.5	Vac-Truck
	12/29/2009	466.7	455.0	11.7	Vac-Truck
	12/30/2009	100.0	97.5	2.5	Vac-Truck
	12/31/2009	100.0	97.5	2.5	Vac-Truck
	1/4/2010	200.0	180.0	20.0	Vac-Truck
	1/5/2010	121.0	118.0	3.0	Vac-Truck
	1/6/2010	145.2	141.6	3.6	Vac-Truck
	1/7/2010	410.0	399.8	10.3	Vac-Truck
	1/8/2010	0.0	0.0	0.0	Vac-Truck
	1/11/2010	140.0	126.0	14.0	Vac-Truck
	1/12/2010	156.0	152.1	3.9	Vac-Truck
	1/13/2010	158.0	154.1	4.0	Vac-Truck
	1/14/2010	175.0	175.0	0.0	Vac-Truck
	1/15/2010	152.0	152.0	0.0	Vac-Truck
	1/18/2010	142.0	142.0	0.0	Vac-Truck
	1/19/2010	0.0	0.0	0.0	Vac-Truck
	1/20/2010	0.0	0.0	0.0	Vac-Truck
	1/21/2010	0.0	0.0	0.0	Vac-Truck
	1/22/2010	0.0	0.0	0.0	Vac-Truck
	1/25/2010	217.5	217.5	0.0	Vac-Truck
	1/26/2010	207.5	207.5	0.0	Vac-Truck
	1/27/2010	0.0	0.0	0.0	Vac-Truck
	1/28/2010	0.0	0.0	0.0	Vac-Truck
	1/29/2010	0.0	0.0	0.0	Vac-Truck
	2/1/2010	171.4	170.9	0.5	Vac-Truck
	2/2/2010	0.0	0.0	0.0	Vac-Truck
	2/3/2010	0.0	0.0	0.0	Vac-Truck
	2/4/2010	242.5	241.8	0.7	Vac-Truck
	2/5/2010	162.0	161.5	0.5	Vac-Truck
	2/12/2010	0.0	0.0	0.0	Hand-Bail
	2/15/2010	228.8	228.1	0.7	Vac-Truck

Table 1 - Fluids Recovery Data Summary
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Well No.	Date	Estimated Total Fluids Recovery	Estimated Water Recovery	Estimated LPH Recovery	Recovery Method
	2/16/2010	0.0	0.0	0.0	Hand-Bail
	2/17/2010	0.0	0.0	0.0	Vac-Truck
	2/18/2010	0.0	0.0	0.0	Hand-Bail
	2/19/2010	146.8	146.3	0.4	Vac-Truck
	Total	5617.4	5330.3	287.1	Vac-Truck
MW-5	12/15/2009	0.0	0.0	0.0	Vac-Truck
	12/16/2009	606.0	606.0	0.0	Vac-Truck
	12/17/2009	223.3	217.7	5.6	Vac-Truck
	12/18/2009	312.6	304.8	7.8	Vac-Truck
	12/21/2009	58.3	52.5	5.8	Vac-Truck
	12/22/2009	55.0	49.5	5.5	Vac-Truck
	12/23/2009	68.8	58.4	10.3	Vac-Truck
	12/24/2009	299.8	254.8	45.0	Vac-Truck
	12/25/2009	166.5	141.5	25.0	Vac-Truck
	12/26/2009	410.8	349.2	61.6	Vac-Truck
	12/27/2009	0.0	0.0	0.0	Vac-Truck
	12/28/2009	104.8	89.1	15.7	Vac-Truck
	12/29/2009	466.7	396.7	70.0	Vac-Truck
	12/30/2009	100.0	85.0	15.0	Vac-Truck
	12/31/2009	100.0	85.0	15.0	Vac-Truck
	1/4/2010	200.0	170.0	30.0	Vac-Truck
	1/5/2010	121.0	102.9	18.2	Vac-Truck
	1/6/2010	145.2	123.4	21.8	Vac-Truck
	1/7/2010	410.0	348.5	61.5	Vac-Truck
	1/8/2010	187.5	159.4	28.1	Vac-Truck
	1/11/2010	140.0	119.0	21.0	Vac-Truck
	1/12/2010	156.0	132.6	23.4	Vac-Truck
	1/13/2010	158.0	134.3	23.7	Vac-Truck
	1/14/2010	175.0	148.8	26.3	Vac-Truck
	1/15/2010	152.0	129.2	22.8	Vac-Truck
	1/18/2010	142.0	120.7	21.3	Vac-Truck
	1/19/2010	207.5	176.4	31.1	Vac-Truck
	1/20/2010	200.0	170.0	30.0	Vac-Truck
	1/21/2010	250.0	212.5	37.5	Vac-Truck
	1/22/2010	264.0	224.4	39.6	Vac-Truck
	1/25/2010	217.5	184.9	32.6	Vac-Truck
	1/26/2010	207.5	176.4	31.1	Vac-Truck
	1/27/2010	245.0	208.3	36.8	Vac-Truck
	1/28/2010	177.5	150.9	26.6	Vac-Truck
	1/29/2010	200.0	170.0	30.0	Vac-Truck
	2/1/2010	171.4	154.3	17.1	Vac-Truck
	2/2/2010	293.5	264.2	29.4	Vac-Truck
	2/3/2010	243.0	218.7	24.3	Vac-Truck
	2/4/2010	242.5	218.3	24.3	Vac-Truck
	2/5/2010	162.0	145.8	16.2	Vac-Truck
	2/12/2010	1.0	0.0	1.0	Hand-Bail

Table 1 - Fluids Recovery Data Summary
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Well No.	Date	Estimated Total Fluids Recovery	Estimated Water Recovery	Estimated LPH Recovery	Recovery Method
	2/15/2010	288.8	287.9	0.9	Vac-Truck
	2/16/2010	0.5	0.0	0.5	Hand-Bail
	2/17/2010	316.7	315.7	1.0	Vac-Truck
	2/18/2010	0.8	0.0	0.8	Hand-Bail
	2/19/2010	146.8	146.3	0.4	Vac-Truck
	Total	8041.7	7053.8	987.9	Vac-Truck
MW-6	12/15/2009	0.0	0.0	0.0	Vac-Truck
	12/16/2009	0.0	0.0	0.0	Vac-Truck
	12/17/2009	223.3	223.3	0.0	Vac-Truck
	12/18/2009	0.0	0.0	0.0	Vac-Truck
	12/21/2009	58.3	56.9	1.5	Vac-Truck
	12/22/2009	0.0	0.0	0.0	Vac-Truck
	12/23/2009	0.0	0.0	0.0	Vac-Truck
	12/24/2009	0.0	0.0	0.0	Vac-Truck
	12/25/2009	166.5	164.8	1.7	Vac-Truck
	12/26/2009	410.8	400.5	10.3	Vac-Truck
	12/27/2009	157.3	153.4	3.9	Vac-Truck
	12/28/2009	104.8	102.2	2.6	Vac-Truck
	12/29/2009	466.7	455.0	11.7	Vac-Truck
	12/30/2009	100.0	100.0	0.0	Vac-Truck
	12/31/2009	100.0	97.5	2.5	Vac-Truck
	1/4/2010	5.8	5.8	0.1	Vac-Truck
	1/5/2010	5.7	5.7	0.1	Vac-Truck
	1/6/2010	5.6	5.6	0.1	Vac-Truck
	1/7/2010	410.0	399.8	10.3	Vac-Truck
	1/8/2010	0.0	0.0	0.0	Vac-Truck
	1/11/2010	0.0	0.0	0.0	Vac-Truck
	1/12/2010	0.0	0.0	0.0	Vac-Truck
	1/13/2010	158.0	158.0	0.0	Vac-Truck
	1/14/2010	175.0	173.3	1.8	Vac-Truck
	1/15/2010	152.0	152.0	0.0	Vac-Truck
	1/18/2010	142.0	142.0	0.0	Vac-Truck
	1/19/2010	207.5	205.4	2.1	Vac-Truck
	1/20/2010	200.0	198.0	2.0	Vac-Truck
	1/21/2010	0.0	0.0	0.0	Vac-Truck
	1/22/2010	0.0	0.0	0.0	Vac-Truck
	1/25/2010	0.0	0.0	0.0	Vac-Truck
	1/26/2010	0.0	0.0	0.0	Vac-Truck
	1/27/2010	0.0	0.0	0.0	Vac-Truck
	1/28/2010	177.5	177.3	0.0	Vac-Truck
	1/29/2010	200.0	199.8	0.0	Vac-Truck
	2/1/2010	171.4	170.9	0.5	Vac-Truck
	2/2/2010	0.0	0.0	0.0	Vac-Truck
	2/3/2010	0.0	0.0	0.0	Vac-Truck
	2/4/2010	0.0	0.0	0.0	Vac-Truck
	2/5/2010	0.0	0.0	0.0	Vac-Truck

Table 1 - Fluids Recovery Data Summary
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Well No.	Date	Estimated Total Fluids Recovery	Estimated Water Recovery	Estimated LPH Recovery	Recovery Method
	2/12/2010	0.0	0.0	0.0	Hand-Bail
	2/15/2010	0.0	0.0	0.0	Vac-Truck
	2/16/2010	0.0	0.0	0.0	Hand-Bail
	2/17/2010	0.0	0.0	0.0	Vac-Truck
	2/18/2010	0.0	0.0	0.0	Hand-Bail
	2/19/2010	73.4	73.2	0.2	Vac-Truck
	Total	3798.2	3747.2	51.2	Vac-Truck
MW-7	12/15/2009	0.0	0.0	0.0	Vac-Truck
	12/16/2009	0.0	0.0	0.0	Vac-Truck
	12/17/2009	0.0	0.0	0.0	Vac-Truck
	12/18/2009	0.0	0.0	0.0	Vac-Truck
	12/21/2009	0.0	0.0	0.0	Vac-Truck
	12/22/2009	0.0	0.0	0.0	Vac-Truck
	12/23/2009	0.0	0.0	0.0	Vac-Truck
	12/24/2009	0.0	0.0	0.0	Vac-Truck
	12/25/2009	0.0	0.0	0.0	Vac-Truck
	12/26/2009	0.0	0.0	0.0	Vac-Truck
	12/27/2009	0.0	0.0	0.0	Vac-Truck
	12/28/2009	104.8	102.7	2.1	Vac-Truck
	12/29/2009	466.7	457.4	9.3	Vac-Truck
	12/30/2009	100.0	98.0	2.0	Vac-Truck
	12/31/2009	100.0	98.0	2.0	Vac-Truck
	1/4/2010	200.0	196.0	4.0	Vac-Truck
	1/5/2010	121.0	118.6	2.4	Vac-Truck
	1/6/2010	145.2	142.3	2.9	Vac-Truck
	1/7/2010	410.0	401.8	8.2	Vac-Truck
	1/8/2010	187.5	183.8	3.8	Vac-Truck
	1/11/2010	140.0	137.2	2.8	Vac-Truck
	1/12/2010	156.0	152.9	3.1	Vac-Truck
	1/13/2010	158.0	154.8	3.2	Vac-Truck
	1/14/2010	175.0	171.5	3.5	Vac-Truck
	1/15/2010	152.0	149.0	3.0	Vac-Truck
	1/18/2010	142.0	139.2	2.8	Vac-Truck
	1/19/2010	207.5	203.4	4.2	Vac-Truck
	1/20/2010	200.0	196.0	4.0	Vac-Truck
	1/21/2010	250.0	248.8	1.3	Vac-Truck
	1/22/2010	264.0	262.7	1.3	Vac-Truck
	1/25/2010	217.5	216.4	1.1	Vac-Truck
	1/26/2010	207.5	206.5	1.0	Vac-Truck
	1/27/2010	245.0	243.8	1.2	Vac-Truck
	1/28/2010	177.5	176.6	0.9	Vac-Truck
	1/29/2010	200.0	199.0	1.0	Vac-Truck
	2/1/2010	171.4	170.9	0.5	Vac-Truck
	2/2/2010	0.0	0.0	0.0	Vac-Truck
	2/3/2010	0.0	0.0	0.0	Vac-Truck
	2/4/2010	242.5	241.8	0.7	Vac-Truck

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Well No.	Date	Estimated Total Fluids Recovery	Estimated Water Recovery	Estimated LPH Recovery	Recovery Method
	2/5/2010	0.0	0.0	0.0	Vac-Truck
	2/12/2010	0.0	0.0	0.0	Hand-Bail
	2/15/2010	228.8	228.1	0.7	Vac-Truck
	2/16/2010	0.0	0.0	0.0	Hand-Bail
	2/17/2010	316.7	315.7	1.0	Vac-Truck
	2/18/2010	0.0	0.0	0.0	Hand-Bail
	2/19/2010	73.4	73.2	0.2	Vac-Truck
	Total	5141.1	5068.7	72.4	Vac-Truck
TP-1	12/15/2009	3021.0	2718.9	302.1	Vac-Truck
	12/16/2009	606.0	545.4	60.6	Vac-Truck
	12/17/2009	7.0	7.0	0.7	Vac-Truck
	12/18/2009	6.9	6.9	0.7	Vac-Truck
	12/21/2009	6.8	6.8	0.3	Vac-Truck
	12/22/2009	0.0	0.0	0.0	Vac-Truck
	12/23/2009	0.0	0.0	0.0	Vac-Truck
	12/24/2009	0.0	0.0	0.0	Vac-Truck
	12/25/2009	166.5	158.2	8.3	Vac-Truck
	12/26/2009	0.0	0.0	0.0	Vac-Truck
	12/27/2009	0.0	0.0	0.0	Vac-Truck
	12/28/2009	0.0	0.0	0.0	Vac-Truck
	12/29/2009	0.0	0.0	0.0	Vac-Truck
	12/30/2009	100.0	95.0	5.0	Vac-Truck
	12/31/2009	100.0	95.0	5.0	Vac-Truck
	1/4/2010	0.0	0.0	0.0	Vac-Truck
	1/5/2010	0.0	0.0	0.0	Vac-Truck
	1/6/2010	0.0	0.0	0.0	Vac-Truck
	1/7/2010	0.0	0.0	0.0	Vac-Truck
	1/8/2010	0.0	0.0	0.0	Vac-Truck
	1/11/2010	0.0	0.0	0.0	Vac-Truck
	1/12/2010	0.0	0.0	0.0	Vac-Truck
	1/13/2010	0.0	0.0	0.0	Vac-Truck
	1/14/2010	0.0	0.0	0.0	Vac-Truck
	1/15/2010	0.0	0.0	0.0	Vac-Truck
	1/18/2010	0.0	0.0	0.0	Vac-Truck
	1/19/2010	0.0	0.0	0.0	Vac-Truck
	1/20/2010	0.0	0.0	0.0	Vac-Truck
	1/21/2010	0.0	0.0	0.0	Vac-Truck
	1/22/2010	0.0	0.0	0.0	Vac-Truck
	1/25/2010	0.0	0.0	0.0	Vac-Truck
	1/26/2010	0.0	0.0	0.0	Vac-Truck
	1/27/2010	0.0	0.0	0.0	Vac-Truck
	1/28/2010	0.0	0.0	0.0	Vac-Truck
	1/29/2010	0.0	0.0	0.0	Vac-Truck
	2/1/2010	0.0	0.0	0.0	Vac-Truck
	2/2/2010	0.0	0.0	0.0	Vac-Truck
	2/3/2010	0.0	0.0	0.0	Vac-Truck

Table 1 - Fluids Recovery Data Summary
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Well No.	Date	Estimated Total Fluids Recovery	Estimated Water Recovery	Estimated LPH Recovery	Recovery Method
	2/4/2010	0.0	0.0	0.0	Vac-Truck
	2/5/2010	0.0	0.0	0.0	Vac-Truck
	2/12/2010	0.0	0.0	0.0	Hand-Bail
	2/15/2010	0.0	0.0	0.0	Vac-Truck
	2/16/2010	0.0	0.0	0.0	Hand-Bail
	2/17/2010	0.0	0.0	0.0	Vac-Truck
	2/18/2010	0.0	0.0	0.0	Hand-Bail
	2/19/2010	0.0	0.0	0.0	Vac-Truck
	Total	4014.2	3633.1	382.8	Vac-Truck
TP-2	12/15/2009	3021.0	2718.9	302.1	Vac-Truck
	12/16/2009	606.0	545.4	60.6	Vac-Truck
	12/17/2009	223.3	201.0	22.3	Vac-Truck
	12/18/2009	312.6	281.3	31.3	Vac-Truck
	12/21/2009	0.0	0.0	0.0	Vac-Truck
	12/22/2009	55.0	54.5	0.6	Vac-Truck
	12/23/2009	0.0	0.0	0.0	Vac-Truck
	12/24/2009	299.8	296.8	3.0	Vac-Truck
	12/25/2009	0.0	0.0	0.0	Vac-Truck
	12/26/2009	0.0	0.0	0.0	Vac-Truck
	12/27/2009	0.0	0.0	0.0	Vac-Truck
	12/28/2009	0.0	0.0	0.0	Vac-Truck
	12/29/2009	0.0	0.0	0.0	Vac-Truck
	12/30/2009	0.0	0.0	0.0	Vac-Truck
	12/31/2009	0.0	0.0	0.0	Vac-Truck
	1/4/2010	0.0	0.0	0.0	Vac-Truck
	1/5/2010	0.0	0.0	0.0	Vac-Truck
	1/6/2010	0.0	0.0	0.0	Vac-Truck
	1/7/2010	7.5	4.4	0.1	Vac-Truck
	1/8/2010	7.4	4.2	0.1	Vac-Truck
	1/11/2010	7.7	4.1	0.1	Vac-Truck
	1/12/2010	0.0	0.0	0.0	Vac-Truck
	1/13/2010	0.0	0.0	0.0	Vac-Truck
	1/14/2010	0.0	0.0	0.0	Vac-Truck
	1/15/2010	0.0	0.0	0.0	Vac-Truck
	1/18/2010	0.0	0.0	0.0	Vac-Truck
	1/19/2010	0.0	0.0	0.0	Vac-Truck
	1/20/2010	0.0	0.0	0.0	Vac-Truck
	1/21/2010	0.0	0.0	0.0	Vac-Truck
	1/22/2010	0.0	0.0	0.0	Vac-Truck
	1/25/2010	0.0	0.0	0.0	Vac-Truck
	1/26/2010	0.0	0.0	0.0	Vac-Truck
	1/27/2010	0.0	0.0	0.0	Vac-Truck
	1/28/2010	0.0	0.0	0.0	Vac-Truck
	1/29/2010	0.0	0.0	0.0	Vac-Truck
	2/1/2010	0.0	0.0	0.0	Vac-Truck
	2/2/2010	0.0	0.0	0.0	Vac-Truck

Table 1 - Fluids Recovery Data Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237

Well No.	Date	Estimated Total Fluids Recovery	Estimated Water Recovery	Estimated LPH Recovery	Recovery Method
	2/3/2010	0.0	0.0	0.0	Vac-Truck
	2/4/2010	0.0	0.0	0.0	Vac-Truck
	2/5/2010	0.0	0.0	0.0	Vac-Truck
	2/12/2010	0.0	0.0	0.0	Hand-Bail
	2/15/2010	0.0	0.0	0.0	Vac-Truck
	2/16/2010	0.0	0.0	0.0	Hand-Bail
	2/17/2010	0.0	0.0	0.0	Vac-Truck
	2/18/2010	0.0	0.0	0.0	Hand-Bail
	2/19/2010	0.0	0.0	0.0	Vac-Truck
	Total	4540.2	4110.6	420.1	
Grand Total		44911.1	41165.9	3508.7	

All measurements in gallons
LPH - Liquid Phase Hydrocarbon

Table 2 - LPH Bail-Down Test Data - February 12, 2010
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237

Well No.	Time	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness
MW-2	Static	13.79	10.79	99.42	85.63	88.63	87.73	3.00
	8:12:00	12.92	12.92	99.42	86.50	86.50	86.50	0.00
	8:17:00	11.71	11.63	99.42	87.71	87.79	87.77	0.08
	8:22:00	11.71	11.60	99.42	87.71	87.82	87.79	0.11
	8:27:00	11.71	11.59	99.42	87.71	87.83	87.79	0.12
	8:32:00	11.71	11.58	99.42	87.71	87.84	87.80	0.13
	8:37:00	11.71	11.57	99.42	87.71	87.85	87.81	0.14
	8:42:00	11.72	11.56	99.42	87.70	87.86	87.81	0.16
	9:12:00	11.75	11.55	99.42	87.67	87.87	87.81	0.20
	9:42:00	11.77	11.55	99.42	87.65	87.87	87.80	0.22
	10:42:00	11.79	11.53	99.42	87.63	87.89	87.81	0.26
	11:42:00	11.79	11.51	99.42	87.63	87.91	87.83	0.28
	12:42:00	11.78	11.47	99.42	87.64	87.95	87.86	0.31
	13:42:00	11.79	11.41	99.42	87.63	88.01	87.90	0.38
	14:42:00	11.73	11.35	99.42	87.69	88.07	87.96	0.38
	15:42:00	11.70	11.30	99.42	87.72	88.12	88.00	0.40
MW-5	Static	3.79	3.65	91.96	88.17	88.31	88.27	0.14
	8:20:00	4.10	4.10	91.96	87.86	87.86	87.86	0.00
	8:55:00	3.96	3.95	91.96	88.00	88.01	88.01	0.01
	9:00:00	3.87	3.86	91.96	88.09	88.10	88.10	0.01
	9:05:00	3.84	3.82	91.96	88.12	88.14	88.13	0.02
	9:10:00	3.82	3.80	91.96	88.14	88.16	88.15	0.02
	9:15:00	3.81	3.78	91.96	88.15	88.18	88.17	0.03
	9:20:00	3.82	3.77	91.96	88.14	88.19	88.18	0.05
	9:50:00	3.84	3.75	91.96	88.12	88.21	88.18	0.09
	10:20:00	3.85	3.75	91.96	88.11	88.21	88.18	0.10
	11:20:00	3.86	3.75	91.96	88.10	88.21	88.18	0.11
	12:20:00	3.75	3.61	91.96	88.21	88.35	88.31	0.14
MW-7	Static	13.53	13.28	99.85	86.32	86.57	86.50	0.25
	9:58:00	14.45	14.45	99.85	85.40	85.40	85.40	0.00
	10:03:00	14.37	14.35	99.85	85.48	85.50	85.49	0.02
	10:08:00	14.35	14.31	99.85	85.50	85.54	85.53	0.04
	10:13:00	14.34	14.26	99.85	85.51	85.59	85.57	0.08
	10:18:00	14.30	14.23	99.85	85.55	85.62	85.60	0.07
	10:23:00	14.27	14.21	99.85	85.58	85.64	85.62	0.06
	10:28:00	14.25	14.18	99.85	85.60	85.67	85.65	0.07
	10:58:00	14.11	14.03	99.85	85.74	85.82	85.80	0.08
	11:28:00	14.00	13.91	99.85	85.85	85.94	85.91	0.09
	12:28:00	13.83	13.74	99.85	86.02	86.11	86.08	0.09
	13:28:00	13.68	13.60	99.85	86.17	86.25	86.23	0.08
	14:28:00	13.56	13.47	99.85	86.29	86.38	86.35	0.09
	15:28:00	13.48	13.38	99.85	86.37	86.47	86.44	0.10

All measurements in feet
LPH = Liquid Phase Hydrocarbon
TOC = Top of Casing Elevation

**Table 3 - Historical Groundwater Elevation Data - Monitoring and Tank Pit Wells
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237**

Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
MW-1	12/15/2009	6.13	5.59	98.98	92.85	93.39	93.23	0.54	
	12/16/2009	12.40	12.25	98.98	86.58	86.73	86.69	0.15	
	12/17/2009	10.97	10.90	98.98	88.01	88.08	88.06	0.07	
	12/18/2009	12.01	11.91	98.98	86.97	87.07	87.04	0.10	
	12/19/2009	12.73	12.73	98.98	86.25	86.25	86.25	0.00	
	12/20/2009	NG	NG	98.98	NG	NG	NG	NG	
	12/21/2009	12.77	12.10	98.98	86.21	86.88	86.68	0.67	
	12/22/2009	11.71	11.71	98.98	87.27	87.27	87.27	0.00	
	12/23/2009	11.76	11.70	98.98	87.22	87.28	87.26	0.06	
	12/24/2009	11.81	11.71	98.98	87.17	87.27	87.24	0.10	
	12/25/2009	11.80	11.69	98.98	87.18	87.29	87.26	0.11	
	12/26/2009	9.58	9.52	98.98	89.40	89.46	89.44	0.06	
	12/27/2009	11.10	10.92	98.98	87.88	88.06	88.01	0.18	
	12/28/2009	11.15	11.07	98.98	87.83	87.91	87.89	0.08	
	12/29/2009	11.71	11.62	98.98	87.27	87.36	87.33	0.09	
	12/30/2009	11.99	11.96	98.98	86.99	87.02	87.01	0.03	
	12/31/2009	11.92	11.90	98.98	87.06	87.08	87.07	0.02	
	1/4/2010	12.21	11.39	98.98	86.77	87.59	87.34	0.82	
	1/5/2010	12.12	12.09	98.98	86.86	86.89	86.88	0.03	
	1/6/2010	12.04	12.03	98.98	86.94	86.95	86.95	0.01	
	1/7/2010	12.58	12.51	98.98	86.40	86.47	86.45	0.07	
	1/8/2010	12.36	12.35	98.98	86.62	86.63	86.63	0.01	
	1/9/2010	13.36	13.35	98.98	85.62	85.63	85.63	0.01	
	1/10/2010	12.28	12.25	98.98	86.70	86.73	86.72	0.03	
	1/11/2010	12.20	12.15	98.98	86.78	86.83	86.82	0.05	
	1/12/2010	12.40	12.39	98.98	86.58	86.59	86.59	0.01	
	1/13/2010	12.40	12.39	98.98	86.58	86.59	86.59	0.01	
	1/14/2010	13.95	13.94	98.98	85.03	85.04	85.04	0.01	
	1/15/2010	12.63	12.62	98.98	86.35	86.36	86.36	0.01	
	1/16/2010	12.61	12.61	98.98	86.37	86.37	86.37	0.00	
	1/17/2010	10.95	10.95	98.98	88.03	88.03	88.03	0.00	
	1/18/2010	11.53	11.53	98.98	87.45	87.45	87.45	0.00	Sheen
	1/19/2010	11.50	11.50	98.98	87.48	87.48	87.48	0.00	
	1/20/2010	12.04	12.04	98.98	86.94	86.94	86.94	0.00	
	1/21/2010	12.22	12.22	98.98	86.76	86.76	86.76	0.00	
	1/22/2010	12.10	12.10	98.98	86.88	86.88	86.88	0.00	
	1/23/2010	11.38	11.38	98.98	87.60	87.60	87.60	0.00	
	1/24/2010	12.08	12.08	98.98	86.90	86.90	86.90	0.00	
	1/25/2010	10.95	10.95	98.98	88.03	88.03	88.03	0.00	
	1/26/2010	11.75	11.75	98.98	87.23	87.23	87.23	0.00	
	1/27/2010	11.56	11.56	98.98	87.42	87.42	87.42	0.00	
	1/28/2010	11.95	11.95	98.98	87.03	87.03	87.03	0.00	
	1/29/2010	12.21	12.21	98.98	86.77	86.77	86.77	0.00	
	1/30/2010	12.15	12.15	98.98	86.83	86.83	86.83	0.00	
	1/31/2010	12.07	12.07	98.98	86.91	86.91	86.91	0.00	
	2/1/2010	12.07	12.07	98.98	86.91	86.91	86.91	0.00	
	2/2/2010	12.22	12.22	98.98	86.76	86.76	86.76	0.00	
	2/3/2010	11.97	11.97	98.98	87.01	87.01	87.01	0.00	
	2/4/2010	12.02	12.02	98.98	86.96	86.96	86.96	0.00	Sheen
	2/5/2010	12.15	12.15	98.98	86.83	86.83	86.83	0.00	

Table 3 - Historical Groundwater Elevation Data - Monitoring and Tank Pit Wells
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237

Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
	2/8/2010	NG	NG	98.98	NG	NG	NG	NG	
	2/9/2010	NG	NG	98.98	NG	NG	NG	NG	
	2/10/2010	NG	NG	98.98	NG	NG	NG	NG	
	2/11/2010	NG	NG	98.98	NG	NG	NG	NG	
	2/12/2010	NG	NG	98.98	NG	NG	NG	NG	
	2/15/2010	NG	NG	98.98	NG	NG	NG	NG	
	2/16/2010	NG	NG	98.98	NG	NG	NG	NG	
	2/17/2010	NG	NG	98.98	NG	NG	NG	NG	
	2/18/2010	NG	NG	98.98	NG	NG	NG	NG	
	2/19/2010	NG	NG	98.98	NG	NG	NG	NG	
MW-2	12/15/2009	6.93	6.29	99.42	92.49	93.13	92.94	0.64	
	12/16/2009	12.88	12.51	99.42	86.54	86.91	86.80	0.37	
	12/17/2009	11.35	11.09	99.42	88.07	88.33	88.25	0.26	
	12/18/2009	12.53	12.01	99.42	86.89	87.41	87.25	0.52	
	12/19/2009	16.03	12.86	99.42	83.39	86.56	85.61	3.17	
	12/20/2009	17.30	13.43	99.42	82.12	85.99	84.83	3.87	
	12/21/2009	17.59	12.77	99.42	81.83	86.65	85.20	4.82	
	12/22/2009	15.17	10.24	99.42	84.25	89.18	87.70	4.93	
	12/23/2009	15.50	10.41	99.42	83.92	89.01	87.48	5.09	
	12/24/2009	15.20	10.42	99.42	84.22	89.00	87.57	4.78	
	12/25/2009	16.14	10.26	99.42	83.28	89.16	87.40	5.88	
	12/26/2009	14.61	8.13	99.42	84.81	91.29	89.35	6.48	
	12/27/2009	16.12	9.40	99.42	83.30	90.02	88.00	6.72	
	12/28/2009	16.20	9.48	99.42	83.22	89.94	87.92	6.72	
	12/29/2009	15.03	10.55	99.42	84.39	88.87	87.53	4.48	
	12/30/2009	15.21	10.96	99.42	84.21	88.46	87.19	4.25	
	12/31/2009	15.27	10.88	99.42	84.15	88.54	87.22	4.39	
	1/4/2010	17.03	9.86	99.42	82.39	89.56	87.41	7.17	
	1/5/2010	15.26	11.31	99.42	84.16	88.11	86.93	3.95	
	1/6/2010	15.68	10.89	99.42	83.74	88.53	87.09	4.79	
	1/7/2010	15.27	11.53	99.42	84.15	87.89	86.77	3.74	
	1/8/2010	15.06	11.55	99.42	84.36	87.87	86.82	3.51	
	1/9/2010	15.10	11.50	99.42	84.32	87.92	86.84	3.60	
	1/10/2010	16.19	11.03	99.42	83.23	88.39	86.84	5.16	
	1/11/2010	16.50	10.80	99.42	82.92	88.62	86.91	5.70	
	1/12/2010	14.94	11.62	99.42	84.48	87.80	86.80	3.32	
	1/13/2010	14.67	11.78	99.42	84.75	87.64	86.77	2.89	
	1/14/2010	14.52	12.10	99.42	84.90	87.32	86.59	2.42	
	1/15/2010	14.37	12.09	99.42	85.05	87.33	86.65	2.28	
	1/16/2010	14.49	12.17	99.42	84.93	87.25	86.55	2.32	
	1/17/2010	14.85	10.05	99.42	84.57	89.37	87.93	4.80	
	1/18/2010	15.55	10.35	99.42	83.87	89.07	87.51	5.20	
	1/19/2010	13.23	11.75	99.42	86.19	87.67	87.23	1.48	
	1/20/2010	13.19	11.88	99.42	86.23	87.54	87.15	1.31	
	1/21/2010	13.20	12.13	99.42	86.22	87.29	86.97	1.07	
	1/22/2010	13.02	12.00	99.42	86.40	87.42	87.11	1.02	
	1/23/2010	13.40	12.28	99.42	86.02	87.14	86.80	1.12	
	1/24/2010	14.21	11.48	99.42	85.21	87.94	87.12	2.73	
	1/25/2010	14.02	10.22	99.42	85.40	89.20	88.06	3.80	
	1/26/2010	12.42	11.79	99.42	87.00	87.63	87.44	0.63	

Table 3 - Historical Groundwater Elevation Data - Monitoring and Tank Pit Wells
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237

Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
	1/27/2010	12.61	12.01	99.42	86.81	87.41	87.23	0.60	
	1/28/2010	12.60	11.99	99.42	86.82	87.43	87.25	0.61	
	1/29/2010	12.74	12.25	99.42	86.68	87.17	87.02	0.49	
	1/30/2010	12.75	12.19	99.42	86.67	87.23	87.06	0.56	
	1/31/2010	13.37	11.83	99.42	86.05	87.59	87.13	1.54	
	2/1/2010	13.94	11.83	99.42	85.48	87.59	86.96	2.11	
	2/2/2010	12.64	12.33	99.42	86.78	87.09	87.00	0.31	
	2/3/2010	12.45	12.05	99.42	86.97	87.37	87.25	0.40	
	2/4/2010	12.42	11.92	99.42	87.00	87.50	87.35	0.50	
	2/5/2010	12.50	12.27	99.42	86.92	87.15	87.08	0.23	
	2/8/2010	12.93	11.45	99.42	86.49	87.97	87.53	1.48	
	2/9/2010	13.17	11.25	99.42	86.25	88.17	87.59	1.92	
	2/10/2010	13.15	10.68	99.42	86.27	88.74	88.00	2.47	
	2/11/2010	13.65	10.93	99.42	85.77	88.49	87.67	2.72	
	2/12/2010	13.79	10.79	99.42	85.63	88.63	87.73	3.00	
	2/15/2010	12.66	11.00	99.42	86.76	88.42	87.92	1.66	
	2/16/2010	11.51	11.28	99.42	87.91	88.14	88.07	0.23	
	2/17/2010	11.62	11.28	99.42	87.80	88.14	88.04	0.34	
	2/18/2010	11.54	11.34	99.42	87.88	88.08	88.02	0.20	
	2/19/2010	11.44	11.14	99.42	87.98	88.28	88.19	0.30	
MW-3	12/15/2009	NG	NG	92.5	NG	NG	NG	NG	
	12/16/2009	7.49	7.49	92.5	85.01	85.01	85.01	0.00	
	12/17/2009	8.11	8.07	92.5	84.39	84.43	84.42	0.04	
	12/18/2009	NG	NG	92.5	NG	NG	NG	NG	
	12/19/2009	4.83	4.83	92.5	87.67	87.67	87.67	0.00	
	12/20/2009	4.93	4.93	92.5	87.57	87.57	87.57	0.00	
	12/21/2009	4.96	4.96	92.5	87.54	87.54	87.54	0.00	
	12/22/2009	4.71	4.71	92.5	87.79	87.79	87.79	0.00	
	12/23/2009	4.64	4.64	92.5	87.86	87.86	87.86	0.00	
	12/24/2009	5.07	5.07	92.5	87.43	87.43	87.43	0.00	
	12/25/2009	5.21	5.21	92.5	87.29	87.29	87.29	0.00	
	12/26/2009	NG	NG	92.5	NG	NG	NG	NG	
	12/27/2009	4.40	4.40	92.5	88.10	88.10	88.10	0.00	
	12/28/2009	6.02	6.02	92.5	86.48	86.48	86.48	0.00	
	12/29/2009	5.45	5.45	92.5	87.05	87.05	87.05	0.00	
	12/30/2009	7.59	7.59	92.5	84.91	84.91	84.91	0.00	
	12/31/2009	5.31	5.31	92.5	87.19	87.19	87.19	0.00	
	1/4/2010	5.20	5.20	92.5	87.30	87.30	87.30	0.00	
	1/5/2010	5.71	5.71	92.5	86.79	86.79	86.79	0.00	
	1/6/2010	5.64	5.64	92.5	86.86	86.86	86.86	0.00	
	1/7/2010	5.58	5.58	92.5	86.92	86.92	86.92	0.00	
	1/8/2010	5.81	5.81	92.5	86.69	86.69	86.69	0.00	
	1/9/2010	5.69	5.69	92.5	86.81	86.81	86.81	0.00	
	1/10/2010	5.68	5.68	92.5	86.82	86.82	86.82	0.00	
	1/11/2010	5.62	5.62	92.5	86.88	86.88	86.88	0.00	
	1/12/2010	7.15	7.15	92.5	85.35	85.35	85.35	0.00	
	1/13/2010	6.08	6.08	92.5	86.42	86.42	86.42	0.00	
	1/14/2010	6.07	6.07	92.5	86.43	86.43	86.43	0.00	
	1/15/2010	6.21	6.21	92.5	86.29	86.29	86.29	0.00	
	1/16/2010	6.09	6.09	92.5	86.41	86.41	86.41	0.00	

Table 3 - Historical Groundwater Elevation Data - Monitoring and Tank Pit Wells
Gasoline Fueling Station – Royal Farms #64
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Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
	1/17/2010	2.04	2.04	92.5	90.46	90.46	90.46	0.00	
	1/18/2010	4.97	4.97	92.5	87.53	87.53	87.53	0.00	
	1/19/2010	5.28	5.28	92.5	87.22	87.22	87.22	0.00	
	1/20/2010	5.41	5.41	92.5	87.09	87.09	87.09	0.00	
	1/21/2010	5.68	5.68	92.5	86.82	86.82	86.82	0.00	
	1/22/2010	5.52	5.52	92.5	86.98	86.98	86.98	0.00	
	1/23/2010	5.81	5.81	92.5	86.69	86.69	86.69	0.00	
	1/24/2010	5.54	5.54	92.5	86.96	86.96	86.96	0.00	
	1/25/2010	4.98	4.98	92.5	87.52	87.52	87.52	0.00	
	1/26/2010	5.39	5.38	92.5	87.11	87.12	87.12	0.01	
	1/27/2010	5.63	5.63	92.5	86.87	86.87	86.87	0.00	
	1/28/2010	5.44	5.44	92.5	87.06	87.06	87.06	0.00	
	1/29/2010	5.83	5.83	92.5	86.67	86.67	86.67	0.00	
	1/30/2010	5.68	5.68	92.5	86.82	86.82	86.82	0.00	
	1/31/2010	5.61	5.61	92.5	86.89	86.89	86.89	0.00	
	2/1/2010	5.64	5.64	92.5	86.86	86.86	86.86	0.00	
	2/2/2010	5.93	5.93	92.5	86.57	86.57	86.57	0.00	
	2/3/2010	5.65	5.65	92.5	86.85	86.85	86.85	0.00	
	2/4/2010	5.93	5.93	92.5	86.57	86.57	86.57	0.00	
	2/5/2010	5.50	5.50	92.5	87.00	87.00	87.00	0.00	
	2/8/2010	NG	NG	92.5	NG	NG	NG	NG	
	2/9/2010	5.18	5.18	92.5	87.32	87.32	87.32	0.00	
	2/10/2010	4.73	4.73	92.5	87.77	87.77	87.77	0.00	
	2/11/2010	5.04	5.04	92.5	87.46	87.46	87.46	0.00	
	2/12/2010	4.95	4.95	92.5	87.55	87.55	87.55	0.00	
	2/15/2010	4.28	4.28	92.5	88.22	88.22	88.22	0.00	
	2/16/2010	5.75	5.75	92.5	86.75	86.75	86.75	0.00	
	2/17/2010	4.78	4.78	92.5	87.72	87.72	87.72	0.00	
	2/18/2010	4.84	4.84	92.5	87.66	87.66	87.66	0.00	
	2/19/2010	4.90	4.90	92.5	87.60	87.60	87.60	0.00	
MW-4	12/15/2009	NG	NG	93.77	NG	NG	NG	NG	
	12/16/2009	11.42	8.81	93.77	82.35	84.96	84.18	2.61	
	12/17/2009	13.21	13.17	93.77	80.56	80.60	80.59	0.04	
	12/18/2009	13.63	13.63	93.77	80.14	80.14	80.14	0.00	
	12/19/2009	7.10	5.61	93.77	86.67	88.16	87.71	1.49	
	12/20/2009	7.94	5.97	93.77	85.83	87.80	87.21	1.97	
	12/21/2009	8.17	5.94	93.77	85.60	87.83	87.16	2.23	
	12/22/2009	6.75	5.79	93.77	87.02	87.98	87.69	0.96	
	12/23/2009	6.69	6.60	93.77	87.08	87.17	87.14	0.09	
	12/24/2009	3.58	3.29	93.77	90.19	90.48	90.39	0.29	
	12/25/2009	6.73	6.21	93.77	87.04	87.56	87.40	0.52	
	12/26/2009	3.60	3.15	93.77	90.17	90.62	90.49	0.45	
	12/27/2009	5.92	5.50	93.77	87.85	88.27	88.14	0.42	
	12/28/2009	6.16	5.90	93.77	87.61	87.87	87.79	0.26	
	12/29/2009	6.61	6.55	93.77	87.16	87.22	87.20	0.06	
	12/30/2009	6.91	6.86	93.77	78.46	86.91	78.50	0.05	
	12/31/2009	6.74	6.67	93.77	87.03	87.10	87.08	0.07	
	1/4/2010	7.07	6.25	93.77	86.70	87.52	87.27	0.82	
	1/5/2010	7.07	7.00	93.77	86.70	86.77	86.75	0.07	
	1/6/2010	6.96	6.90	93.77	86.81	86.87	86.85	0.06	

**Table 3 - Historical Groundwater Elevation Data - Monitoring and Tank Pit Wells
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Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
	1/7/2010	7.31	7.27	93.77	86.46	86.50	86.49	0.04	
	1/8/2010	7.15	7.15	93.77	86.62	86.62	86.62	0.00	
	1/9/2010	7.06	7.04	93.77	86.71	86.73	86.72	0.02	
	1/10/2010	7.07	6.96	93.77	86.70	86.81	86.78	0.11	
	1/11/2010	7.04	6.81	93.77	86.73	86.96	86.89	0.23	
	1/12/2010	7.19	7.13	93.77	86.58	86.64	86.62	0.06	
	1/13/2010	7.41	7.40	93.77	86.36	86.37	86.37	0.01	
	1/14/2010	7.35	7.35	93.77	86.42	86.42	86.42	0.00	
	1/15/2010	7.55	7.55	93.77	86.22	86.22	86.22	0.00	
	1/16/2010	7.49	7.48	93.77	86.28	86.29	86.29	0.01	
	1/17/2010	5.28	5.18	93.77	88.49	88.59	88.56	0.10	
	1/18/2010	6.17	6.17	93.77	87.60	87.60	87.60	0.00	
	1/19/2010	6.81	6.81	93.77	86.96	86.96	86.96	0.00	
	1/20/2010	6.70	6.70	93.77	87.07	87.07	87.07	0.00	
	1/21/2010	6.91	6.91	93.77	86.86	86.86	86.86	0.00	
	1/22/2010	6.71	6.71	93.77	87.06	87.06	87.06	0.00	
	1/23/2010	7.04	7.04	93.77	86.73	86.73	86.73	0.00	
	1/24/2010	6.76	6.76	93.77	87.01	87.01	87.01	0.00	
	1/25/2010	5.52	5.52	93.77	88.25	88.25	88.25	0.00	
	1/26/2010	6.64	6.64	93.77	87.13	87.13	87.13	0.00	Sheen
	1/27/2010	6.85	6.85	93.77	86.92	86.92	86.92	0.00	
	1/28/2010	6.55	6.55	93.77	87.22	87.22	87.22	0.00	
	1/29/2010	6.99	6.99	93.77	86.78	86.78	86.78	0.00	
	1/30/2010	6.89	6.88	93.77	86.88	86.89	86.89	0.01	
	1/31/2010	6.84	6.79	93.77	86.93	86.98	86.97	0.05	
	2/1/2010	6.90	6.78	93.77	86.87	86.99	86.95	0.12	
	2/2/2010	7.03	7.00	93.77	86.74	86.77	86.76	0.03	
	2/3/2010	6.95	6.92	93.77	86.82	86.85	86.84	0.03	
	2/4/2010	6.10	6.05	93.77	87.67	87.72	87.71	0.05	
	2/5/2010	6.82	6.78	93.77	86.95	86.99	86.98	0.04	
	2/8/2010	NG	NG	93.77	NG	NG	NG	NG	
	2/9/2010	6.45	6.42	93.77	87.32	87.35	87.34	0.03	
	2/10/2010	5.99	5.95	93.77	87.78	87.82	87.81	0.04	
	2/11/2010	6.33	6.27	93.77	87.44	87.50	87.48	0.06	
	2/12/2010	6.25	6.13	93.77	87.52	87.64	87.60	0.12	
	2/15/2010	6.27	5.95	93.77	87.50	87.82	87.72	0.32	
	2/16/2010	6.06	6.03	93.77	87.71	87.74	87.73	0.03	
	2/17/2010	5.48	5.48	93.77	88.29	88.29	88.29	0.00	
	2/18/2010	6.00	6.00	93.77	87.77	87.77	87.77	0.00	
	2/19/2010	5.67	5.66	93.77	88.10	88.11	88.11	0.01	
MW-5	12/15/2009	NG	NG	91.96	NG	NG	NG	NG	
	12/16/2009	6.50	6.50	91.96	85.46	85.46	85.46	0.00	
	12/17/2009	7.31	7.23	91.96	84.65	84.73	84.71	0.08	
	12/18/2009	7.67	7.63	91.96	84.29	84.33	84.32	0.04	
	12/19/2009	4.42	4.17	91.96	87.54	87.79	87.72	0.25	
	12/20/2009	4.81	4.69	91.96	87.15	87.27	87.23	0.12	
	12/21/2009	5.03	4.54	91.96	86.93	87.42	87.27	0.49	
	12/22/2009	4.39	3.98	91.96	87.57	87.98	87.86	0.41	
	12/23/2009	5.40	4.21	91.96	86.56	87.75	87.39	1.19	
	12/24/2009	4.87	3.89	91.96	87.09	88.07	87.78	0.98	

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Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
	12/25/2009	6.31	4.34	91.96	85.65	87.62	87.03	1.97	
	12/26/2009	NG	NG	91.96	NG	NG	NG	NG	
	12/27/2009	3.50	3.50	91.96	88.46	88.46	88.46	0.00	Sheen
	12/28/2009	7.60	3.83	91.96	84.36	88.13	87.00	3.77	
	12/29/2009	7.40	3.81	91.96	84.56	88.15	87.07	3.59	
	12/30/2009	7.36	3.99	91.96	84.60	87.97	86.96	3.37	
	12/31/2009	6.82	4.21	91.96	85.14	87.75	86.97	2.61	
	1/4/2010	9.49	2.91	91.96	82.47	89.05	87.08	6.58	
	1/5/2010	7.68	4.05	91.96	84.28	87.91	86.82	3.63	
	1/6/2010	8.06	3.93	91.96	83.90	88.03	86.79	4.13	
	1/7/2010	8.02	4.23	91.96	83.94	87.73	86.59	3.79	
	1/8/2010	7.70	4.27	91.96	84.26	87.69	86.66	3.43	
	1/9/2010	8.23	4.24	91.96	83.73	87.72	86.52	3.99	
	1/10/2010	8.10	4.14	91.96	83.86	87.82	86.63	3.96	
	1/11/2010	8.53	4.00	91.96	83.43	87.96	86.60	4.53	
	1/12/2010	8.25	4.23	91.96	83.71	87.73	86.52	4.02	
	1/13/2010	7.79	4.35	91.96	84.17	87.61	86.58	3.44	
	1/14/2010	8.08	4.54	91.96	83.88	87.42	86.36	3.54	
	1/15/2010	8.08	4.57	91.96	83.88	87.39	86.34	3.51	
	1/16/2010	8.15	4.61	91.96	83.81	87.35	86.29	3.54	
	1/17/2010	1.40	1.08	91.96	90.56	90.88	90.78	0.32	
	1/18/2010	5.67	3.72	91.96	86.29	88.24	87.66	1.95	
	1/19/2010	7.52	3.79	91.96	84.44	88.17	87.05	3.73	
	1/20/2010	7.77	4.13	91.96	84.19	87.83	86.74	3.64	
	1/21/2010	7.53	4.22	91.96	84.43	87.74	86.75	3.31	
	1/22/2010	7.51	4.29	91.96	84.45	87.67	86.70	3.22	
	1/23/2010	7.84	4.39	91.96	84.12	87.57	86.54	3.45	
	1/24/2010	7.59	4.03	91.96	84.37	87.93	86.86	3.56	
	1/25/2010	3.90	1.32	91.96	88.06	90.64	89.87	2.58	
	1/26/2010	5.13	4.08	91.96	86.83	87.88	87.57	1.05	
	1/27/2010	6.45	4.30	91.96	85.51	87.66	87.02	2.15	
	1/28/2010	7.42	4.05	91.96	84.54	87.91	86.90	3.37	
	1/29/2010	7.45	4.36	91.96	84.51	87.60	86.67	3.09	
	1/30/2010	7.39	4.23	91.96	84.57	87.73	86.78	3.16	
	1/31/2010	7.66	4.12	91.96	84.30	87.84	86.78	3.54	
	2/1/2010	7.77	3.98	91.96	84.19	87.98	86.84	3.79	
	2/2/2010	7.21	4.35	91.96	84.75	87.61	86.75	2.86	
	2/3/2010	5.20	4.23	91.96	86.76	87.73	87.44	0.97	
	2/4/2010	5.73	4.24	91.96	86.23	87.72	87.27	1.49	
	2/5/2010	6.68	4.45	91.96	85.28	87.51	86.84	2.23	
	2/8/2010	NG	NG	91.96	NG	NG	NG	NG	
	2/9/2010	4.04	3.93	91.96	87.92	88.03	88.00	0.11	
	2/10/2010	2.82	2.73	91.96	89.14	89.23	89.20	0.09	
	2/11/2010	3.38	3.27	91.96	88.58	88.69	88.66	0.11	
	2/12/2010	3.79	3.65	91.96	88.17	88.31	88.27	0.14	
	2/15/2010	3.52	3.44	91.96	88.44	88.52	88.50	0.08	
	2/16/2010	4.05	3.54	91.96	87.91	88.42	88.27	0.51	
	2/17/2010	3.60	3.42	91.96	88.36	88.54	88.49	0.18	
	2/18/2010	4.00	3.52	91.96	87.96	88.44	88.30	0.48	
	2/19/2010	3.50	3.25	91.96	88.46	88.71	88.64	0.25	

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Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
MW-6	12/15/2009	NG	NG	99.15	NG	NG	NG	NG	
	12/16/2009	14.24	14.24	99.15	84.91	84.91	84.91	0.00	
	12/17/2009	13.57	13.57	99.15	85.58	85.58	85.58	0.00	
	12/18/2009	12.26	12.26	99.15	86.89	86.89	86.89	0.00	
	12/19/2009	12.73	12.73	99.15	86.42	86.42	86.42	0.00	
	12/20/2009	12.90	12.90	99.15	86.25	86.25	86.25	0.00	Sheen
	12/21/2009	12.04	12.04	99.15	87.11	87.11	87.11	0.00	Sheen
	12/22/2009	12.79	12.79	99.15	86.36	86.36	86.36	0.00	
	12/23/2009	12.80	12.80	99.15	86.35	86.35	86.35	0.00	
	12/24/2009	12.86	12.85	99.15	86.29	86.30	86.30	0.01	
	12/25/2009	12.83	12.82	99.15	86.32	86.33	86.33	0.01	
	12/26/2009	11.84	11.52	99.15	87.31	87.63	87.53	0.32	
	12/27/2009	12.77	12.00	99.15	86.38	87.15	86.92	0.77	
	12/28/2009	12.50	12.24	99.15	86.65	86.91	86.83	0.26	
	12/29/2009	12.94	12.78	99.15	86.21	86.37	86.32	0.16	
	12/30/2009	12.96	12.96	99.15	86.19	86.19	86.19	0.00	
	12/31/2009	12.88	12.86	99.15	86.27	86.29	86.28	0.02	
	1/4/2010	12.88	12.56	99.15	86.27	86.59	86.49	0.32	
	1/5/2010	13.06	12.99	99.15	86.09	86.16	86.14	0.07	
	1/6/2010	13.02	13.00	99.15	86.13	86.15	86.14	0.02	
	1/7/2010	13.23	13.21	99.15	85.92	85.94	85.93	0.02	
	1/8/2010	13.17	13.15	99.15	85.98	86.00	85.99	0.02	
	1/9/2010	13.24	13.24	99.15	85.91	85.91	85.91	0.00	
	1/10/2010	13.21	13.20	99.15	85.94	85.95	85.95	0.01	
	1/11/2010	13.11	13.10	99.15	86.04	86.05	86.05	0.01	
	1/12/2010	13.21	13.21	99.15	85.94	85.94	85.94	0.00	
	1/13/2010	13.21	13.21	99.15	85.94	85.94	85.94	0.00	
	1/14/2010	13.34	13.34	99.15	85.81	85.81	85.81	0.00	Sheen
	1/15/2010	13.34	13.34	99.15	85.81	85.81	85.81	0.00	
	1/16/2010	13.38	13.38	99.15	85.77	85.77	85.77	0.00	
	1/17/2010	12.39	12.31	99.15	86.76	86.84	86.82	0.08	
	1/18/2010	12.66	12.53	99.15	86.49	86.62	86.58	0.13	
	1/19/2010	12.87	12.87	99.15	86.28	86.28	86.28	0.00	Sheen
	1/20/2010	12.93	12.93	99.15	86.22	86.22	86.22	0.00	Sheen
	1/21/2010	13.10	13.10	99.15	86.05	86.05	86.05	0.00	
	1/22/2010	12.95	12.94	99.15	86.20	86.21	86.21	0.01	
	1/23/2010	13.23	13.23	99.15	85.92	85.92	85.92	0.00	
	1/24/2010	13.00	12.99	99.15	86.15	86.16	86.16	0.01	
	1/25/2010	12.25	12.25	99.15	86.90	86.90	86.90	0.00	
	1/26/2010	12.72	12.68	99.15	86.43	86.47	86.46	0.04	
	1/27/2010	12.91	12.91	99.15	86.24	86.24	86.24	0.00	
	1/28/2010	12.87	12.86	99.15	86.28	86.29	86.29	0.01	
	1/29/2010	13.07	13.07	99.15	86.08	86.08	86.08	0.00	Sheen
	1/30/2010	13.04	13.04	99.15	86.11	86.11	86.11	0.00	
	1/31/2010	12.96	12.95	99.15	86.19	86.20	86.20	0.01	
	2/1/2010	13.00	12.98	99.15	86.15	86.17	86.16	0.02	
	2/2/2010	13.07	13.07	99.15	86.08	86.08	86.08	0.00	Sheen
	2/3/2010	12.91	12.90	99.15	86.24	86.25	86.25	0.01	
	2/4/2010	12.93	12.92	99.15	86.22	86.23	86.23	0.01	
	2/5/2010	13.01	12.99	99.15	86.14	86.16	86.15	0.02	

**Table 3 - Historical Groundwater Elevation Data - Monitoring and Tank Pit Wells
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
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Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
	2/8/2010	NG	NG	99.15	NG	NG	NG	NG	
	2/9/2010	NG	NG	99.15	NG	NG	NG	NG	
	2/10/2010	NG	NG	99.15	NG	NG	NG	NG	
	2/11/2010	NG	NG	99.15	NG	NG	NG	NG	
	2/12/2010	NG	NG	99.15	NG	NG	NG	NG	
	2/15/2010	NG	NG	99.15	NG	NG	NG	NG	
	2/16/2010	NG	NG	99.15	NG	NG	NG	NG	
	2/17/2010	NG	NG	99.15	NG	NG	NG	NG	
	2/18/2010	NG	NG	99.15	NG	NG	NG	NG	
	2/19/2010	12.22	11.99	99.15	86.93	87.16	87.09	0.23	
MW-7	12/15/2009	NG	NG	99.85	NG	NG	NG	NG	
	12/16/2009	NG	NG	99.85	NG	NG	NG	NG	
	12/17/2009	13.66	13.66	99.85	86.19	86.19	86.19	0.00	
	12/18/2009	13.63	13.63	99.85	86.22	86.22	86.22	0.00	
	12/19/2009	13.62	13.62	99.85	86.23	86.23	86.23	0.00	
	12/20/2009	NG	NG	99.85	NG	NG	NG	NG	
	12/21/2009	13.87	13.87	99.85	85.98	85.98	85.98	0.00	
	12/22/2009	13.80	13.80	99.85	86.05	86.05	86.05	0.00	
	12/23/2009	13.75	13.75	99.85	86.10	86.10	86.10	0.00	
	12/24/2009	13.81	13.81	99.85	86.04	86.04	86.04	0.00	
	12/25/2009	13.72	13.72	99.85	86.13	86.13	86.13	0.00	
	12/26/2009	12.60	12.60	99.85	87.25	87.25	87.25	0.00	
	12/27/2009	13.30	13.27	99.85	86.55	86.58	86.57	0.03	
	12/28/2009	13.33	13.27	99.85	86.52	86.58	86.56	0.06	
	12/29/2009	13.26	13.24	99.85	86.59	86.61	86.60	0.02	
	12/30/2009	13.71	13.70	99.85	86.14	86.15	86.15	0.01	
	12/31/2009	13.42	13.41	99.85	86.43	86.44	86.44	0.01	
	1/4/2010	14.01	13.47	99.85	85.84	86.38	86.22	0.54	
	1/5/2010	13.42	13.32	99.85	86.43	86.53	86.50	0.10	
	1/6/2010	14.75	14.48	99.85	85.10	85.37	85.29	0.27	
	1/7/2010	13.54	13.40	99.85	86.31	86.45	86.41	0.14	
	1/8/2010	14.04	13.92	99.85	85.81	85.93	85.89	0.12	
	1/9/2010	13.71	13.65	99.85	86.14	86.20	86.18	0.06	
	1/10/2010	13.66	13.57	99.85	86.19	86.28	86.25	0.09	
	1/11/2010	13.44	13.27	99.85	86.41	86.58	86.53	0.17	
	1/12/2010	13.46	13.39	99.85	86.39	86.46	86.44	0.07	
	1/13/2010	13.35	13.29	99.85	86.50	86.56	86.54	0.06	
	1/14/2010	14.00	13.94	99.85	85.85	85.91	85.89	0.06	
	1/15/2010	14.15	14.10	99.85	85.70	85.75	85.74	0.05	
	1/16/2010	13.84	13.80	99.85	86.01	86.05	86.04	0.04	
	1/17/2010	12.71	12.55	99.85	87.14	87.30	87.25	0.16	
	1/18/2010	13.05	12.81	99.85	86.80	87.04	86.97	0.24	
	1/19/2010	13.62	13.52	99.85	86.23	86.33	86.30	0.10	
	1/20/2010	13.76	13.72	99.85	86.09	86.13	86.12	0.04	
	1/21/2010	14.04	13.98	99.85	85.81	85.87	85.85	0.06	
	1/22/2010	13.66	13.64	99.85	86.19	86.21	86.20	0.02	
	1/23/2010	13.80	13.78	99.85	86.05	86.07	86.06	0.02	
	1/24/2010	13.53	13.47	99.85	86.32	86.38	86.36	0.06	
	1/25/2010	12.40	12.25	99.85	87.45	87.60	87.56	0.15	
	1/26/2010	13.47	13.45	99.85	86.38	86.40	86.39	0.02	

Table 3 - Historical Groundwater Elevation Data - Monitoring and Tank Pit Wells
Gasoline Fueling Station – Royal Farms #64
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Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
	1/27/2010	13.67	13.64	99.85	86.18	86.21	86.20	0.03	
	1/28/2010	13.76	13.75	99.85	86.09	86.10	86.10	0.01	
	1/29/2010	13.87	13.86	99.85	85.98	85.99	85.99	0.01	
	1/30/2010	13.94	13.92	99.85	85.91	85.93	85.92	0.02	
	1/31/2010	13.48	13.42	99.85	86.37	86.43	86.41	0.06	
	2/1/2010	13.50	13.40	99.85	86.35	86.45	86.42	0.10	
	2/2/2010	13.54	13.54	99.85	86.31	86.31	86.31	0.00	
	2/3/2010	13.52	13.47	99.85	86.33	86.38	86.37	0.05	
	2/4/2010	12.42	12.35	99.85	87.43	87.50	87.48	0.07	
	2/5/2010	13.89	13.87	99.85	85.96	85.98	85.97	0.02	
	2/8/2010	13.11	12.99	99.85	86.74	86.86	86.82	0.12	
	2/9/2010	13.17	13.01	99.85	86.68	86.84	86.79	0.16	
	2/10/2010	12.63	12.43	99.85	87.22	87.42	87.36	0.20	
	2/11/2010	12.97	12.74	99.85	86.88	87.11	87.04	0.23	
	2/12/2010	13.53	13.28	99.85	86.32	86.57	86.50	0.25	
	2/15/2010	12.94	12.75	99.85	86.91	87.10	87.04	0.19	
	2/16/2010	12.62	12.61	99.85	87.23	87.24	87.24	0.01	
	2/17/2010	11.90	11.90	99.85	87.95	87.95	87.95	0.00	
	2/18/2010	12.27	12.27	99.85	87.58	87.58	87.58	0.00	
	2/19/2010	11.62	11.62	99.85	88.23	88.23	88.23	0.00	
MW-8	12/15/2009	NG	NG	100.1	NG	NG	NG	NG	
	12/16/2009	NG	NG	100.1	NG	NG	NG	NG	
	12/17/2009	14.01	14.01	100.1	86.09	86.09	86.09	0.00	
	12/18/2009	14.22	14.22	100.1	85.88	85.88	85.88	0.00	
	12/19/2009	12.23	12.23	100.1	87.87	87.87	87.87	0.00	
	12/20/2009	NG	NG	100.1	NG	NG	NG	NG	
	12/21/2009	12.52	12.52	100.1	87.58	87.58	87.58	0.00	
	12/22/2009	12.37	12.37	100.1	87.73	87.73	87.73	0.00	
	12/23/2009	12.39	12.39	100.1	87.71	87.71	87.71	0.00	
	12/24/2009	12.47	12.47	100.1	87.63	87.63	87.63	0.00	
	12/25/2009	13.41	13.41	100.1	86.69	86.69	86.69	0.00	
	12/26/2009	11.72	11.72	100.1	88.38	88.38	88.38	0.00	
	12/27/2009	11.71	11.71	100.1	88.39	88.39	88.39	0.00	
	12/28/2009	12.27	12.27	100.1	87.83	87.83	87.83	0.00	
	12/29/2009	12.93	12.93	100.1	87.17	87.17	87.17	0.00	
	12/30/2009	12.62	12.62	100.1	87.48	87.48	87.48	0.00	
	12/31/2009	12.55	12.55	100.1	87.55	87.55	87.55	0.00	
	1/4/2010	12.83	12.83	100.1	87.27	87.27	87.27	0.00	
	1/5/2010	12.75	12.75	100.1	87.35	87.35	87.35	0.00	
	1/6/2010	12.66	12.66	100.1	87.44	87.44	87.44	0.00	
	1/7/2010	13.00	13.00	100.1	87.10	87.10	87.10	0.00	
	1/8/2010	13.02	13.02	100.1	87.08	87.08	87.08	0.00	
	1/9/2010	12.99	12.99	100.1	87.11	87.11	87.11	0.00	
	1/10/2010	12.89	12.89	100.1	87.21	87.21	87.21	0.00	
	1/11/2010	12.78	12.78	100.1	87.32	87.32	87.32	0.00	
	1/12/2010	13.02	13.02	100.1	87.08	87.08	87.08	0.00	
	1/13/2010	13.05	13.05	100.1	87.05	87.05	87.05	0.00	
	1/14/2010	13.26	13.26	100.1	86.84	86.84	86.84	0.00	
	1/15/2010	13.21	13.21	100.1	86.89	86.89	86.89	0.00	
	1/16/2010	13.27	13.27	100.1	86.83	86.83	86.83	0.00	

Table 3 - Historical Groundwater Elevation Data - Monitoring and Tank Pit Wells
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Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
	1/17/2010	11.34	11.34	100.1	88.76	88.76	88.76	0.00	
	1/18/2010	12.27	12.27	100.1	87.83	87.83	87.83	0.00	
	1/19/2010	12.66	12.66	100.1	87.44	87.44	87.44	0.00	
	1/20/2010	12.75	12.75	100.1	87.35	87.35	87.35	0.00	
	1/21/2010	12.93	12.93	100.1	87.17	87.17	87.17	0.00	
	1/22/2010	12.78	12.78	100.1	87.32	87.32	87.32	0.00	
	1/23/2010	13.07	13.07	100.1	87.03	87.03	87.03	0.00	
	1/24/2010	12.73	12.73	100.1	87.37	87.37	87.37	0.00	
	1/25/2010	11.79	11.79	100.1	88.31	88.31	88.31	0.00	
	1/26/2010	12.46	12.46	100.1	87.64	87.64	87.64	0.00	
	1/27/2010	12.68	12.68	100.1	87.42	87.42	87.42	0.00	
	1/28/2010	12.84	12.84	100.1	87.26	87.26	87.26	0.00	
	1/29/2010	12.89	12.89	100.1	87.21	87.21	87.21	0.00	
	1/30/2010	12.83	12.83	100.1	87.27	87.27	87.27	0.00	
	1/31/2010	12.71	12.71	100.1	87.39	87.39	87.39	0.00	
	2/1/2010	12.71	12.71	100.1	87.39	87.39	87.39	0.00	
	2/2/2010	12.90	12.90	100.1	87.20	87.20	87.20	0.00	
	2/3/2010	12.64	12.64	100.1	87.46	87.46	87.46	0.00	
	2/4/2010	12.67	12.67	100.1	87.43	87.43	87.43	0.00	
	2/5/2010	12.83	12.83	100.1	87.27	87.27	87.27	0.00	
	2/8/2010	12.31	12.31	100.1	87.79	87.79	87.79	0.00	
	2/9/2010	12.23	12.23	100.1	87.87	87.87	87.87	0.00	
	2/10/2010	11.77	11.77	100.1	88.33	88.33	88.33	0.00	
	2/11/2010	12.11	12.11	100.1	87.99	87.99	87.99	0.00	
	2/12/2010	12.03	12.03	100.1	88.07	88.07	88.07	0.00	
	2/15/2010	11.82	11.82	100.1	88.28	88.28	88.28	0.00	
	2/16/2010	11.80	11.80	100.1	88.30	88.30	88.30	0.00	
	2/17/2010	11.81	11.81	100.1	88.29	88.29	88.29	0.00	
	2/18/2010	11.83	11.83	100.1	88.27	88.27	88.27	0.00	
	2/19/2010	11.61	11.61	100.1	88.49	88.49	88.49	0.00	
MW-9	12/15/2009	NG	NG	100.25	NG	NG	NG	NG	
	12/16/2009	NG	NG	100.25	NG	NG	NG	NG	
	12/17/2009	14.22	14.22	100.25	86.03	86.03	86.03	0.00	
	12/18/2009	15.11	15.11	100.25	85.14	85.14	85.14	0.00	
	12/19/2009	13.29	13.29	100.25	86.96	86.96	86.96	0.00	
	12/20/2009	NG	NG	100.25	NG	NG	NG	NG	
	12/21/2009	13.48	13.48	100.25	86.77	86.77	86.77	0.00	
	12/22/2009	13.51	13.51	100.25	86.74	86.74	86.74	0.00	
	12/23/2009	13.60	13.60	100.25	86.65	86.65	86.65	0.00	
	12/24/2009	13.66	13.66	100.25	86.59	86.59	86.59	0.00	
	12/25/2009	13.62	13.62	100.25	86.63	86.63	86.63	0.00	
	12/26/2009	12.31	12.31	100.25	87.94	87.94	87.94	0.00	
	12/27/2009	13.05	13.05	100.25	87.20	87.20	87.20	0.00	
	12/28/2009	13.30	13.30	100.25	86.95	86.95	86.95	0.00	
	12/29/2009	13.80	13.80	100.25	86.45	86.45	86.45	0.00	
	12/30/2009	13.82	13.82	100.25	86.43	86.43	86.43	0.00	
	12/31/2009	13.75	13.75	100.25	86.50	86.50	86.50	0.00	
	1/4/2010	13.71	13.71	100.25	86.54	86.54	86.54	0.00	
	1/5/2010	13.84	13.84	100.25	86.41	86.41	86.41	0.00	
	1/6/2010	13.79	13.79	100.25	86.46	86.46	86.46	0.00	

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Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
	1/7/2010	14.03	14.03	100.25	86.22	86.22	86.22	0.00	
	1/8/2010	14.02	14.02	100.25	86.23	86.23	86.23	0.00	
	1/9/2010	14.06	14.06	100.25	86.19	86.19	86.19	0.00	
	1/10/2010	14.01	14.01	100.25	86.24	86.24	86.24	0.00	
	1/11/2010	13.92	13.92	100.25	86.33	86.33	86.33	0.00	
	1/12/2010	14.08	14.08	100.25	86.17	86.17	86.17	0.00	
	1/13/2010	14.10	14.10	100.25	86.15	86.15	86.15	0.00	
	1/14/2010	14.24	14.24	100.25	86.01	86.01	86.01	0.00	
	1/15/2010	14.18	14.18	100.25	86.07	86.07	86.07	0.00	
	1/16/2010	14.25	14.25	100.25	86.00	86.00	86.00	0.00	
	1/17/2010	13.15	13.15	100.25	87.10	87.10	87.10	0.00	
	1/18/2010	13.44	13.44	100.25	86.81	86.81	86.81	0.00	
	1/19/2010	13.73	13.73	100.25	86.52	86.52	86.52	0.00	
	1/20/2010	13.80	13.80	100.25	86.45	86.45	86.45	0.00	
	1/21/2010	13.95	13.95	100.25	86.30	86.30	86.30	0.00	
	1/22/2010	13.80	13.80	100.25	86.45	86.45	86.45	0.00	
	1/23/2010	14.04	14.04	100.25	86.21	86.21	86.21	0.00	
	1/24/2010	13.80	13.80	100.25	86.45	86.45	86.45	0.00	
	1/25/2010	13.05	13.05	100.25	87.20	87.20	87.20	0.00	
	1/26/2010	13.52	13.52	100.25	86.73	86.73	86.73	0.00	
	1/27/2010	13.75	13.75	100.25	86.50	86.50	86.50	0.00	
	1/28/2010	13.70	13.70	100.25	86.55	86.55	86.55	0.00	
	1/29/2010	13.91	13.91	100.25	86.34	86.34	86.34	0.00	
	1/30/2010	13.86	13.86	100.25	86.39	86.39	86.39	0.00	
	1/31/2010	13.80	13.80	100.25	86.45	86.45	86.45	0.00	
	2/1/2010	13.79	13.79	100.25	86.46	86.46	86.46	0.00	
	2/2/2010	13.66	13.66	100.25	86.59	86.59	86.59	0.00	
	2/3/2010	13.70	13.70	100.25	86.55	86.55	86.55	0.00	
	2/4/2010	13.74	13.74	100.25	86.51	86.51	86.51	0.00	
	2/5/2010	13.84	13.84	100.25	86.41	86.41	86.41	0.00	
	2/8/2010	13.45	13.45	100.25	86.80	86.80	86.80	0.00	
	2/9/2010	13.39	13.39	100.25	86.86	86.86	86.86	0.00	
	2/10/2010	12.97	12.97	100.25	87.28	87.28	87.28	0.00	
	2/11/2010	13.27	13.27	100.25	86.98	86.98	86.98	0.00	
	2/12/2010	13.19	13.19	100.25	87.06	87.06	87.06	0.00	
	2/15/2010	13.08	13.08	100.25	87.17	87.17	87.17	0.00	
	2/16/2010	12.99	12.99	100.25	87.26	87.26	87.26	0.00	
	2/17/2010	13.03	13.03	100.25	87.22	87.22	87.22	0.00	
	2/18/2010	13.04	13.04	100.25	87.21	87.21	87.21	0.00	
	2/19/2010	12.86	12.86	100.25	87.39	87.39	87.39	0.00	
TP-1	12/15/2009	NG	NG	NM	NG	NG	NG	NG	
	12/16/2009	9.12	8.89	NM	NM	NM	NM	0.23	
	12/17/2009	9.53	9.49	NM	NM	NM	NM	0.04	
	12/18/2009	10.93	10.42	NM	NM	NM	NM	0.51	
	12/19/2009	10.91	10.90	NM	NM	NM	NM	0.01	
	12/20/2009	10.91	10.91	NM	NM	NM	NM	0.00	Sheen
	12/21/2009	10.54	10.53	NM	NM	NM	NM	0.01	
	12/22/2009	10.76	10.76	NM	NM	NM	NM	0.00	
	12/23/2009	10.75	10.75	NM	NM	NM	NM	0.00	
	12/24/2009	10.69	10.69	NM	NM	NM	NM	0.00	Sheen

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Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
	12/25/2009	10.65	10.63	NM	NM	NM	NM	0.02	
	12/26/2009	10.28	10.28	NM	NM	NM	NM	0.00	Sheen
	12/27/2009	10.15	10.14	NM	NM	NM	NM	0.01	
	12/28/2009	10.30	10.20	NM	NM	NM	NM	0.10	
	12/29/2009	10.28	10.25	NM	NM	NM	NM	0.03	
	12/30/2009	10.48	10.39	NM	NM	NM	NM	0.09	
	12/31/2009	10.72	10.68	NM	NM	NM	NM	0.04	
	1/4/2010	10.87	10.87	NM	NM	NM	NM	0.00	
	1/5/2010	10.67	10.67	NM	NM	NM	NM	0.00	
	1/6/2010	10.66	10.66	NM	NM	NM	NM	0.00	
	1/7/2010	10.65	10.65	NM	NM	NM	NM	0.00	
	1/8/2010	10.64	10.64	NM	NM	NM	NM	0.00	
	1/9/2010	10.67	10.67	NM	NM	NM	NM	0.00	
	1/10/2010	10.64	10.64	NM	NM	NM	NM	0.00	
	1/11/2010	10.63	10.63	NM	NM	NM	NM	0.00	
	1/12/2010	10.63	10.63	NM	NM	NM	NM	0.00	
	1/13/2010	10.62	10.62	NM	NM	NM	NM	0.00	
	1/14/2010	10.65	10.65	NM	NM	NM	NM	0.00	
	1/15/2010	10.63	10.63	NM	NM	NM	NM	0.00	
	1/16/2010	10.64	10.64	NM	NM	NM	NM	0.00	
	1/17/2010	10.45	10.45	NM	NM	NM	NM	0.00	
	1/18/2010	10.41	10.41	NM	NM	NM	NM	0.00	
	1/19/2010	10.41	10.41	NM	NM	NM	NM	0.00	
	1/20/2010	10.40	10.40	NM	NM	NM	NM	0.00	
	1/21/2010	10.40	10.40	NM	NM	NM	NM	0.00	
	1/22/2010	10.41	10.41	NM	NM	NM	NM	0.00	
	1/23/2010	10.40	10.40	NM	NM	NM	NM	0.00	
	1/24/2010	10.40	10.40	NM	NM	NM	NM	0.00	
	1/25/2010	10.24	10.24	NM	NM	NM	NM	0.00	
	1/26/2010	10.20	10.20	NM	NM	NM	NM	0.00	
	1/27/2010	10.20	10.20	NM	NM	NM	NM	0.00	
	1/28/2010	10.21	10.21	NM	NM	NM	NM	0.00	
	1/29/2010	10.21	10.21	NM	NM	NM	NM	0.00	
	1/30/2010	10.20	10.20	NM	NM	NM	NM	0.00	
	1/31/2010	10.92	10.92	NM	NM	NM	NM	0.00	
	2/1/2010	10.20	10.20	NM	NM	NM	NM	0.00	
	2/2/2010	10.18	10.18	NM	NM	NM	NM	0.00	
	2/3/2010	10.17	10.17	NM	NM	NM	NM	0.00	
	2/4/2010	10.12	10.12	NM	NM	NM	NM	0.00	
	2/5/2010	10.12	10.12	NM	NM	NM	NM	0.00	
	2/8/2010	NG	NG	NM	NM	NM	NM	NG	
	2/9/2010	NG	NG	NM	NM	NM	NM	NG	
	2/10/2010	NG	NG	NM	NM	NM	NM	NG	
	2/11/2010	NG	NG	NM	NM	NM	NM	NG	
	2/12/2010	NG	NG	NM	NM	NM	NM	NG	
	2/15/2010	NG	NG	NM	NM	NM	NM	NG	
	2/16/2010	9.72	9.72	NM	NM	NM	NM	0.00	
	2/17/2010	9.71	9.71	NM	NM	NM	NM	0.00	
	2/18/2010	9.70	9.70	NM	NM	NM	NM	0.00	
	2/19/2010	9.61	9.61	NM	NM	NM	NM	0.00	

**Table 3 - Historical Groundwater Elevation Data - Monitoring and Tank Pit Wells
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237**

Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
TP-2	12/15/2009	NG	NG	NM	NG	NG	NG	NG	
	12/16/2009	10.06	9.79	NM	NM	NM	NM	0.27	
	12/17/2009	10.21	10.20	NM	NM	NM	NM	0.01	
	12/18/2009	10.55	10.09	NM	NM	NM	NM	0.46	
	12/19/2009	11.64	11.64	NM	NM	NM	NM	0.00	
	12/20/2009	11.82	11.82	NM	NM	NM	NM	0.00	Sheen
	12/21/2009	11.58	11.58	NM	NM	NM	NM	0.00	Sheen
	12/22/2009	11.50	11.49	NM	NM	NM	NM	0.01	
	12/23/2009	NG	NG	NM	NG	NM	NM	NG	
	12/24/2009	11.43	11.43	NM	NM	NM	NM	0.00	Sheen
	12/25/2009	11.42	11.42	NM	NM	NM	NM	0.00	
	12/26/2009	11.01	11.01	NM	NM	NM	NM	0.00	
	12/27/2009	10.89	10.89	NM	NM	NM	NM	0.00	
	12/28/2009	10.85	10.85	NM	NM	NM	NM	0.00	
	12/29/2009	11.00	11.00	NM	NM	NM	NM	0.00	
	12/30/2009	11.14	11.14	NM	NM	NM	NM	0.00	
	12/31/2009	11.44	11.44	NM	NM	NM	NM	0.00	
	1/4/2010	11.40	11.40	NM	NM	NM	NM	0.00	
	1/5/2010	11.41	11.41	NM	NM	NM	NM	0.00	
	1/6/2010	11.39	11.39	NM	NM	NM	NM	0.00	
	1/7/2010	11.39	11.39	NM	NM	NM	NM	0.00	
	1/8/2010	11.39	11.39	NM	NM	NM	NM	0.00	
	1/9/2010	11.39	11.39	NM	NM	NM	NM	0.00	
	1/10/2010	11.39	11.39	NM	NM	NM	NM	0.00	
	1/11/2010	11.37	11.37	NM	NM	NM	NM	0.00	
	1/12/2010	11.37	11.37	NM	NM	NM	NM	0.00	
	1/13/2010	11.39	11.39	NM	NM	NM	NM	0.00	
	1/14/2010	11.37	11.37	NM	NM	NM	NM	0.00	
	1/15/2010	11.37	11.37	NM	NM	NM	NM	0.00	
	1/16/2010	11.37	11.37	NM	NM	NM	NM	0.00	
	1/17/2010	11.18	11.18	NM	NM	NM	NM	0.00	
	1/18/2010	11.15	11.15	NM	NM	NM	NM	0.00	
	1/19/2010	11.15	11.15	NM	NM	NM	NM	0.00	
	1/20/2010	11.14	11.14	NM	NM	NM	NM	0.00	
	1/21/2010	11.14	11.14	NM	NM	NM	NM	0.00	
	1/22/2010	11.13	11.13	NM	NM	NM	NM	0.00	
	1/23/2010	11.14	11.14	NM	NM	NM	NM	0.00	
	1/24/2010	11.13	11.13	NM	NM	NM	NM	0.00	
	1/25/2010	10.99	10.99	NM	NM	NM	NM	0.00	
	1/26/2010	10.94	10.94	NM	NM	NM	NM	0.00	
	1/27/2010	11.94	11.94	NM	NM	NM	NM	0.00	
	1/28/2010	10.94	10.94	NM	NM	NM	NM	0.00	
	1/29/2010	10.95	10.95	NM	NM	NM	NM	0.00	
	1/30/2010	10.95	10.95	NM	NM	NM	NM	0.00	
	1/31/2010	10.95	10.95	NM	NM	NM	NM	0.00	
	2/1/2010	10.94	10.94	NM	NM	NM	NM	0.00	
	2/2/2010	10.93	10.93	NM	NM	NM	NM	0.00	
	2/3/2010	10.91	10.91	NM	NM	NM	NM	0.00	
	2/4/2010	10.86	10.86	NM	NM	NM	NM	0.00	
	2/5/2010	10.86	10.86	NM	NM	NM	NM	0.00	

**Table 3 - Historical Groundwater Elevation Data - Monitoring and Tank Pit Wells
 Gasoline Fueling Station – Royal Farms #64
 7950 Pulaski Highway
 Baltimore, Maryland 21237**

Well No.	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	Comments
	2/8/2010	10.76	10.76	NM	NM	NM	NM	0.00	
	2/9/2010	10.74	10.74	NM	NM	NM	NM	0.00	
	2/10/2010	10.70	10.70	NM	NM	NM	NM	0.00	
	2/11/2010	10.69	10.69	NM	NM	NM	NM	0.00	
	2/12/2010	10.55	10.55	NM	NM	NM	NM	0.00	
	2/15/2010	10.47	10.47	NM	NM	NM	NM	0.00	
	2/16/2010	10.44	10.44	NM	NM	NM	NM	0.00	
	2/17/2010	10.44	10.44	NM	NM	NM	NM	0.00	
	2/18/2010	10.42	10.42	NM	NM	NM	NM	0.00	
	2/19/2010	10.41	10.41	NM	NM	NM	NM	0.00	

All measurements in feet

NG = Not Gauged

NM = Not Measured

LPH = Liquid Phase Hydrocarbon

NA = Not Applicable

TOC = Top of Casing Elevation

Corrected water elevation based on LPH density of 0.7 grams per milliliter

**Table 4 - Historical Groundwater Elevation Data - Temporary Piezometers
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237**

ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness	
B-1	1/23/2010	14.25	14.25	102.42	88.17	88.17	88.17	0.00	
	1/24/2010	13.75	13.75	102.42	88.67	88.67	88.67	0.00	
	1/25/2010	13.16	13.16	102.42	89.26	89.26	89.26	0.00	
	1/26/2010	13.55	13.55	102.42	88.87	88.87	88.87	0.00	
	1/27/2010	14.22	14.22	102.42	88.20	88.20	88.20	0.00	
	1/28/2010	NG	NG	102.42	NM	NM	NM	NM	
	1/29/2010	NG	NG	102.42	NM	NM	NM	NM	
	1/30/2010	NG	NG	102.42	NM	NM	NM	NM	
	2/1/2010	12.97	12.97	102.42	89.45	89.45	89.45	0.00	
	2/2/2010	13.91	13.91	102.42	88.51	88.51	88.51	0.00	
	2/3/2010	NG	NG	102.42	NM	NM	NM	NM	
	2/4/2010	NG	NG	102.42	NM	NM	NM	NM	
	2/5/2010	NG	NG	102.42	NM	NM	NM	NM	
	B-2	1/23/2010	12.50	12.47	99.35	86.85	86.88	86.87	0.03
		1/24/2010	11.86	11.83	99.35	87.49	87.52	87.51	0.03
1/25/2010		11.66	11.64	99.35	87.69	87.71	87.70	0.02	
1/26/2010		11.50	11.50	99.35	87.85	87.85	87.85	0.00	
1/27/2010		12.52	11.71	99.35	86.83	87.64	87.40	0.81	
1/28/2010		12.51	11.59	99.35	86.84	87.76	87.48	0.92	
1/29/2010		13.15	11.83	99.35	86.20	87.52	87.12	1.32	
1/30/2010		14.13	11.70	99.35	85.22	87.65	86.92	2.43	
2/1/2010		13.68	11.51	99.35	85.67	87.84	87.19	2.17	
2/2/2010		13.77	11.51	99.35	85.58	87.84	87.16	2.26	
2/3/2010		NG	NG	99.35	NM	NM	NM	NM	
2/4/2010		NG	NG	99.35	NM	NM	NM	NM	
2/5/2010		NG	NG	99.35	NM	NM	NM	NM	
B-3		1/23/2010	11.83	11.83	100.25	88.42	88.42	88.42	0.00
		1/24/2010	11.94	11.94	100.25	88.31	88.31	88.31	0.00
	1/25/2010	11.71	11.71	100.25	88.54	88.54	88.54	0.00	
	1/26/2010	11.83	11.83	100.25	88.42	88.42	88.42	0.00	
	1/27/2010	12.06	12.06	100.25	88.19	88.19	88.19	0.00	
	1/28/2010	NG	NG	100.25	NM	NM	NM	NM	
	1/29/2010	NG	NG	100.25	NM	NM	NM	NM	
	1/30/2010	NG	NG	100.25	NM	NM	NM	NM	
	2/1/2010	9.66	9.66	100.25	90.59	90.59	90.59	0.00	
	2/2/2010	13.86	13.86	100.25	86.39	86.39	86.39	0.00	
	2/3/2010	NG	NG	100.25	NM	NM	NM	NM	
	2/4/2010	NG	NG	100.25	NM	NM	NM	NM	
	2/5/2010	NG	NG	100.25	NM	NM	NM	NM	
	B-4	1/23/2010	NG	NG	101.17	NM	NM	NM	NM
		1/24/2010	NG	NG	101.17	NM	NM	NM	NM
1/25/2010		NG	NG	101.17	NM	NM	NM	NM	
1/26/2010		13.55	13.55	101.17	87.62	87.62	87.62	0.00	
1/27/2010		15.11	15.11	101.17	86.06	86.06	86.06	0.00	
1/28/2010		NG	NG	101.17	NM	NM	NM	NM	
1/29/2010		NG	NG	101.17	NM	NM	NM	NM	
1/30/2010	NG	NG	101.17	NM	NM	NM	NM		

**Table 4 - Historical Groundwater Elevation Data - Temporary Piezometers
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237**

ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness
	2/1/2010	NG	NG	101.17	NM	NM	NM	NM
	2/2/2010	13.80	13.80	101.17	87.37	87.37	87.37	0.00
	2/3/2010	NG	NG	101.17	NM	NM	NM	NM
	2/4/2010	NG	NG	101.17	NM	NM	NM	NM
	2/5/2010	NG	NG	101.17	NM	NM	NM	NM
B-5	1/23/2010	NG	NG	100.67	NM	NM	NM	NM
	1/24/2010	NG	NG	100.67	NM	NM	NM	NM
	1/25/2010	NG	NG	100.67	NM	NM	NM	NM
	1/26/2010	12.06	12.06	100.67	88.61	88.61	88.61	0.00
	1/27/2010	NG	NG	100.67	NM	NM	NM	NM
	1/28/2010	NG	NG	100.67	NM	NM	NM	NM
	1/29/2010	NG	NG	100.67	NM	NM	NM	NM
	1/30/2010	NG	NG	100.67	NM	NM	NM	NM
	2/1/2010	NG	NG	100.67	NM	NM	NM	NM
	2/2/2010	12.75	12.75	100.67	87.92	87.92	87.92	0.00
	2/3/2010	NG	NG	100.67	NM	NM	NM	NM
	2/4/2010	NG	NG	100.67	NM	NM	NM	NM
	2/5/2010	NG	NG	100.67	NM	NM	NM	NM
B-6	1/23/2010	NG	NG	99.71	NM	NM	NM	NM
	1/24/2010	NG	NG	99.71	NM	NM	NM	NM
	1/25/2010	NG	NG	99.71	NM	NM	NM	NM
	1/26/2010	NG	NG	99.71	NM	NM	NM	NM
	1/27/2010	12.35	12.35	99.71	87.36	87.36	87.36	0.00
	1/28/2010	11.86	11.85	99.71	87.85	87.86	87.86	0.01
	1/29/2010	12.97	12.84	99.71	86.74	86.87	86.83	0.13
	1/30/2010	12.03	12.02	99.71	87.68	87.69	87.69	0.01
	2/1/2010	NG	NG	99.71	NM	NM	NM	NM
	2/2/2010	12.06	12.00	99.71	87.65	87.71	87.69	0.06
	2/3/2010	NG	NG	99.71	NM	NM	NM	NM
	2/4/2010	NG	NG	99.71	NM	NM	NM	NM
	2/5/2010	NG	NG	99.71	NM	NM	NM	NM
B-7	1/23/2010	NG	NG	99.50	NM	NM	NM	NM
	1/24/2010	NG	NG	99.50	NM	NM	NM	NM
	1/25/2010	NG	NG	99.50	NM	NM	NM	NM
	1/26/2010	NG	NG	99.50	NM	NM	NM	NM
	1/27/2010	NG	NG	99.50	NM	NM	NM	NM
	1/28/2010	NG	NG	99.50	NM	NM	NM	NM
	1/29/2010	7.35	7.35	99.50	92.15	92.15	92.15	0.00
	1/30/2010	NG	NG	99.50	NM	NM	NM	NM
	2/1/2010	NG	NG	99.50	NM	NM	NM	NM
	2/2/2010	7.67	7.67	99.50	91.83	91.83	91.83	0.00
	2/3/2010	NG	NG	99.50	NM	NM	NM	NM
	2/4/2010	NG	NG	99.50	NM	NM	NM	NM
	2/5/2010	7.90	7.90	99.50	NM	NM	NM	NM
B-8	1/23/2010	NG	NG	99.46	NM	NM	NM	NM
	1/24/2010	NG	NG	99.46	NM	NM	NM	NM
	1/25/2010	NG	NG	99.46	NM	NM	NM	NM

**Table 4 - Historical Groundwater Elevation Data - Temporary Piezometers
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237**

ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness
	1/26/2010	NG	NG	99.46	NM	NM	NM	NM
	1/27/2010	NG	NG	99.46	NM	NM	NM	NM
	1/28/2010	NG	NG	99.46	NM	NM	NM	NM
	1/29/2010	13.91	13.91	99.46	85.55	85.55	85.55	0.00
	1/30/2010	NG	NG	99.46	NM	NM	NM	NM
	2/1/2010	NG	NG	99.46	NM	NM	NM	NM
	2/2/2010	12.04	12.04	99.46	87.42	87.42	87.42	0.00
	2/3/2010	NG	NG	99.46	NM	NM	NM	NM
	2/4/2010	NG	NG	99.46	NM	NM	NM	NM
	2/5/2010	11.95	11.95	99.46	NM	NM	NM	NM
B-9	1/23/2010	NG	NG	99.27	NM	NM	NM	NM
	1/24/2010	NG	NG	99.27	NM	NM	NM	NM
	1/25/2010	NG	NG	99.27	NM	NM	NM	NM
	1/26/2010	NG	NG	99.27	NM	NM	NM	NM
	1/27/2010	15.94	11.10	99.27	83.33	88.17	86.72	4.84
	1/28/2010	17.06	11.35	99.27	82.21	87.92	86.21	5.71
	1/29/2010	16.91	13.10	99.27	82.36	86.17	85.03	3.81
	1/30/2010	15.43	11.13	99.27	83.84	88.14	86.85	4.30
	2/1/2010	NG	NG	99.27	NM	NM	NM	NM
	2/2/2010	15.20	11.25	99.27	84.07	88.02	86.84	3.95
	2/3/2010	NG	NG	99.27	NM	NM	NM	NM
	2/4/2010	NG	NG	99.27	NM	NM	NM	NM
	2/5/2010	NG	NG	99.27	NM	NM	NM	NM
B-10	1/23/2010	NG	NG	97.36	NM	NM	NM	NM
	1/24/2010	NG	NG	97.36	NM	NM	NM	NM
	1/25/2010	NG	NG	97.36	NM	NM	NM	NM
	1/26/2010	7.37	7.37	97.36	89.99	89.99	89.99	0.00
	1/27/2010	8.14	8.14	97.36	89.22	89.22	89.22	0.00
	1/28/2010	8.10	8.10	97.36	89.26	89.26	89.26	0.00
	1/29/2010	NG	NG	97.36	NM	NM	NM	NM
	1/30/2010	NG	NG	97.36	NM	NM	NM	NM
	2/1/2010	NG	NG	97.36	NM	NM	NM	NM
	2/2/2010	8.77	8.77	97.36	88.59	88.59	88.59	0.00
	2/3/2010	NG	NG	97.36	NM	NM	NM	NM
	2/4/2010	NG	NG	97.36	NM	NM	NM	NM
	2/5/2010	NG	NG	97.36	NM	NM	NM	NM
B-11	1/23/2010	NG	NG	95.61	NM	NM	NM	NM
	1/24/2010	NG	NG	95.61	NM	NM	NM	NM
	1/25/2010	NG	NG	95.61	NM	NM	NM	NM
	1/26/2010	8.76	8.34	95.61	86.85	87.27	87.14	0.42
	1/27/2010	9.61	9.13	95.61	86.00	86.48	86.34	0.48
	1/28/2010	NG	NG	95.61	NM	NM	NM	NM
	1/29/2010	10.21	9.51	95.61	85.40	86.10	85.89	0.70
	1/30/2010	9.33	8.62	95.61	86.28	86.99	86.78	0.71
	2/1/2010	NG	NG	95.61	NM	NM	NM	NM
	2/2/2010	9.72	8.69	95.61	85.89	86.92	86.61	1.03
	2/3/2010	NG	NG	95.61	NM	NM	NM	NM

**Table 4 - Historical Groundwater Elevation Data - Temporary Piezometers
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237**

ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness
	2/4/2010	NG	NG	95.61	NM	NM	NM	NM
	2/5/2010	NG	NG	95.61	NM	NM	NM	NM
B-12	1/23/2010	NG	NG	93.36	NM	NM	NM	NM
	1/24/2010	NG	NG	93.36	NM	NM	NM	NM
	1/25/2010	NG	NG	93.36	NM	NM	NM	NM
	1/26/2010	6.24	6.24	93.36	87.12	87.12	87.12	0.00
	1/27/2010	7.10	7.10	93.36	86.26	86.26	86.26	0.00
	1/28/2010	7.89	7.89	93.36	85.47	85.47	85.47	0.00
	1/29/2010	NG	NG	93.36	NM	NM	NM	NM
	1/30/2010	NG	NG	93.36	NM	NM	NM	NM
	2/1/2010	NG	NG	93.36	NM	NM	NM	NM
	2/2/2010	6.67	6.67	93.36	86.69	86.69	86.69	0.00
	2/3/2010	6.64	6.64	93.36	86.72	86.72	86.72	0.00
	2/4/2010	NG	NG	93.36	NM	NM	NM	NM
	2/5/2010	NG	NG	93.36	NM	NM	NM	NM
B-13	1/23/2010	NG	NG	91.78	NM	NM	NM	NM
	1/24/2010	NG	NG	91.78	NM	NM	NM	NM
	1/25/2010	NG	NG	91.78	NM	NM	NM	NM
	1/26/2010	2.21	2.21	91.78	89.57	89.57	89.57	0.00
	1/27/2010	2.24	2.24	91.78	89.54	89.54	89.54	0.00
	1/28/2010	2.75	2.75	91.78	89.03	89.03	89.03	0.00
	1/29/2010	NG	NG	91.78	NM	NM	NM	NM
	1/30/2010	NG	NG	91.78	NM	NM	NM	NM
	2/1/2010	NG	NG	91.78	NM	NM	NM	NM
	2/2/2010	4.20	4.20	91.78	87.58	87.58	87.58	0.00
	2/3/2010	4.34	4.34	91.78	87.44	87.44	87.44	0.00
	2/4/2010	NG	NG	91.78	NM	NM	NM	NM
	2/5/2010	NG	NG	91.78	NM	NM	NM	NM
B-14	1/23/2010	NG	NG	90.42	NM	NM	NM	NM
	1/24/2010	NG	NG	90.42	NM	NM	NM	NM
	1/25/2010	NG	NG	90.42	NM	NM	NM	NM
	1/26/2010	NG	NG	90.42	NM	NM	NM	NM
	1/27/2010	4.19	4.19	90.42	86.23	86.23	86.23	0.00
	1/28/2010	4.09	4.09	90.42	86.33	86.33	86.33	0.00
	1/29/2010	NG	NG	90.42	NM	NM	NM	NM
	1/30/2010	NG	NG	90.42	NM	NM	NM	NM
	2/1/2010	NG	NG	90.42	NM	NM	NM	NM
	2/2/2010	5.24	5.24	90.42	85.18	85.18	85.18	0.00
	2/3/2010	3.58	3.58	90.42	86.84	86.84	86.84	0.00
	2/4/2010	NG	NG	90.42	NM	NM	NM	NM
	2/5/2010	NG	NG	90.42	NM	NM	NM	NM
B-15	1/23/2010	NG	NG	91.91	NM	NM	NM	NM
	1/24/2010	NG	NG	91.91	NM	NM	NM	NM
	1/25/2010	NG	NG	91.91	NM	NM	NM	NM
	1/26/2010	NG	NG	91.91	NM	NM	NM	NM
	1/27/2010	1.99	1.99	91.91	89.92	89.92	89.92	0.00
	1/28/2010	NG	NG	91.91	NM	NM	NM	NM

**Table 4 - Historical Groundwater Elevation Data - Temporary Piezometers
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237**

ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness
	1/29/2010	NG	NG	91.91	NM	NM	NM	NM
	1/30/2010	NG	NG	91.91	NM	NM	NM	NM
	2/1/2010	NG	NG	91.91	NM	NM	NM	NM
	2/2/2010	3.71	3.71	91.91	88.20	88.20	88.20	0.00
	2/3/2010	3.74	3.74	91.91	88.17	88.17	88.17	0.00
	2/4/2010	NG	NG	91.91	NM	NM	NM	NM
	2/5/2010	NG	NG	91.91	NM	NM	NM	NM
B-16	1/23/2010	NG	NG	92.00	NM	NM	NM	NM
	1/24/2010	NG	NG	92.00	NM	NM	NM	NM
	1/25/2010	NG	NG	92.00	NM	NM	NM	NM
	1/26/2010	NG	NG	92.00	NM	NM	NM	NM
	1/27/2010	3.11	3.11	92.00	88.89	88.89	88.89	0.00
	1/28/2010	NG	NG	92.00	NM	NM	NM	NM
	1/29/2010	NG	NG	92.00	NM	NM	NM	NM
	1/30/2010	NG	NG	92.00	NM	NM	NM	NM
	2/1/2010	NG	NG	92.00	NM	NM	NM	NM
	2/2/2010	3.81	3.81	92.00	88.19	88.19	88.19	0.00
	2/3/2010	3.71	3.71	92.00	88.29	88.29	88.29	0.00
	2/4/2010	NG	NG	92.00	NM	NM	NM	NM
	2/5/2010	NG	NG	92.00	NM	NM	NM	NM
B-17	1/23/2010	NG	NG	95.33	NM	NM	NM	NM
	1/24/2010	NG	NG	95.33	NM	NM	NM	NM
	1/25/2010	NG	NG	95.33	NM	NM	NM	NM
	1/26/2010	NG	NG	95.33	NM	NM	NM	NM
	1/27/2010	8.38	8.38	95.33	86.95	86.95	86.95	0.00
	1/28/2010	8.26	8.26	95.33	87.07	87.07	87.07	0.00
	1/29/2010	NG	NG	95.33	NM	NM	NM	NM
	1/30/2010	NG	NG	95.33	NM	NM	NM	NM
	2/1/2010	NG	NG	95.33	NM	NM	NM	NM
	2/2/2010	8.81	8.81	95.33	86.52	86.52	86.52	0.00
	2/3/2010	NG	NG	95.33	NM	NM	NM	NM
	2/4/2010	NG	NG	95.33	NM	NM	NM	NM
	2/5/2010	NG	NG	95.33	NM	NM	NM	NM
B-18	1/23/2010	NG	NG	96.81	NM	NM	NM	NM
	1/24/2010	NG	NG	96.81	NM	NM	NM	NM
	1/25/2010	NG	NG	96.81	NM	NM	NM	NM
	1/26/2010	NG	NG	96.81	NM	NM	NM	NM
	1/27/2010	8.55	8.55	96.81	88.26	88.26	88.26	0.00
	1/28/2010	8.53	8.53	96.81	88.28	88.28	88.28	0.00
	1/29/2010	NG	NG	96.81	NM	NM	NM	NM
	1/30/2010	NG	NG	96.81	NM	NM	NM	NM
	2/1/2010	NG	NG	96.81	NM	NM	NM	NM
	2/2/2010	8.88	8.88	96.81	87.93	87.93	87.93	0.00
	2/3/2010	NG	NG	96.81	NM	NM	NM	NM
	2/4/2010	NG	NG	96.81	NM	NM	NM	NM
	2/5/2010	NG	NG	96.81	NM	NM	NM	NM
B-19	1/23/2010	NG	NG	91.63	NM	NM	NM	NM

**Table 4 - Historical Groundwater Elevation Data - Temporary Piezometers
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237**

ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness
	1/24/2010	NG	NG	91.63	NM	NM	NM	NM
	1/25/2010	NG	NG	91.63	NM	NM	NM	NM
	1/26/2010	NG	NG	91.63	NM	NM	NM	NM
	1/27/2010	5.13	5.13	91.63	86.50	86.50	86.50	0.00
	1/28/2010	5.12	5.12	91.63	86.51	86.51	86.51	0.00
	1/29/2010	NG	NG	91.63	NM	NM	NM	NM
	1/30/2010	NG	NG	91.63	NM	NM	NM	NM
	2/1/2010	NG	NG	91.63	NM	NM	NM	NM
	2/2/2010	5.24	5.24	91.63	86.39	86.39	86.39	0.00
	2/3/2010	5.15	5.15	91.63	86.48	86.48	86.48	0.00
	2/4/2010	NG	NG	91.63	NM	NM	NM	NM
	2/5/2010	NG	NG	91.63	NM	NM	NM	NM
B-20	1/23/2010	NG	NG	86.90	NM	NM	NM	NM
	1/24/2010	NG	NG	86.90	NM	NM	NM	NM
	1/25/2010	NG	NG	86.90	NM	NM	NM	NM
	1/26/2010	NG	NG	86.90	NM	NM	NM	NM
	1/27/2010	NG	NG	86.90	NM	NM	NM	NM
	1/28/2010	NG	NG	86.90	NM	NM	NM	NM
	1/29/2010	NG	NG	86.90	NM	NM	NM	NM
	1/30/2010	NG	NG	86.90	NM	NM	NM	NM
	2/1/2010	NG	NG	86.90	NM	NM	NM	NM
	2/2/2010	0.64	0.64	86.90	86.26	86.26	86.26	0.00
	2/3/2010	0.21	0.21	86.90	86.69	86.69	86.69	0.00
	2/4/2010	NG	NG	86.90	NM	NM	NM	NM
	2/5/2010	NG	NG	86.90	NM	NM	NM	NM
B-21	1/23/2010	NG	NG	88.90	NM	NM	NM	NM
	1/24/2010	NG	NG	88.90	NM	NM	NM	NM
	1/25/2010	NG	NG	88.90	NM	NM	NM	NM
	1/26/2010	NG	NG	88.90	NM	NM	NM	NM
	1/27/2010	NG	NG	88.90	NM	NM	NM	NM
	1/28/2010	NG	NG	88.90	NM	NM	NM	NM
	1/29/2010	NG	NG	88.90	NM	NM	NM	NM
	1/30/2010	NG	NG	88.90	NM	NM	NM	NM
	2/1/2010	NG	NG	88.90	NM	NM	NM	NM
	2/2/2010	0.15	0.15	88.90	88.75	88.75	88.75	0.00
	2/3/2010	0.15	0.15	88.90	88.75	88.75	88.75	0.00
	2/4/2010	NG	NG	88.90	NM	NM	NM	NM
	2/5/2010	NG	NG	88.90	NM	NM	NM	NM
B-22	1/23/2010	NG	NG	92.34	NM	NM	NM	NM
	1/24/2010	NG	NG	92.34	NM	NM	NM	NM
	1/25/2010	NG	NG	92.34	NM	NM	NM	NM
	1/26/2010	NG	NG	92.34	NM	NM	NM	NM
	1/27/2010	NG	NG	92.34	NM	NM	NM	NM
	1/28/2010	NG	NG	92.34	NM	NM	NM	NM
	1/29/2010	NG	NG	92.34	NM	NM	NM	NM
	1/30/2010	NG	NG	92.34	NM	NM	NM	NM
	2/1/2010	NG	NG	92.34	NM	NM	NM	NM

**Table 4 - Historical Groundwater Elevation Data - Temporary Piezometers
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237**

ID	Date	Depth to Water	Depth to LPH	TOC Elevation	Water Elevation	LPH Elevation	Corrected Water Elevation	LPH Thickness
	2/2/2010	5.65	5.65	92.34	86.69	86.69	86.69	0.00
	2/3/2010	NG	NG	92.34	NM	NM	NM	NM
	2/4/2010	5.19	5.19	92.34	87.15	87.15	87.15	0.00
	2/5/2010	NG	NG		NM	NM	NM	NM
B-23	1/23/2010	NG	NG	96.75	NM	NM	NM	NM
	1/24/2010	NG	NG	96.75	NM	NM	NM	NM
	1/25/2010	NG	NG	96.75	NM	NM	NM	NM
	1/26/2010	NG	NG	96.75	NM	NM	NM	NM
	1/27/2010	NG	NG	96.75	NM	NM	NM	NM
	1/28/2010	NG	NG	96.75	NM	NM	NM	NM
	1/29/2010	10.77	10.77	96.75	85.98	85.98	85.98	0.00
	1/30/2010	NG	NG	96.75	NM	NM	NM	NM
	2/1/2010	NG	NG	96.75	NM	NM	NM	NM
	2/2/2010	10.05	10.05	96.75	86.70	86.70	86.70	0.00
	2/3/2010	NG	NG	96.75	NM	NM	NM	NM
	2/4/2010	NG	NG	96.75	NM	NM	NM	NM
	2/5/2010	9.97	9.97	96.75	NM	NM	NM	NM
B-24	1/23/2010	NG	NG	96.88	NM	NM	NM	NM
	1/24/2010	NG	NG	96.88	NM	NM	NM	NM
	1/25/2010	NG	NG	96.88	NM	NM	NM	NM
	1/26/2010	NG	NG	96.88	NM	NM	NM	NM
	1/27/2010	NG	NG	96.88	NM	NM	NM	NM
	1/28/2010	NG	NG	96.88	NM	NM	NM	NM
	1/29/2010	9.21	9.21	96.88	87.67	87.67	87.67	0.00
	1/30/2010	NG	NG	96.88	NM	NM	NM	NM
	2/1/2010	NG	NG	96.88	NM	NM	NM	NM
	2/2/2010	NG	NG	96.88	NM	NM	NM	NM
	2/3/2010	NG	NG	96.88	NM	NM	NM	NM
	2/4/2010	NG	NG	96.88	NM	NM	NM	NM
	2/5/2010	9.24	9.24	96.88	NM	NM	NM	NM

All measurements in feet

NG = Not Gauged

NM = Not Measured

LPH = Liquid Phase Hydrocarbon

NA = Not Applicable

TOC = Top of Casing Elevation

Corrected water elevation based on LPH density of 0.7 grams per milliliter

Table 5 - Aquifer Testing Parameter Summary
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237

Well No.	Hydraulic Conductivity (K) using Bouwer Rice Method	Hydraulic Conductivity (K) using Hvorslev Method	Hydraulic Conductivity (K) Well Average	Transmissivity (T)	Average Linear Velocity (V)
MW-2	0.00061 ft/min	0.0017 ft/min	0.0011 ft/min	0.012 ft ² /min	0.00009 ft/min
MW-5	0.00040 ft/min	0.00094 ft/min	0.00067 ft/min	0.016 ft ² /min	0.000054 ft/min
Average	0.00050 ft/min	0.0013 ft/min	NA	0.014 ft ² /min	0.000072 ft/min

T calculated using *K* and saturated thickness of the aquifer (*b*)

V calculated using *K*, hydraulic gradient (*dh/dl*) and effective porosity (*n*)

b = 10.48 feet for MW-2 and 17.25 feet for MW-5

dh/dl = 0.012 ft/ft

n = 0.15

**Table 6 - Summary of Soil Quality Data - Confirmation Samples
 Samples Collected December 17, 2009
 Gasoline Fueling Station – Royal Farms #64
 7950 Pulaski Highway
 Baltimore, Maryland 21237**

Sample ID	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	TPH GRO	TPH DRO
C-1	12/17/2009	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
C-2	12/17/2009	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
C-3	12/17/2009	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
C-4	12/17/2009	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
C-5	12/17/2009	15	210	120	940	1285	BDL	80	6	BDL
Residential Cleanup Standard		1.2E+03	6.3E+05	7.8E+05	1.6E+06	NRS	1.6E+05	1.6E+05	230	230
Non-Residential Cleanup Standard		5.2E+04	8.2E+06	1.0E+07	2.0E+07	NRS	7.2E+05	2.0E+06	620	620

TPH GRO and DRO results in milligrams per kilogram (mg/kg)

BTEX, MTBE and Naphthalene results in micrograms per kilogram (ug/kg)

BDL = Below Detection Limits

B = Benzene; T = Toluene; E = Ethylbenzene; X = Xylene

MTBE = Methyl-tert-butyl-ether

TPH GRO = Total Petroleum Hydrocarbons Gasoline Range Organics

TPH DRO = Total Petroleum Hydrocarbons Diesel Range Organics

Some compounds may have been detected but are not tabulated on this spreadsheet.

See laboratory analytical results reports for full results.

J Denotes Estimated Value

MDE Standards (Generic Numeric Cleanup Standards for Groundwater and Soil - Interim Final Guidance Update No. 2.1 - June 2008)

NRS = No Regulatory Standard

**Table 7 - Summary of Sump Water Quality Data
 Samples Collected December 23, 2009 and January 21, 2010
 Gasoline Fueling Station – Royal Farms #64
 7950 Pulaski Highway
 Baltimore, Maryland 21237**

Sample ID	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	TPH GRO	TPH DRO
Sump-1207	12/23/2009	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Sump-1209	12/23/2009	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Sump-1209 1/2	12/23/2009	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Sump-1205	1/21/2010	85	1500	300	2800	4685	BDL	600	15	7.1
Sump-1205 Treated Effluent	2/18/2010	BDL	15	BDL	110	125	BDL	BDL	0.5	BDL
Type I and II Aquifers		5	1000	700	10000	NRS	20	0.65	0.047	0.047

TPH GRO and DRO results in milligrams per liter (mg/l)

BTEX, MTBE and Naphthalene results in micrograms per liter (ug/l)

BDL = Below Detection Limits

B = Benzene; T = Toluene; E = Ethylbenzene; X = Xylene

MTBE = Methyl-tert-butyl-ether

TPH GRO = Total Petroleum Hydrocarbons Gasoline Range Organics

TPH DRO = Total Petroleum Hydrocarbons Diesel Range Organics

Some compounds may have been detected but are not tabulated on this spreadsheet.

See laboratory analytical results reports for full results.

J Denotes Estimated Value

MDE Standards (Generic Numeric Cleanup Standards for Groundwater and Soil - Interim Final Guidance Update No. 2.1 - June 2008)

NRS = No Regulatory Standard

Table 8 - Summary of Soil Quality Data - Borings
Samples Collected January 25 through 28, 2010
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237

Sample ID - Depth	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	TPH GRO	TPH DRO
B-1-12'	1/21/2010	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
B-2-11'	1/21/2010	300	750	910	2300	4260	BDL	600	18	BDL
B-3-5'	1/21/2010	BDL	30	7.6	48	85.6	BDL	21	BDL	BDL
B-4-13'	1/25/2010	BDL	30	5.6	27	62.6	BDL	BDL	BDL	BDL
B-5-12'	1/25/2010	900	6100	2400	9000	18400	BDL	8.2	4.2	33
B-6-11'	1/27/2010	4100	9900	3800	18000	35800	BDL	8.2	140	BDL
B-7-5'	1/28/2010	15	70	20	100	205	BDL	30	0.6	BDL
B-8-13'	1/28/2010	1300	2000	800	3600	7700	BDL	170	5	20
B-9-8'	1/26/2010	500	720	60	230	1510	BDL	BDL	0.9	BDL
B-10-9'	1/25/2010	11	220	210	770	1211	BDL	150	1.4	11
B-11-15'	1/25/2010	120	550	250	820	1740	BDL	170	2.5	17
B-12-3'	1/25/2010	300	700	250	820	2070	BDL	90	1	BDL
B-13-8'	1/25/2010	580	2300	670	3180	6730	BDL	23	16	110
B-14-5'	1/26/2010	18	100	35	145	298	BDL	34	0.5	BDL
B-15-5'	1/26/2010	BDL	6.2	BDL	BDL	6.2	BDL	7.6	BDL	BDL
B-16-4'	1/26/2010	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
B-17-7'	1/26/2010	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
B-18-7'	1/26/2010	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
B-20-2'	1/27/2010	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
B-21-3'	1/27/2010	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
B-22-2'	1/27/2010	18	110	40	170	338	BDL	10	BDL	BDL
B-23-5'	1/28/2010	120	500	100	930	1650	BDL	BDL	0.7	12
B-24-9'	1/28/2010	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Residential Cleanup Standard		1.2E+03	6.3E+05	7.8E+05	1.6E+06	NRS	1.6E+05	1.6E+05	230	230
Non-Residential Cleanup Standard		5.2E+04	8.2E+06	1.0E+07	2.0E+07	NRS	7.2E+05	2.0E+06	620	620

TPH GRO and DRO results in milligrams per kilogram (mg/kg)

BTEX, MTBE and Naphthalene results in micrograms per kilogram (ug/kg)

BDL = Below Detection Limits

B = Benzene; T = Toluene; E = Ethylbenzene; X = Xylene

MTBE = Methyl-tert-butyl-ether

TPH GRO = Total Petroleum Hydrocarbons Gasoline Range Organics

TPH DRO = Total Petroleum Hydrocarbons Diesel Range Organics

Some compounds may have been detected but are not tabulated on this spreadsheet.

See laboratory analytical results reports for full results.

MDE Standards (Generic Numeric Cleanup Standards for Groundwater and Soil - Interim Final Guidance Update No. 2.1 - June 2008)

NRS = No Regulatory Standard

Depth in feet

**Table 9 - Summary of Groundwater Quality Data - Borings
Samples Collected February 1 through 5, 2010
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237**

Sample ID	Date	B	T	E	X	Total BTEX	MTBE	Naphthalene	TPH GRO	TPH DRO
B-1	2/1/2010	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
B-3	2/3/2010	4200	7100	700	3000	10800	500	100	70	60
B-4	2/1/2010	550	700	110	420	1780	BDL	13	3.8	BDL
B-5	2/3/2010	6500	20000	5000	18800	50300	500	1200	46	NA
B-7	2/5/2010	BDL	7.8	BDL	21.3	29.1	17	BDL	BDL	BDL
B-8	2/5/2010	250	500	40	370	1160	BDL	20	1	BDL
B-10	2/2/2010	1700	6400	110	5300	13510	BDL	13	20	5.4
B-12	2/2/2010	390	5100	1500	9200	16190	BDL	580	51	22
B-14	2/3/2010	7.2	30	5.9	28.9	72	70	BDL	0.6	BDL
B-15	2/3/2010	3700	8300	800	5700	18500	BDL	110	11	11
B-16	2/3/2010	340	540	54	260	1194	36	7.2	0.5	BDL
B-17	2/3/2010	14	27	BDL	56	97	BDL	7.2	BDL	BDL
B-18	2/3/2010	BDL	22	BDL	16.2	38.2	BDL	BDL	BDL	BDL
B-19	2/4/2010	1100	1900	180	700	3880	BDL	20	5.9	BDL
B-20	2/4/2010	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
B-21	2/4/2010	20	200	50	280	550	80	12	1.3	BDL
B-22	2/4/2010	BDL	8.8	BDL	8.5	17.3	BDL	BDL	BDL	BDL
B-23	2/5/2010	1800	5000	900	6800	14500	BDL	540	18	2.4
B-24	2/5/2010	BDL	5.6	BDL	7	12.6	BDL	BDL	BDL	BDL
Type I and II Aquifers		5	1000	700	10000	NRS	20	0.65	0.047	0.047

TPH GRO and DRO results in milligrams per liter (mg/l)

BTEX, MTBE and Naphthalene results in micrograms per liter (ug/l)

BDL = Below Detection Limits

B = Benzene; T = Toluene; E = Ethylbenzene; X = Xylene

MTBE = Methyl-tert-butyl-ether

TPH GRO = Total Petroleum Hydrocarbons Gasoline Range Organics

TPH DRO = Total Petroleum Hydrocarbons Diesel Range Organics

Some compounds may have been detected but are not tabulated on this spreadsheet.

See laboratory analytical results reports for full results.

MDE Standards (Generic Numeric Cleanup Standards for Groundwater and Soil - Interim Final Guidance Update No. 2.1 - June 2008)

NRS = No Regulatory Standard

NA = Not Analyzed

**Table 10 - J&E Soil Properties and Structural Properties of Building
Gasoline Fueling Station – Royal Farms #64
7950 Pulaski Highway
Baltimore, Maryland 21237**

Parameter	Units	Value
Average Soil/Groundwater Temperature	Celsius	10
Soil stratum soil type (SCS)	Not applicable	L
Depth below grade to bottom of exposed floor space	cm	15
Depth below grade to water table	cm	60
Depth below grade to top of contamination	cm	61
Average vapor flow rate into building	L/m	5

cm = centimeter

L/m = liters per minute

SCS = Soil Conservation Service

L = Loam

**Table 11 - J&E Groundwater and Soil Model Results Summary
 Gasoline Fueling Station – Royal Farms #64
 7950 Pulaski Highway
 Baltimore, Maryland 21237**

Compound	Groundwater Concentration (ug/l)	Carcinogenic Risk	Hazard Index
Benzene	20	9.40E-07	9.3E-03
Toluene	200	NA	7.3E-03
Ethylbenzene	50	NA	6.9E-04
m-Xylene	190	NA	2.3E-02
o-Xylene	80	NA	1.0E-02
Naphthalene	12	NA	8.3E-03
MTBE	80	NA	1.1E-04
Cumulative Values		NA	5.9E-02
Compound	Soil Concentration (ug/kg)	Carcinogenic Risk	Hazard Index
Benzene	18	8.90E-05	8.9E-01
Toluene	110	NA	2.2E-01
Ethylbenzene	40	NA	1.8E-02
m-Xylene	120	NA	4.5E-01
o-Xylene	50	NA	1.6E-01
Naphthalene	10	NA	1.4E-02
Cumulative Values		NA	1.8E+00

NA = Not Applicable

ug/l = micrograms per liter

ug/kg = micrograms per kilogram

APPENDIX F
GROUNDWATER AND LIQUID PHASE PETROLEUM
DISPOSAL MANIFESTS

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000622794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest No: 0920

Generator/Shipper: Royal Farms		Billing Name: STATION MAINTANACE	
Site Address:		Address:	
City: Rose Dale	State: MD Zip:	City:	State: Zip:
Phone: ()	Contact:	Phone: ()	Contact:

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	3042
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: **PLG GAS/WATER FROM ALL SUMPS AND WELL (H5091 RECOVER)**

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) Date of Service **12-15-09**

Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.		Driver Name (print) Raymond Davis
Street 7443 Shipley Avenue		Driver Signature Raymond Davis
City Harmans	State MD Zip 21077	Phone

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

Facility Name
Petroleum Management, Inc.
 Acceptance Signature
[Signature]
 7443 Shipley Avenue
 Harmans, MD 21077
 410-760-3703

Total Quantity Received

White - Original

Yellow - Transporter

Pink - Facility

Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **No 0908**

Generator/Shipper: Royce Farms		Billing Name: STATION ATTENDANCE	
Site Address: 14100 PLASKI HWY		Address:	
City: Rosedale	State: MD Zip:	City:	State: Zip:
Phone: ()	Contact:	Phone: ()	Contact:

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII	Water 3000	Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGI		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: **p/o monitoring wells**

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	James Taylor Bell	Date of Service	12-15-09
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	<i>[Signature]</i>		

HAULER/CARRIER INFORMATION

Co. Name		Driver Name (print)	
Petroleum Management, Inc.		Kelly Haskel	
Street		Driver Signature	
7443 Shipley Avenue		<i>[Signature]</i>	
City	State	Zip	Phone
Harmans	MD	21077	410 760 3703

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	Facility Name	Petroleum Management, Inc. 7443 Shipley Avenue Harmans, MD 21077 410-760-3703	Total Quantity Received
	Acceptance Signature		
	Phone		

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD, Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014636

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 0914**

Generator/Shipper: ROYAL FARMS			Billing Name: STATIONS (MATERIAL)		
Site Address: 7950 P. HICKS HWY.			Address:		
City: ROCKDALE	State: MD	Zip:	City:	State:	Zip:
Phone: ()	Contact: D. HAYNES	Phone: ()	Contact:		

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII	Water 3015	Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGI		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: **1/0 (3) monitoring wells to be removed**
1/0 (3) fuel tank (spill)

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	Date of Service
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	12-16-09

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.		Driver Name (print) Kelly Hayslip	
Street 7443 Shipley Avenue		Driver Signature <i>Kelly Hayslip</i>	
City Harmans	State MD	Zip 21077	Phone

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	Facility Name	Petroleum Management, Inc. 7443 Shipley Avenue Harmans, MD 21077 410-760-3703	Total Quantity Received
	Acceptance Signature		
	Phone		

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest No: 0921

Generator/Shipper: ROYAL FARMS		Billing Name: STATION MAINTANACE	
Site Address: 1400 POLASKI HWY		Address:	
City: Rosedale	State: MD Zip:	City:	State: Zip:
Phone: ()	Contact:	Phone: ()	Contact:

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII	WATER 623	Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGI		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: **10 GAS/WATER mixture out of well
 TOTAL gal 623 AND 5 gal 15 GAS**

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	Date of Service
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	12-16-09

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.		Driver Name (print) RAYMOND DAVIS	
Street 7443 Shipley Avenue		Driver Signature Raymond Davis	
City Harmans	State MD	Zip 21077	Phone 410-760-3703

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

RECEIVING FACILITY ACCEPTANCE

Facility Name	Petroleum Management, Inc. 7443 Shipley Avenue Harmans, MD 21077 410-760-3703	Total Quantity Received
Acceptance Signature		
Phone		

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 0958**

Generator/Shipper: <i>Ronald Evans</i>			Billing Name: <i>Station Materiel</i>		
Site Address: <i>7950 Pulaski Hwy</i>			Address:		
City: <i>Beltsville</i>	State: <i>MD</i>	Zip:	City:	State:	Zip:
Phone: ()	Contact: <i>DANNYNE</i>		Phone: ()	Contact:	
Purchase Order NO:					

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII	<i>3025</i>	Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soft): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *Spill of Gasoline - 287 Gallons*

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement
 As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

X Generator/Shipper Authorized Agent (Print) Date of Service: *12-18-09*
 X Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name: **Petroleum Management, Inc.** Driver Name (print): *Ronald Evans*
 Street: **7443 Shipley Avenue** Driver Signature: *[Signature]*
 City: **Harmans** State: **MD** Zip: **21077** Phone: *410-760-3703*

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in the right box.

Facility Name: **Petroleum Management, Inc.**
 7443 Shipley Avenue
 Harmans, MD 21077
 410-760-3703

Acceptance Signature: *[Signature]* Total Quantity Received: _____
 Phone: _____

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest No. 0936

Generator/Shipper:			Billing Name: <i>Station Maintenance</i>		
Site Address: <i>Rosedale Royal Farms</i>			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone: ()	Contact:		Phone: ()	Contact:	

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	100
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGI		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	Date of Service
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	12/18/09

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.		Driver Name (print) <i>James Talbot</i>
Street 7443 Shipley Avenue		Driver Signature <i>James Talbot</i>
City Harmans	State MD	Zip 21077

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	RECEIVING FACILITY ACCEPTANCE	
	Facility Name Petroleum Management, Inc. 7443 Shipley Avenue Harmans, MD 21077 410-760-3703	Total Quantity Received
	Acceptance Signature <i>[Signature]</i>	Phone

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 0989**

Generator/Shipper: Rosedale Royalties		Billing Name: same	
Site Address: 5013 RT 410		Address:	
City: Rosedale	State: MD	City:	State: Zip:
Phone: ()	Contact:	Phone: ()	Contact:

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	900
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGI		Kerosene		Other:	
No. of Drums		No. of Tanks		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: **P/O @ Mentoring wells**

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement
 As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) **Royal Farms** Date of Service **12/23/09**
 Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.		Driver Name (print) James T. Felt	
Street 7443 Shipley Avenue		Driver Signature <i>James T. Felt</i>	
City Harmans	State MD	Zip 21077	Phone

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

RECEIVING FACILITY ACCEPTANCE
 Facility Name: **Petroleum Management, Inc.**
 Acceptance Signature: *[Signature]*
 Address: **7443 Shipley Avenue, Harmans, MD 21077, 410-760-3703**
 Phone: Total Quantity Received: **900**

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

*Oil from Wells
 Rest from basement*

Bill of Lading/Manifest *** No 0974**

Generator/Shipper: Royal Farms		Billing Name: Station Maintenance	
Site Address: PULASKI HWY		Address:	
City: Rosedale	State: MD Zip:	City:	State: Zip:
Phone: ()	Contact: Dwayne	Phone: ()	Contact:

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII <i>water</i>	2998	Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3, NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *p/r basement (3) monitoring wells*

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCBS). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print) Royal Farms	Date of Service 12-25-09
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print) <i>Keith Haisch</i>
Street 7443 Shipley Avenue	Driver Signature <i>Keith Haisch</i>
City Harmans State MD Zip 21077	Phone 410 760 3703

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	RECEIVING FACILITY ACCEPTANCE	
	Facility Name	Petroleum Management, Inc. 7443 Shipley Avenue Harmans, MD 21077 410-760-3703
	Acceptance Signature <i>[Signature]</i>	
Phone	Total Quantity Received 2998	

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue • Harmans, Maryland 21077 • Phone 410-760-3703 • Fax 410-760-3708

*Est 1000 gal from wells
 rest from leasehold*

Bill of Lading/Manifest **№ 1105**

Generator/Shipper: <i>Royal Farm</i>		Billing Name: <i>Station Maintenance</i>	
Site Address: <i>7950 Palanski Hwy</i>		Address:	
City: <i>Rosedale</i>	State: <i>MD</i>	Zip:	
Phone: ()	Contact:	Phone: ()	Contact:

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII <i>/water 3054</i>		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *p/o ① water well / p/o ① Basement*

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnity and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	Date of Service
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	<i>12/26/09</i>

HAULER/CARRIER INFORMATION

Co. Name		Driver Name (print)	
Petroleum Management, Inc.		<i>Keith Kulp</i>	
Street		Driver Signature	
7443 Shipley Avenue		<i>Keith Kulp</i>	
City	State	Zip	Phone
Harmans	MD	21077	<i>410 760 3705</i>

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

RECEIVING FACILITY ACCEPTANCE

Facility Name	Petroleum Management, Inc.	
Acceptance Signature	7443 Shipley Avenue	
	Harmans, MD 21077	
Phone	410-760-3703	
	Total Quantity Received	

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 0975**

Generator/Shipper: Royal Farms		Billing Name: <i>Stedman</i>	
Site Address: <i>77000</i>		Address:	
City: <i>...</i>	State: <i>MD</i>	Zip: <i>21077</i>	
Phone: ()	Contact:	Phone: ()	Contact:

Purchase Order NO: _____

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3, NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other: <i>Groundwater</i>	<i>1258</i>
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *P/O wells*

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) *ROYAL FARMS* Date of Service *12-28-09*

Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name: **Petroleum Management, Inc.** Driver Name (print): *Kenneth Mickoff*

Street: **7443 Shipley Avenue** Driver Signature: *Kenneth Mickoff*

City: **Harmans** State: **MD** Zip: **21077** Phone: *410-760-3703*

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

Facility Name: **Petroleum Management, Inc.**
 7443 Shipley Avenue
 Harmans, MD 21077
 410-760-3703

Acceptance Signature: *[Signature]*

Phone: _____ Total Quantity Received: *1258*

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 0976**

Generator/Shipper:			Billing Name:		
Site Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone: ()	Contact:		Phone: ()	Contact:	

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	2800
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	Date of Service
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	12/29/9

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print)
Street 7443 Shipley Avenue	Driver Signature
City Harmans	Phone
State MD	Zip 21077

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	Facility Name
	Acceptance Signature
	Phone
Total Quantity Received	

Petroleum Management, Inc.

MD, Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 1018**

Generator/Shipper:			Billing Name:		
Site Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone: ()	Contact:		Phone: ()	Contact:	

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII <i>WA/12</i>	<i>1203</i>	Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) Date of Service *12-31-09 ?*

Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.		Driver Name (print)
Street 7443 Shipley Avenue		Driver Signature
City Harmans	State MD Zip 21077	Phone

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

RECEIVING FACILITY ACCEPTANCE

Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **No 0938**

Generator/Shipper:			Billing Name:		
Site Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone: ()		Contact:	Phone: ()		Contact:

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	1000
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	Date of Service
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	1-4-10

HAULER/CARRIER INFORMATION

Co. Name	Driver Name (print)		
Petroleum Management, Inc.			
Street	Driver Signature		
7443 Shipley Avenue			
City	State	Zip	Phone
Harmans	MD	21077	410-760-3703

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	Facility Name
	Acceptance Signature
	Phone
	Total Quantity Received

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 0943**

Generator/Shipper:			Billing Name:		
Site Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone: ()	Contact:		Phone: ()	Contact:	

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII	1452	Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement
 As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	Date of Service
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	1/6/10

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print)
Street 7443 Shipley Avenue	Driver Signature
City Harmans	State MD
	Zip 21077
	Phone

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	Facility Name	Did not offload this quantity + 100 gallons from another RF Store on truck starting 1/7/10 Total Quantity Received
	Acceptance Signature	
	Phone	

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 1036**

Generator/Shipper: <i>Essex Ref Store</i>			Billing Name: <i>State of Maryland</i>		
Site Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone: ()	Contact:		Phone: ()	Contact:	

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII	2464	Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *Delivery of fuel*

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print) <i>W. S. L.</i>	Date of Service <i>1/7/10</i>
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print)
Street 7443 Shipley Avenue	Driver Signature
City Harmans	Phone
State MD	Zip 21077

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	Facility Name	<i>This manifest represents total volume for 1/6 and 1/7 + 100 gal. from Essex Ref Store.</i> Total Quantity Received
	Acceptance Signature	
	Phone	

White - Original

Yellow - Transporter

Pink - Facility

Gold - Customer

W

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **No 1037**

Generator/Shipper:			Billing Name:		
Site Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone: ()	Contact:		Phone: ()	Contact:	

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	700
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement
 As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) Date of Service: 1-11-10
 Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print)
Street 7443 Shipley Avenue	Driver Signature
City Harmans	Phone
State MD	Zip 21077

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **No: 1006**

Generator/Shipper:			Billing Name:		
Site Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone: ()		Contact:	Phone: ()		Contact:

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	950
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

X Generator/Shipper Authorized Agent (Print)	Date of Service
X Generator/Shipper Authorized Agent Signature	1-12-10

HAULER/CARRIER INFORMATION

Co. Name	Driver Name (print)
Petroleum Management, Inc.	
Street	Driver Signature
7443 Shipley Avenue	
City	Phone
Harmans	
State	Zip
MD	21077

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	RECEIVING FACILITY ACCEPTANCE	
	Facility Name	
	Acceptance Signature	
	Phone	Total Quantity Received

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 0568**

Generator/Shipper: <i>PMI</i>			Billing Name: <i>PMI</i>		
Site Address: <i>7443 Shipley Ave</i>			Address:		
City: <i>Harmans</i>	State: <i>MD</i>	Zip: <i>21077</i>	City:	State:	Zip:
Phone: ()	Contact: <i>PMI</i>	Phone: ()	Contact:		

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	<i>950</i>
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *...*

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	Date of Service
<i>PMI</i>	<i>11/13/10</i>
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	

HAULER/CARRIER INFORMATION

Co. Name	Driver Name (print)		
Petroleum Management, Inc.	<i>...</i>		
Street	Driver Signature		
7443 Shipley Avenue	<i>...</i>		
City	State	Zip	Phone
Harmans	MD	21077	

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	RECEIVING FACILITY ACCEPTANCE	
	Facility Name	
	Acceptance Signature	
Phone	Total Quantity Received	

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 1038**

Generator/Shipper:			Billing Name:		
Site Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone: ()	Contact:		Phone: ()	Contact:	

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	1050
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement
 As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	Date of Service
<i>W. R. E.</i>	1/14/10
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	

HAULER/CARRIER INFORMATION

Co. Name	Driver Name (print)
Petroleum Management, Inc.	
Street	Driver Signature
7443 Shipley Avenue	
City	Phone
Harmans	
State	Zip
MD	21077

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

RECEIVING FACILITY ACCEPTANCE	
Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-00052794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

UCP 3

Bill of Lading/Manifest **Nº 1007**

Generator/Shipper:		Billing Name:	
Site Address:		Address:	
City:	State:	Zip:	
Phone: ()	Contact:	Phone: ()	Contact:

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	914
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *Waste Oil*

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) *[Signature]* Date of Service *1-15-10*

Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print) <i>[Signature]</i>
Street 7443 Shipley Avenue	Driver Signature <i>[Signature]</i>
City Harmans	Phone
State MD	Zip 21077

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest *** No 1009 ***

Generator/Shipper: <i>ROYAL OCEAN</i>		Billing Name: <i>ROYAL OCEAN</i>	
Site Address: <i>7443 SHIPLEY AVENUE</i>		Address:	
City: <i>HARMANS</i>	State: <i>MD</i>	Zip: <i>21077</i>	
Phone: ()	Contact: <i>JOHN</i>	Phone: ()	Contact: <i>JOHN</i>

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	<i>850</i>
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *HAZARDOUS WASTE TRANSPORTATION*

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) *AT B.S.P.* Date of Service *1-18-10*

Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.		Driver Name (print)
Street 7443 Shipley Avenue		Driver Signature
City Harmans	State MD	Zip 21077
Phone		

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest *** No 1008**

Generator/Shipper: <i>PMI</i>			Billing Name: <i>PMI</i>		
Site Address: <i>7443 Shipley Avenue</i>			Address:		
City: <i>Harmans</i>	State: <i>MD</i>	Zip: <i>21077</i>	City:	State:	Zip:
Phone: ()	Contact: <i>PMI</i>		Phone: ()	Contact: <i>PMI</i>	

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	830
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *Oil*

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) *PMI* Date of Service *1-19-10*

Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.		Driver Name (print) <i>W. Coleman</i>
Street 7443 Shipley Avenue		Driver Signature <i>W. Coleman</i>
City Harmans	State MD Zip 21077	Phone

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

UAC #3

Bill of Lading/Manifest **Nº 0916**

Generator/Shipper: <i>UAC #3</i>		Billing Name: <i>UAC #3</i>	
Site Address: <i>7443 SHIPLEY AVENUE</i>		Address:	
City: <i>HARMANS</i>	State: <i>MD</i>	Zip: <i>21077</i>	
Phone: ()	Contact: <i>UAC</i>	Phone: ()	Contact: <i>UAC</i>

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	<i>801</i>
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *UAC #3*

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

X Generator/Shipper Authorized Agent (Print) <i>UAC #3</i>	Date of Service <i>1-20-10</i>
X Generator/Shipper Authorized Agent Signature	

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print)
Street 7443 Shipley Avenue	Driver Signature <i>[Signature]</i>
City Harmans	Phone
State MD	Zip 21077

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

RECEIVING FACILITY ACCEPTANCE

Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

White - Original

Yellow - Transporter

Pink - Facility

Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 1055**

Generator/Shipper:			Billing Name:		
Site Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone: ()	Contact:		Phone: ()	Contact:	

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	750
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	Date of Service
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	1/21/10

HAULER/CARRIER INFORMATION

Co. Name	Driver Name (print)		
Petroleum Management, Inc.			
Street	Driver Signature		
7443 Shipley Avenue			
City	State	Zip	Phone
Harmans	MD	21077	

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	Facility Name
	Acceptance Signature
	Phone
Total Quantity Received	

Petroleum Management, Inc.

MD, Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest *** N^o 1056**

Generator/Shipper: <i>PMI</i>		Billing Name: <i>PMI</i>	
Site Address: <i>750 Shipley Ave</i>		Address:	
City: <i>Harmans</i>	State: <i>MD</i>	Zip: <i>21077</i>	City: <i>Harmans</i>
Phone: ()	Contact: <i>PMI</i>	Phone: ()	Contact: <i>PMI</i>

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water <i>well 115/106</i>	
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other: <i>④ DRUMS</i>	<i>200</i>
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other: <i>④ TANKS</i>	<i>120</i>
No. of Drums		No. of Tanks:		Other: <i>TOTAL</i>	<i>1,321</i>
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *AS VACUUM OUT 40 TANKS FROM 10-15-10*

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print)	Date of Service
<i>PMI</i>	<i>1-22-10</i>
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	

HAULER/CARRIER INFORMATION

Co. Name	Driver Name (print)
Petroleum Management, Inc.	<i>Tom Cole</i>
Street	Driver Signature
7443 Shipley Avenue	<i>Tom Cole</i>
City	Phone
Harmans	
State	Zip
MD	21077

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

RECEIVING FACILITY ACCEPTANCE

Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

White - Original

Yellow - Transporter

Pink - Facility

Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

VAC 13

Bill of Lading/Manifest * N^o 1057

Generator/Shipper: <i>PMI</i>			Billing Name: <i>Waste Management</i>		
Site Address: <i>7443 Shipley Ave</i>			Address:		
City: <i>Harmans</i>	State: <i>MD</i>	Zip: <i>21077</i>	City:	State:	Zip:
Phone: ()	Contact: <i>107</i>		Phone: ()	Contact: <i>107</i>	

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGI		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3, NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	<i>870</i>
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGI		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print) <i>[Signature]</i>	Date of Service <i>1/25/10</i>
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print) <i>[Signature]</i>
Street 7443 Shipley Avenue	Driver Signature <i>[Signature]</i>
City Harmans	Phone
State MD	Zip 21077

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

UAC # 3

Bill of Lading/Manifest **Nº 0918**

Generator/Shipper: <i>ROYAL TANK</i>		Billing Name: <i>ROYAL TANK</i>	
Site Address: <i>7443 SHIPLEY AVE</i>		Address:	
City: <i>HARMANS</i>	State: <i>MD</i>	Zip: <i>21077</i>	City: _____ State: _____ Zip: _____
Phone: () _____	Contact: <i>JOHN</i>	Phone: () _____	Contact: <i>JUNE</i>
Purchase Order NO: _____			

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3, NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	830
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGI		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: _____

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement
 As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) _____ Date of Service *1/26/10*
 Generator/Shipper Authorized Agent Signature _____

HAULER/CARRIER INFORMATION

Co. Name: **Petroleum Management, Inc.** Driver Name (print): _____
 Street: **7443 Shipley Avenue** Driver Signature: _____
 City: **Harmans** State: **MD** Zip: **21077** Phone: _____

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

Facility Name: _____
 Acceptance Signature: _____
 Phone: _____ Total Quantity Received: _____

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

UACT 3

Bill of Lading/Manifest *** No 1064**

Generator/Shipper: <i>WORLD FARM</i>		Billing Name: <i>STATION MOUNTAIN</i>	
Site Address: <i>7950 ROCKY HILL</i>		Address:	
City: <i>ROCKY HILL</i>	State: <i>MD</i>	Zip: <i>21087</i>	City: State: Zip:
Phone: ()	Contact: <i>JOEY</i>	Phone: ()	Contact: <i>JOEY</i>
Purchase Order NO:			

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	735
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *UAC 37 ...*

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement
 As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

X Generator/Shipper Authorized Agent (Print) *WORLD FARM* Date of Service *1/27/10*
 X Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name: **Petroleum Management, Inc.** Driver Name (print): *[Signature]*
 Street: **7443 Shipley Avenue** Driver Signature: *[Signature]*
 City: **Harmans** State: **MD** Zip: **21077** Phone:

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

Facility Name: _____
 Acceptance Signature: _____
 Phone: _____ Total Quantity Received: _____

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest * **No 1065**

Generator/Shipper: <i>PMI</i>		Billing Name: <i>PMI</i>	
Site Address: <i>7443 Shipley Ave</i>		Address:	
City: <i>Harmans</i>	State: <i>MD</i>	Zip: <i>21077</i>	
Phone: ()	Contact: <i>PMI</i>	Phone: ()	Contact:

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	<i>710</i>
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *Oil Transfer*

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) *U. B. R.* Date of Service *1/28/10*

Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name: **Petroleum Management, Inc.** Driver Name (print): *Tom Coleman*

Street: **7443 Shipley Avenue** Driver Signature: *Tom Coleman*

City: **Harmans** State: **MD** Zip: **21077** Phone:

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

Facility Name: _____

Acceptance Signature: _____

Phone: _____ Total Quantity Received: _____

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest *** No 1066**

Generator/Shipper: <i>40701 18111</i>			Billing Name: <i>1271011 M/NA/NA/OLE</i>		
Site Address: <i>7450</i>			Address:		
City: <i>18111</i>	State:	Zip: <i>21077</i>	City:	State:	Zip:
Phone: ()	Contact: <i>BOANE</i>		Phone: ()	Contact: <i>BOANE</i>	
Purchase Order NO:					

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGI		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	800
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGI		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *oil*

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) *M. Hall* Date of Service *1/29/10*

Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name: **Petroleum Management, Inc.** Driver Name (print): *...*

Street: **7443 Shipley Avenue** Driver Signature: *...*

City: **Harmans** State: **MD** Zip: **21077** Phone: *...*

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

Facility Name: _____

Acceptance Signature: _____

Phone: _____ Total Quantity Received: _____

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest * N^o 1071

Generator/Shipper: <i>Petroleum Management, Inc.</i>		Billing Name: <i>Petroleum Management, Inc.</i>	
Site Address: <i>7443 Shipley Avenue</i>		Address: <i>7443 Shipley Avenue</i>	
City: <i>Harmans</i>	State: <i>MD</i>	Zip: <i>21077</i>	City: <i>Harmans</i>
Phone: ()	Contact: <i>[Signature]</i>	Phone: ()	Contact: <i>[Signature]</i>

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3, NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	857
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: _____

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print) <i>[Signature]</i>	Date of Service <i>2/11/10</i>
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print) <i>[Signature]</i>
Street 7443 Shipley Avenue	Driver Signature <i>[Signature]</i>
City Harmans	Phone
State MD	Zip 21077

RECEIVING FACILITY ACCEPTANCE

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	Facility Name	Total Quantity Received
	Acceptance Signature	
	Phone	

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

UAC #3

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest * No 1059

Generator/Shipper: ROYAL TEAM		Billing Name: SECTION 1711020	
Site Address: 7450 SHIPLEY AVENUE		Address:	
City: HARMANS	State: MD Zip: 21077	City:	State: Zip:
Phone: ()	Contact: DUANE	Phone: ()	Contact: DUANE

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	587
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: **NO OIL (D) WATER WELL LOG PART 5 HPS.**
D. HARMANS

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print)

Date of Service **2-2-10**

Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.		Driver Name (print) DUANE
Street 7443 Shipley Avenue		Driver Signature <i>[Signature]</i>
City Harmans	State MD Zip 21077	Phone 410-760-3703

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

RECEIVING FACILITY ACCEPTANCE

Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **No 1060**

Generator/Shipper: <i>Petroleum Management, Inc.</i>		Billing Name: <i>Petroleum Management, Inc.</i>	
Site Address: <i>7443 Shipley Avenue</i>		Address:	
City: <i>Harmans</i>	State: <i>MD</i> Zip: <i>21077</i>	City:	State: Zip:
Phone: ()	Contact: <i>UNK</i>	Phone: ()	Contact: <i>UNK</i>

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	<i>486</i>
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *Deliver 486 gallons of petroleum contaminated water to the site.*

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print) <i>UNK</i>	Date of Service <i>2/3/10</i>
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print) <i>UNK</i>
Street 7443 Shipley Avenue	Driver Signature <i>UNK</i>
City Harmans	Phone <i>410-760-3703</i>
State MD	Zip 21077

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	RECEIVING FACILITY ACCEPTANCE	
	Facility Name	
	Acceptance Signature	
Phone	Total Quantity Received	

White - Original

Yellow - Transporter

Pink - Facility

Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **Nº 1062**

Generator/Shipper: <i>PMI</i>		Billing Name: <i>PMI</i>	
Site Address: <i>7443 Shipley Avenue</i>		Address:	
City: <i>Harmans</i>	State: <i>MD</i>	Zip: <i>21077</i>	City: <i>Harmans</i>
Phone: ()	Contact: <i>PMI</i>	Phone: ()	Contact: <i>PMI</i>

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	<i>970</i>
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGI		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *...*

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print) <i>MSK</i>	Date of Service <i>2/4/10</i>
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print)
Street 7443 Shipley Avenue	Driver Signature
City Harmans	Phone
State MD	Zip 21077

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

RECEIVING FACILITY ACCEPTANCE

Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest * N^o 1063

Generator/Shipper:			Billing Name:		
Site Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
Phone: ()	Contact:		Phone: ()	Contact:	

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	486
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper
Authorized Agent
(Print)

John B. Re...

Date of
Service

2/5/10

Generator/Shipper
Authorized Agent
Signature

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.		Driver Name (print)
Street 7443 Shipley Avenue		Driver Signature
City Harmans	State MD Zip 21077	Phone

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

RECEIVING FACILITY ACCEPTANCE

Facility Name	
Acceptance Signature	
Phone	Total Quantity Received

White - Original

Yellow - Transporter

Pink - Facility

Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31621
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

Bill of Lading/Manifest **No 1221**

Generator/Shipper: <i>ROYAL MARINE</i>		Billing Name: <i>ROYAL MARINE</i>	
Site Address: <i>770 SHIPLEY AVENUE</i>		Address:	
City: <i>HARMANS</i>	State: <i>MD</i>	Zip: <i>21077</i>	
Phone: ()	Contact: <i>WAT</i>	Phone: ()	Contact: <i>WAT</i>

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	<i>915</i>
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *...*

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) *[Signature]* Date of Service *2/15/10*

Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name Petroleum Management, Inc.	Driver Name (print) <i>[Signature]</i>
Street 7443 Shipley Avenue	Driver Signature <i>[Signature]</i>
City Harmans	Phone <i>410-760-3703</i>
State MD	Zip 21077

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	RECEIVING FACILITY ACCEPTANCE	
	Facility Name	
	Acceptance Signature	
	Phone	Total Quantity Received

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-OPT-31821
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

1/20/13

Bill of Lading/Manifest

No 1321

Generator/Shipper:		Billing Name:	
Site Address:		Address:	
City:	State:	Zip:	
Phone: ()	Contact:	Phone: ()	Contact:

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	950
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGI		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description:

PLACARDS TENDERED: YES NO EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

Generator/Shipper Authorized Agent (Print) *W. R. D.* Date of Service *2/17/10*

Generator/Shipper Authorized Agent Signature

HAULER/CARRIER INFORMATION

Co. Name: **Petroleum Management, Inc.** Driver Name (print): *W. R. D.*

Street: **7443 Shipley Avenue** Driver Signature: *W. R. D.*

City: **Harmans** State: **MD** Zip: **21077** Phone:

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.

RECEIVING FACILITY ACCEPTANCE

Facility Name:

Acceptance Signature:

Phone: Total Quantity Received:

White - Original Yellow - Transporter Pink - Facility Gold - Customer

Petroleum Management, Inc.

MD. Oil Operations Permit No: 2009-0PT-31621
 EPA Identification No: MDR-000522794
 Federal ID No: 52-2014536

7443 Shipley Avenue ♦ Harmans, Maryland 21077 ♦ Phone 410-760-3703 ♦ Fax 410-760-3708

UCC 3

Bill of Lading/Manifest

No 1322

Generator/Shipper: <i>UCC 3</i>		Billing Name: <i>UCC 3</i>	
Site Address: <i>7443 Shipley Ave</i>		Address:	
City: <i>Harmans</i>	State: <i>MD</i>	Zip: <i>21077</i>	
Phone: ()	Contact: <i>UCC 3</i>	Phone: ()	Contact: <i>UCC 3</i>

Purchase Order NO:

MATERIAL CHARACTERIZATION (CHECK ALL THAT APPLY):

Description:	Gallons	Description:	Gallons	Description:	Gallons
Gasoline, 3, UN1203, PGII		Hazardous Waste, Liquid, 9 NA3082, PGIII		JP#4	
#2 Fuel Oil, 3, NA1993, PGIII		Hazardous Waste, Solid, 9 NA3077, PGIII		JP#5	
#4 Fuel Oil, 3 NA1993, PGIII		Paint Thinners, 3, UN1263, PGI		Jet A	
#6 Fuel Oil, 3, NA1993, PGIII		Ethylene Glycol, 9, UN3082, PGIII		Sludge	
Diesel, 3, NA1993, PGIII		Lube Oil		Petroleum Contaminated Water	<i>587</i>
Flammable Liquids, NOS, 3, UN1993, PGI		Waste Oil		Other:	
Corrosive Liquids, NOS, 8, UN1760, PGII		Kerosene		Other:	
No. of Drums		No. of Tanks:		Other:	
Scale Weights (Soil): Total: (Tons)		Tare: (Tons)		Net: (Tons)	

Service Description: *UCC 3*

PLACARDS TENDERED: YES NO

EMERGENCY CONTACT (410) 760-3703

Generator/Shipper Certification Statement

As the generator or shipper, I hereby certify that this material is properly classified and does not contain Polychlorinated Biphenyls (PCB'S). To the best of my knowledge it has not been mixed, combined or blended in any amount with any other material defined as hazardous waste under applicable law. Generator/Shipper agrees to indemnify and hold Petroleum Management, Inc. harmless for any damages arising from or in any way relating to a breach of this Certification Statement.

<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent (Print) <i>UCC 3</i>	Date of Service <i>2/19/10</i>
<input checked="" type="checkbox"/> Generator/Shipper Authorized Agent Signature	

HAULER/CARRIER INFORMATION

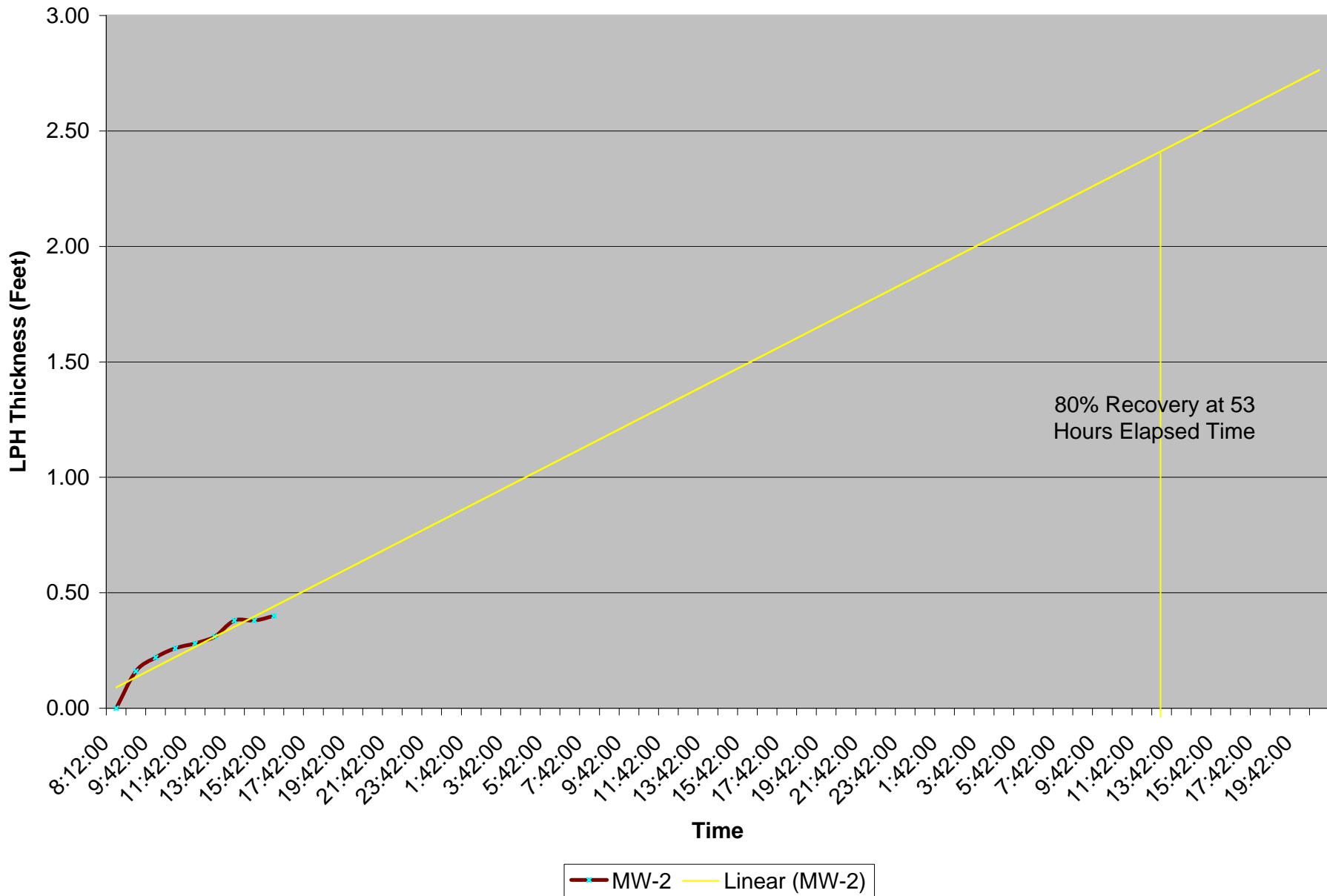
Co. Name Petroleum Management, Inc.		Driver Name (print)	
Street 7443 Shipley Avenue		Driver Signature	
City Harmans	State MD	Zip 21077	Phone <i>410-760-3703</i>

The above mentioned materials have been received by this facility and will be handled in accordance with all applicable rules and regulations. All quantities are subject to final verification by this facility and are indicated in far right box.	RECEIVING FACILITY ACCEPTANCE	
	Facility Name	
	Acceptance Signature	
Phone	Total Quantity Received	

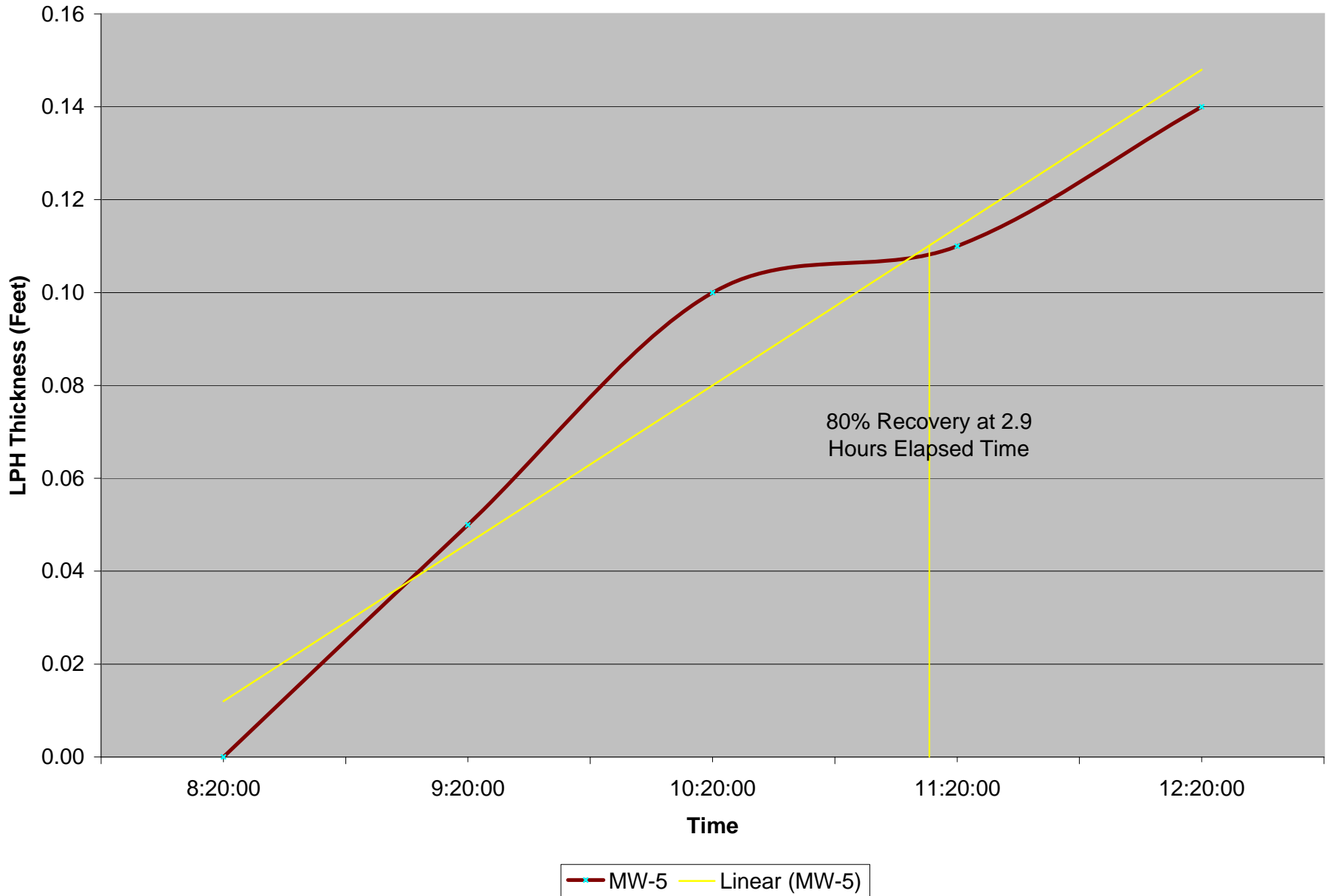
White - Original Yellow - Transporter Pink - Facility Gold - Customer

APPENDIX G
LIQUID PHASE HYDROCARBON RECOVERY RATE GRAPHS

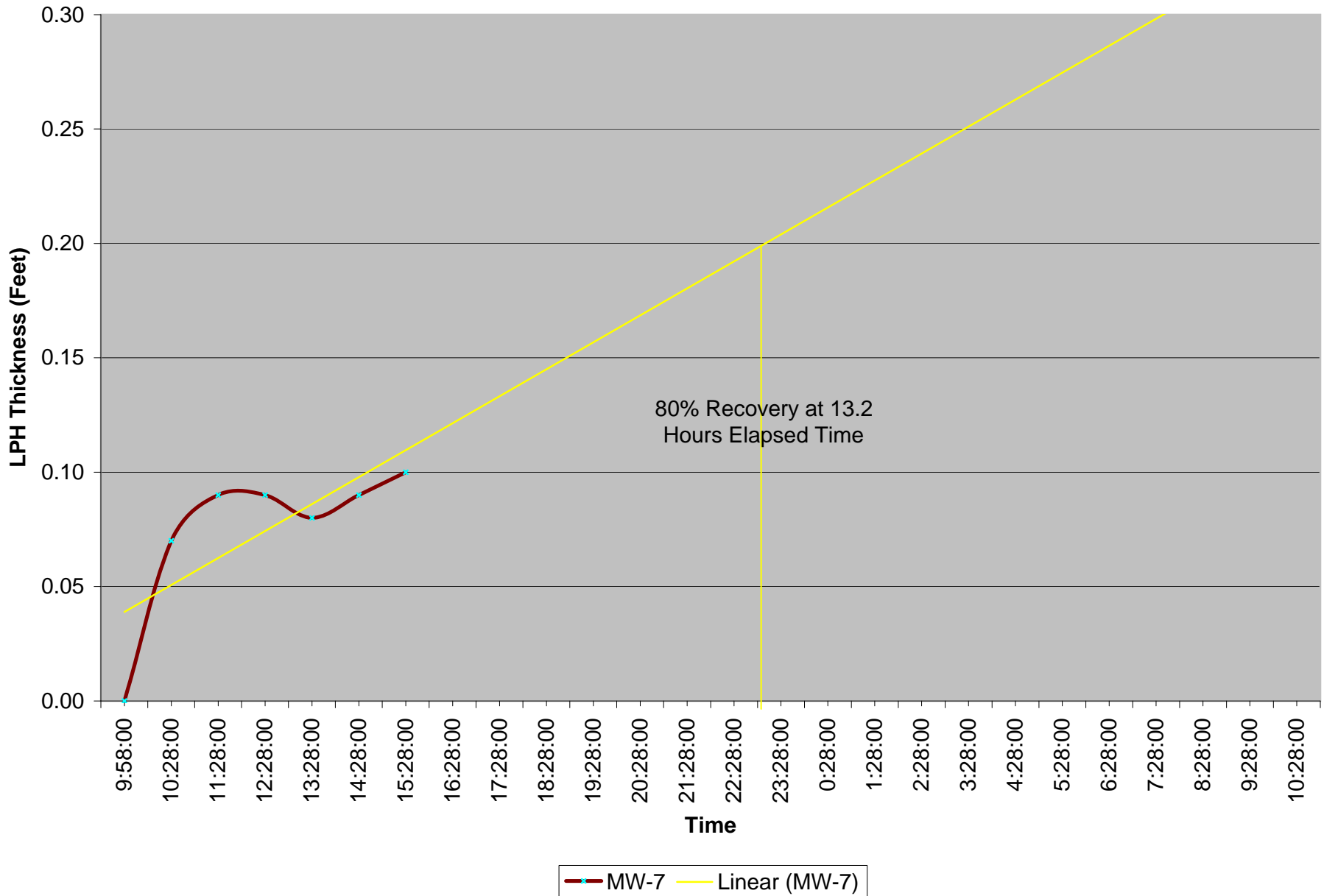
MW-2 LPH Bail-Down Test
Royal Farms No. 64
Data Collected 2-12-10
Data Extrapolated to 80% Recovery
Pre-Test Static LPH Thickness = 3.0 Feet



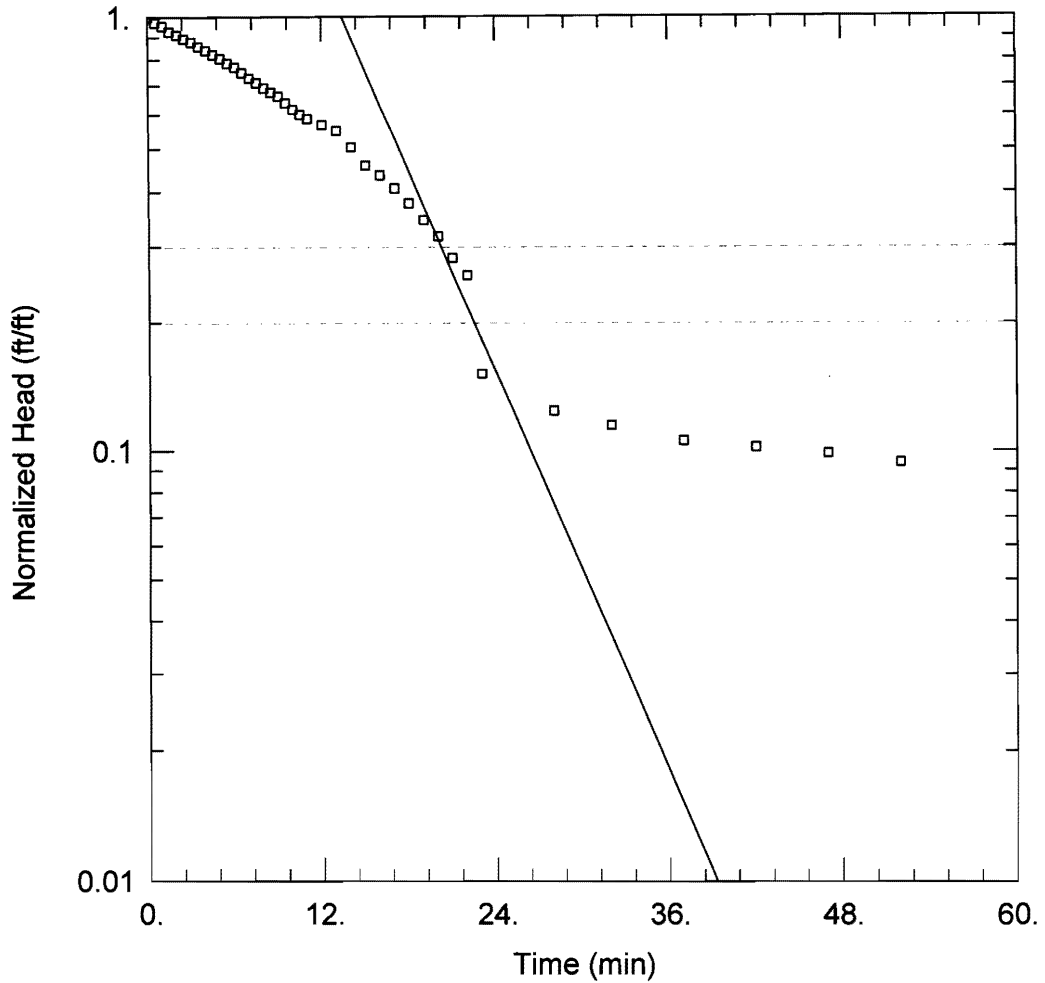
MW-5 LPH Bail-Down Test
Royal Farms No. 64
Data Collected 2-12-10
Pre-Test Static LPH Thickness = 0.14 Feet



MW-7 LPH Bail-Down Test
Royal Farms No. 64
Data Collected 2-12-10
Data Extrapolated to 80% Recovery
Pre-Test Static LPH Thickness = 0.25 Feet



APPENDIX H
AQTESOLV MODEL OUTPUT



ROYAL FARMS NO. 64

Data Set: \..Aqtw MW-2.aqt
Date: 02/17/10

Time: 16:08:49

PROJECT INFORMATION

Company: AEC
Client: Royal Farms
Project: 05-056
Location: Rosedale MD
Test Well: MW-2
Test Date: 2-2-10

AQUIFER DATA

Saturated Thickness: 10.48 ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (MW-2)

Initial Displacement: 8.73 ft
Total Well Penetration Depth: 10.48 ft
Casing Radius: 0.166 ft

Static Water Column Height: 10.48 ft
Screen Length: 10.48 ft
Well Radius: 0.34 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
 $K = 0.0006071$ ft/min

Solution Method: Bouwer-Rice
 $y_0 = 95.72$ ft

Data Set: \\Server1\aec\Project Folder-2005\05-056 Royal Farms Multiple Sites\Store 64 Pulaski Highway, Rosec
 Title: Royal Farms No. 64
 Date: 02/17/10
 Time: 15:04:00

PROJECT INFORMATION

Company: AEC
 Client: Royal Farms
 Project: 05-056
 Location: Rosedale MD
 Test Date: 2-2-10
 Test Well: MW-2

AQUIFER DATA

Saturated Thickness: 10.48 ft
 Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-2

X Location: 0. ft
 Y Location: 0. ft

Initial Displacement: 8.73 ft
 Static Water Column Height: 10.48 ft
 Casing Radius: 0.166 ft
 Well Radius: 0.34 ft
 Well Skin Radius: 0.34 ft
 Screen Length: 10.48 ft
 Total Well Penetration Depth: 10.48 ft
 Corrected Casing Radius (Bouwer-Rice Method): 0.166 ft
 Gravel Pack Porosity: 0.

No. of Observations: 40

Observation Data			
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.5	8.49	10.5	5.24
1.	8.33	11.	5.12
1.5	8.09	12.	4.96
2.	7.96	13.	4.81
2.5	7.8	14.	4.4
3.	7.66	15.	4.
3.5	7.48	16.	3.8
4.	7.33	17.	3.55
4.5	7.17	18.	3.29
5.	7.02	19.	3.01
5.5	6.86	20.	2.76
6.	6.72	21.	2.47
6.5	6.53	22.	2.25
7.	6.34	23.	1.32
7.5	6.19	28.	1.08
8.	6.02	32.	1.
8.5	5.89	37.	0.92
9.	5.77	42.	0.89
9.5	5.57	47.	0.86
10.	5.38	52.	0.82

SOLUTION

Slug Test
 Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 ln(Re/rw): 2.593

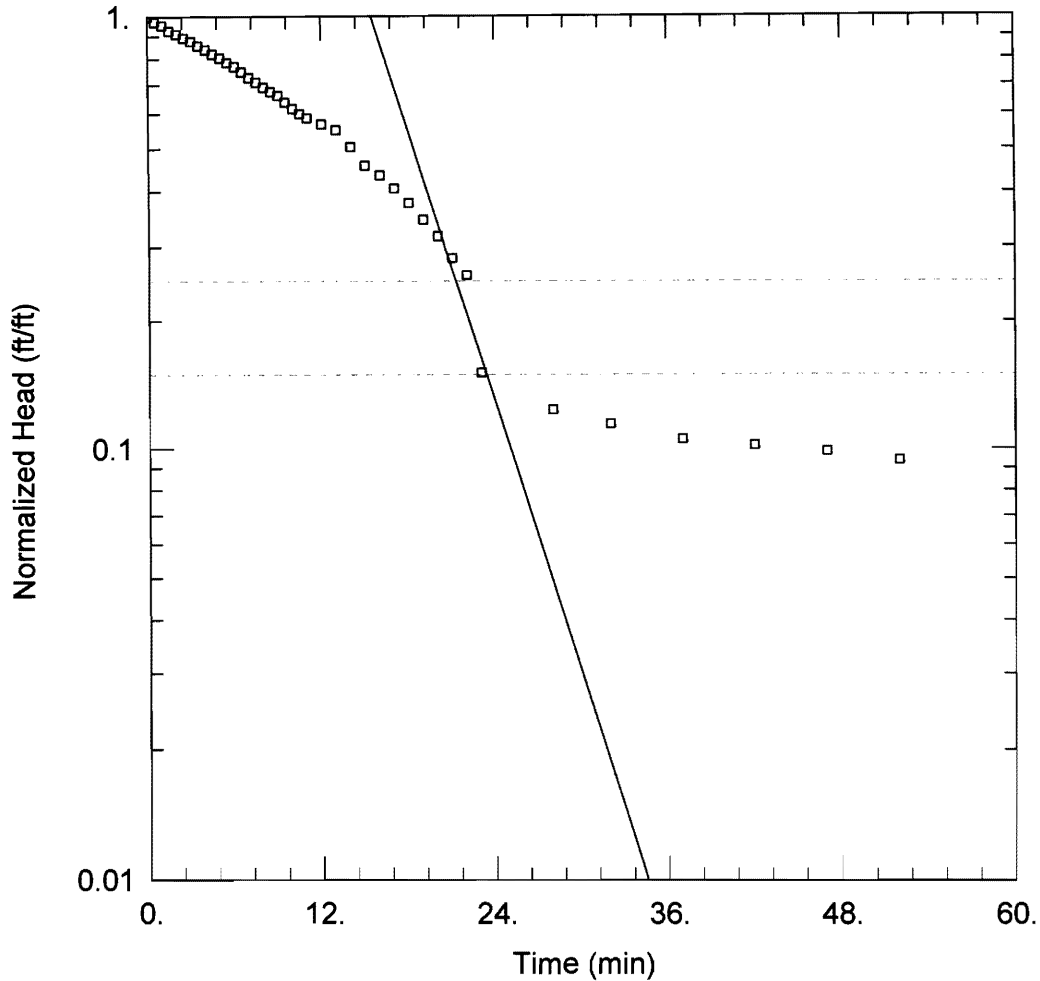
VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0006071	ft/min
y0	95.72	ft

$K = 0.0003084$ cm/sec

$T = K*b = 0.006363$ ft²/min (0.09852 sq. cm/sec)



ROYAL FARMS NO. 64

Data Set: \...Aqtw MW-2.aqt
 Date: 02/17/10

Time: 16:11:24

PROJECT INFORMATION

Company: AEC
 Client: Royal Farms
 Project: 05-056
 Location: Rosedale MD
 Test Well: MW-2
 Test Date: 2-2-10

AQUIFER DATA

Saturated Thickness: 10.48 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-2)

Initial Displacement: 8.73 ft Static Water Column Height: 10.48 ft
 Total Well Penetration Depth: 10.48 ft Screen Length: 10.48 ft
 Casing Radius: 0.166 ft Well Radius: 0.34 ft
 Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 K = 0.001685 ft/min y0 = 373. ft

Data Set: \\Server1\aec\Project Folder-2005\05-056 Royal Farms Multiple Sites\Store 64 Pulaski Highway, Rosec
 Title: Royal Farms No. 64
 Date: 02/17/10
 Time: 15:02:31

PROJECT INFORMATION

Company: AEC
 Client: Royal Farms
 Project: 05-056
 Location: Rosedale MD
 Test Date: 2-2-10
 Test Well: MW-2

AQUIFER DATA

Saturated Thickness: 10.48 ft
 Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-2

X Location: 0. ft
 Y Location: 0. ft

Initial Displacement: 8.73 ft
 Static Water Column Height: 10.48 ft
 Casing Radius: 0.166 ft
 Well Radius: 0.34 ft
 Well Skin Radius: 0.34 ft
 Screen Length: 10.48 ft
 Total Well Penetration Depth: 10.48 ft
 Corrected Casing Radius (Bouwer-Rice Method): 0.166 ft
 Gravel Pack Porosity: 0.

No. of Observations: 40

Observation Data			
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.5	8.49	10.5	5.24
1.	8.33	11.	5.12
1.5	8.09	12.	4.96
2.	7.96	13.	4.81
2.5	7.8	14.	4.4
3.	7.66	15.	4.
3.5	7.48	16.	3.8
4.	7.33	17.	3.55
4.5	7.17	18.	3.29
5.	7.02	19.	3.01
5.5	6.86	20.	2.76
6.	6.72	21.	2.47
6.5	6.53	22.	2.25
7.	6.34	23.	1.32
7.5	6.19	28.	1.08
8.	6.02	32.	1.
8.5	5.89	37.	0.92
9.	5.77	42.	0.89
9.5	5.57	47.	0.86
10.	5.38	52.	0.82

SOLUTION

Slug Test
 Aquifer Model: Unconfined
 Solution Method: Hvorslev
 Log Factor: 0.1887

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.001687	ft/min
y0	426.2	ft

K = 0.000857 cm/sec
 T = K*b = 0.01768 ft²/min (0.2738 sq. cm/sec)

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	Approx. C.I.	t-Ratio	
K	0.0003962	1.231E-5	+/- 2.492E-5	32.18	ft/min
y0	9.172	0.1341	+/- 0.2713	68.41	ft

C.I. is approximate 95% confidence interval for parameter
 t-ratio = estimate/std. error
 No estimation window

K = 0.0002013 cm/sec
 T = K*b = 0.004152 ft²/min (0.06429 sq. cm/sec)

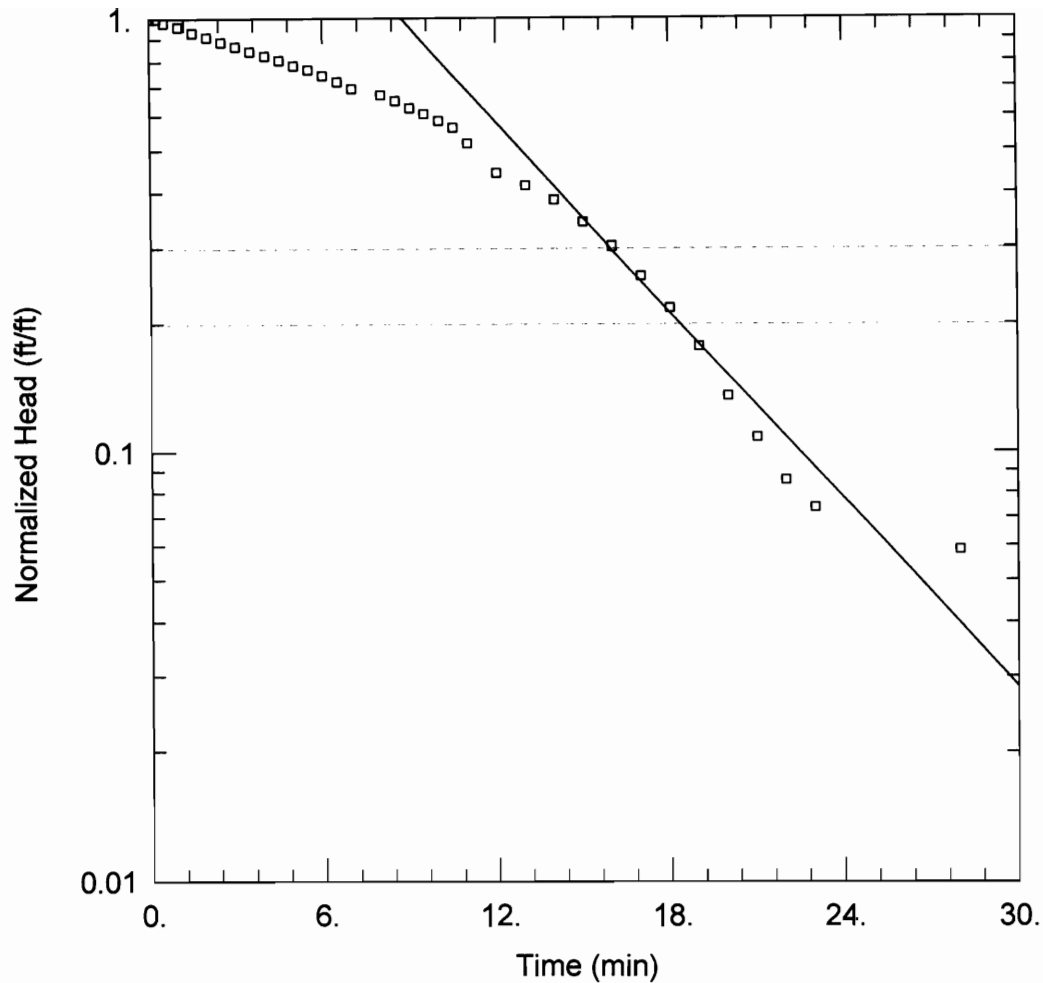
Parameter Correlations

	K	y0
K	1.00	0.76
y0	0.76	1.00

Residual Statistics

for weighted residuals

Sum of Squares 4.089 ft²
 Variance..... 0.1076 ft²
 Std. Deviation 0.328 ft
 Mean -0.01519 ft
 No. of Residuals 40
 No. of Estimates 2



ROYAL FARMS NO. 64

Data Set: \...Aqtw MW-5.aqt
 Date: 02/17/10

Time: 16:25:09

PROJECT INFORMATION

Company: AEC
 Client: Royal Farms
 Project: 05-056
 Location: Rosedale MD
 Test Well: MW-5
 Test Date: 2-3-10

AQUIFER DATA

Saturated Thickness: 17.25 ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (MW-5)

Initial Displacement: 15.98 ft
 Total Well Penetration Depth: 17.25 ft
 Casing Radius: 0.166 ft

Static Water Column Height: 17.25 ft
 Screen Length: 17.25 ft
 Well Radius: 0.34 ft
 Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
 $K = 0.000402$ ft/min

Solution Method: Bower-Rice
 $y_0 = 69.02$ ft

Data Set: \\Server1\aec\Project Folder-2005\05-056 Royal Farms Multiple Sites\Store 64 Pulaski Highway, Rosec
 Title: Royal Farms No. 64
 Date: 02/17/10
 Time: 16:26:31

PROJECT INFORMATION

Company: AEC
 Client: Royal Farms
 Project: 05-056
 Location: Rosedale MD
 Test Date: 2-3-10
 Test Well: MW-5

AQUIFER DATA

Saturated Thickness: 17.25 ft
 Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-5

X Location: 0. ft
 Y Location: 0. ft

Initial Displacement: 15.98 ft
 Static Water Column Height: 17.25 ft
 Casing Radius: 0.166 ft
 Well Radius: 0.34 ft
 Well Skin Radius: 0.34 ft
 Screen Length: 17.25 ft
 Total Well Penetration Depth: 17.25 ft
 Corrected Casing Radius (Bouwer-Rice Method): 0.166 ft
 Gravel Pack Porosity: 0.

No. of Observations: 35

Observation Data			
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.25	15.98	9.5	9.68
0.5	15.63	10.	9.33
1.	15.33	10.5	8.98
1.5	14.85	11.	8.28
2.	14.54	12.	7.08
2.5	14.18	13.	6.63
3.	13.86	14.	6.15
3.5	13.5	15.	5.48
4.	13.18	16.	4.83
4.5	12.88	17.	4.13
5.	12.53	18.	3.48
5.5	12.25	19.	2.83
6.	11.88	20.	2.16
6.5	11.51	21.	1.73
7.	11.09	22.	1.37
8.	10.71	23.	1.18
8.5	10.38	28.	0.94
9.	9.99		

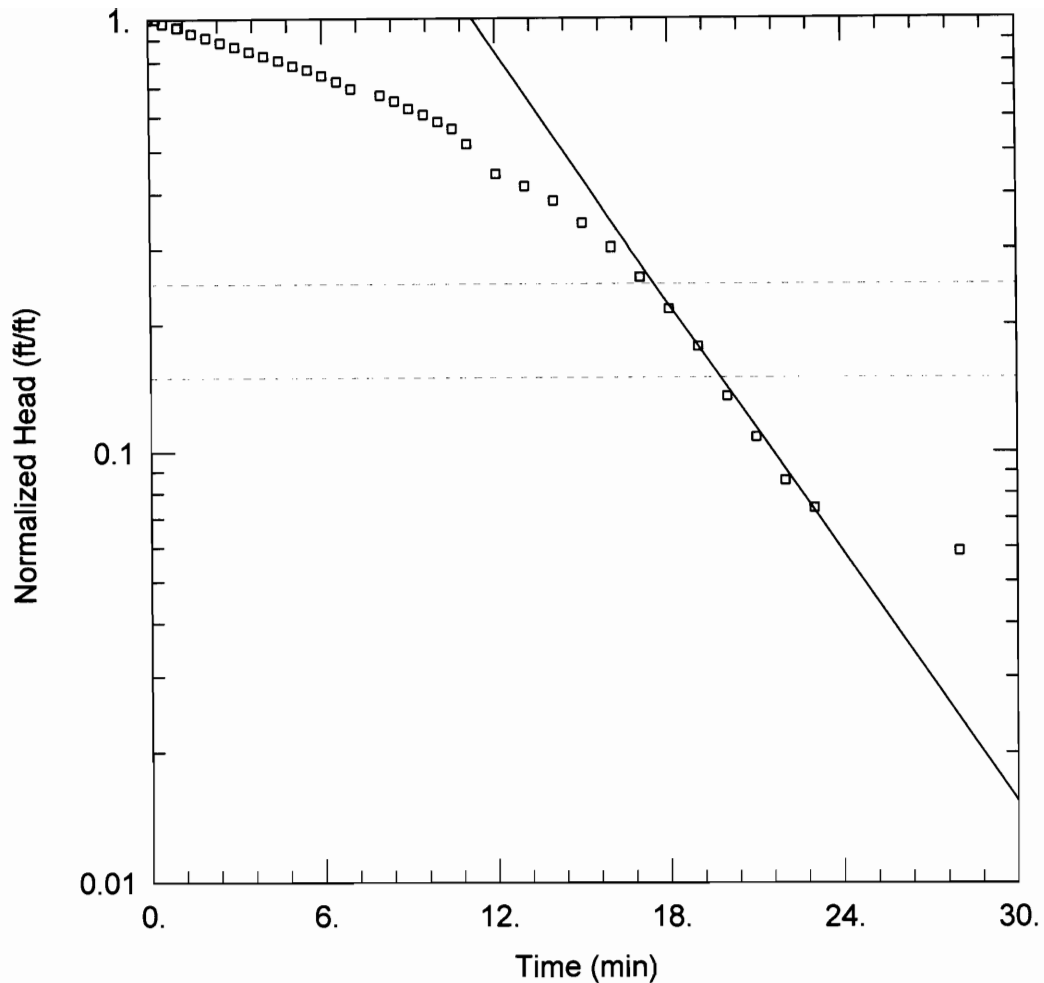
SOLUTION

Slug Test
 Aquifer Model: Unconfined
 Solution Method: Bouwer-Rice
 ln(Re/rw): 3.006

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate
-----------	----------



ROYAL FARMS NO. 64

Data Set: \...Aqtw MW-5.aqt
 Date: 02/17/10

Time: 16:14:02

PROJECT INFORMATION

Company: AEC
 Client: Royal Farms
 Project: 05-056
 Location: Rosedale MD
 Test Well: MW-5
 Test Date: 2-3-10

AQUIFER DATA

Saturated Thickness: 17.25 ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-5)

Initial Displacement: 15.98 ft
 Total Well Penetration Depth: 17.25 ft
 Casing Radius: 0.166 ft

Static Water Column Height: 17.25 ft
 Screen Length: 17.25 ft
 Well Radius: 0.34 ft
 Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined

Solution Method: Hvorslev

K = 0.0009396 ft/min

y0 = 193. ft

Data Set: \\Server1\aec\Project Folder-2005\05-056 Royal Farms Multiple Sites\Store 64 Pulaski Highway, Rosec
 Title: Royal Farms No. 64
 Date: 02/17/10
 Time: 16:15:22

PROJECT INFORMATION

Company: AEC
 Client: Royal Farms
 Project: 05-056
 Location: Rosedale MD
 Test Date: 2-3-10
 Test Well: MW-5

AQUIFER DATA

Saturated Thickness: 17.25 ft
 Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-5

X Location: 0. ft
 Y Location: 0. ft

Initial Displacement: 15.98 ft
 Static Water Column Height: 17.25 ft
 Casing Radius: 0.166 ft
 Well Radius: 0.34 ft
 Well Skin Radius: 0.34 ft
 Screen Length: 17.25 ft
 Total Well Penetration Depth: 17.25 ft
 Corrected Casing Radius (Bouwer-Rice Method): 0.166 ft
 Gravel Pack Porosity: 0.

No. of Observations: 35

Observation Data			
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.25	15.98	9.5	9.68
0.5	15.63	10.	9.33
1.	15.33	10.5	8.98
1.5	14.85	11.	8.28
2.	14.54	12.	7.08
2.5	14.18	13.	6.63
3.	13.86	14.	6.15
3.5	13.5	15.	5.48
4.	13.18	16.	4.83
4.5	12.88	17.	4.13
5.	12.53	18.	3.48
5.5	12.25	19.	2.83
6.	11.88	20.	2.16
6.5	11.51	21.	1.73
7.	11.09	22.	1.37
8.	10.71	23.	1.18
8.5	10.38	28.	0.94
9.	9.99		

SOLUTION

Slug Test
 Aquifer Model: Unconfined
 Solution Method: Hvorslev
 Log Factor: 0.1887

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate
-----------	----------

**APPENDIX I
SOIL BORING LOGS**

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-1		Permit Number:	Permit Date:
Date Work Began: 1/22/10		Date Work Ended: 1/22/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	1	Dk. brown silty CLAY (OL) w/ organics, moist, loose	0.0 @ 1'		
1	4	Orangish brown silty CLAY (CL), moist, med. stiffness	0.0 @ 2'		
4	6	Greyish brown silty CLAY (CL), soft, very moist	0.0 @ 3'		
6	8	Orangish brown silty CLAY (CL), moist, med. stiffness	0.0 @ 4'		
8	14	Orangish brown sandy SILT (SM) w/ some clay, med. stiffness moist	0.0 @ 6'		11.5-12
			0.0 @ 8'		
14	16	Grey silty CLAY (CL), stiff, moist	0.0 @ 10'		13.5-14
16	18.5	Orangish brown/grey silty SAND (ML), moist, loose	0.0 @ 12'		
18.5	24	Reddish brown CLAY (CH), stiff, moist, w/ some white/grey mottling	0.0 @ 14'		
		Boring terminated @ 24' - Refusal	0.0 @ 18'		
		Boring caved in @ 15.5' well advanced to 22' w/ geoprobe	0.0 @ 20'		

Water Level of Completed Well	
First water (ft. bgs): 14.46	Date/Time Measured: 1-22-10/1225
Static Water (ft. bgs): 13.91	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	4.60
Depth to Top of Sand Pack (ft. bgs)	4.60
Depth to Bottom of Sand Pack (ft. bgs)	21.60
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	6.60
Depth to Top of Screen (ft. bgs)	6.60
Depth to Bottom of Screen (ft. bgs)	21.60
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

↑

See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines. GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines. SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures. ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays. OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts. CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-2		Permit Number:	Permit Date:
Date Work Began: 1/22/10		Date Work Ended: 1/22/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	0.5	Concrete	0.3 @ 1'		
0.5	1.5	Orangish brown silty SAND (ML), moist, loose	24.3 @ 3'		
1.5	4	Dk. brown silty CLAY (CL) w/ some gravel and brick, some black staining @ 3'	0.5 @ 5'		
			5.2 @ 7'		
4	13	Orangish brown silty CLAY (CL), moist, med. stiffness	443 @ 9'		10.5-11'
13	23	Reddish brown CLAY (CH), moist, stiff w/ some grey/white mottling, some gravel @ 19-20'	801 @ 11'		
			87.3 @ 13'		9.5-10'
23	25	Yellowish brown silty CLAY (CL), stiff, moist	4.5 @ 15'		
		Boring terminated @ 25'	28.2 @ 17'		
		Boring caved in @ 18' well advanced to 18.30' w/ geoprobe	168 @ 19'		
			123 @ 21'		
			3.1 @ 23'		
			0.3 @ 25'		

Water Level of Completed Well	
First water (ft. bgs): 15.30	Date/Time Measured: 1-22-10/1315
Static Water (ft. bgs): 13.77	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	6.30
Depth to Top of Sand Pack (ft. bgs)	6.30
Depth to Bottom of Sand Pack (ft. bgs)	18.30
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	8.30
Depth to Top of Screen (ft. bgs)	8.30
Depth to Bottom of Screen (ft. bgs)	18.30
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-3		Permit Number:	Permit Date:
Date Work Began: 1/22/10		Date Work Ended: 1/22/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	0.5	Asphalt and gravel sub base	6.4 @ 3'		
0.5	3.5	Tan/brown silty SAND (SM), moist, loose	47.9 @ 5'		
3.5	12	Orangish brown silty CLAY (CL), moist, med. stiffness,	3.3 @ 7'		4.5-5'
		heavy petroleum staining @ 7-8.5'	1.7 @ 9'		6.5-7'
12	18	Orangish brown/grey silty CLAY (CL)	1.4 @ 11'		
18	25	Reddish brown CLAY (CH) w/ grey and tan mottling,	1.0 @ 13'		
		some trace silt and sand.	4.2 @ 15'		
		Boring terminated @ 25'	0.8 @ 17'		
		Boring caved in @ 18' well advanced to 17' w/	0.3 @ 19'		
		geoprobe	0.4 @ 21'		
			1.3 @ 23'		
			0.3 @ 25'		

Water Level of Completed Well	
First water (ft. bgs): 15.60	Date/Time Measured: 1-22-10/1600
Static Water (ft. bgs): 13.86	Date/Time Measured: 2-2-10

Boring Location Sketch

See Figure 3

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	5.05
Depth to Top of Sand Pack (ft. bgs)	5.05
Depth to Bottom of Sand Pack (ft. bgs)	17.05
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	7.05
Depth to Top of Screen (ft. bgs)	7.05
Depth to Bottom of Screen (ft. bgs)	17.05
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-4		Permit Number:	Permit Date:
Date Work Began: 1/25/10		Date Work Ended: 1/25/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log				
Drilling Method: Geoprobe		Drilling Fluid: N/A		
Boring Diameter (inches): 2.25		Drilling Contractor: Carl Hugo		
Depth from Surface		Description		
Feet	Feet	Soil Classification	PID	Odor Comments
		Sample Interval		
0	0.5	Asphalt and gravel sub base	0 @ 1'	
0.5	4	Lt. brown silty SAND (ML) w/some clay, moist, loose	0.2 @ 3'	
4	8	Orangish brown silty CLAY (CL) w/ some sand, med. stiffness, moist, heavy staining @ 7.5'	0.3 @ 5'	
			2.5 @ 7.5'	
8	15	Tan silty CLAY (CL), stiff, moist w/ some gravel	2.3 @ 9'	
				12.5-13'
15	24	Reddish brown sandy SILT (SM), w/ some clay, wet, med. stiffness	0.1 @ 11'	
			52.2 @ 13'	
24	25	Reddish brown CLAY (CH) stiff, wet	1.2 @ 15'	
		Boring terminated @ 25'	0.1 @ 17'	
		Sporadic petroleum staining from 7.5-11'	0.2 @ 19'	
		Boring caved in @ 20' well advanced to 19' w/ geoprobe	1.3 @ 21'	
			0.2 @ 23'	
			0.1 @ 25'	

Water Level of Completed Well	
First water (ft. bgs): 15.36	Date/Time Measured: 1-25-10/1000
Static Water (ft. bgs): 13.80	Date/Time Measured: 2-2-10

Boring Location Sketch

↑

See Figure 3

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	6.96
Depth to Top of Sand Pack (ft. bgs)	6.96
Depth to Bottom of Sand Pack (ft. bgs)	18.96
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	8.96
Depth to Top of Screen (ft. bgs)	8.96
Depth to Bottom of Screen (ft. bgs)	18.96
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
 GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
 SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
 ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
 OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
 CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-5		Permit Number:	Permit Date:
Date Work Began: 1/25/10		Date Work Ended: 1/25/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	0.5	Asphalt and gravel sub base	3.3 @ 1'		
0.5	4	Lt. brown silty SAND (ML), moist, loose	0.2 @ 3'		
4	8	Orangish brown sandy SILT (SM), w/ some clay, moist, loose, black staining @ 7.5-11'	1.1 @ 5'		
			10.5 @ 7.5'		
8	11	Tan CLAY (CH), moist high plasticity, heavy petroleum staining and odor	18.7 @ 9'		
			5.0 @ 10'		
11	12	Orangish brown silty SAND (ML) w/ some gravel, loose, moist	105 @ 11'		11.5-12'
			1607 @ 12'		
12	16	Orangish brown CLAY (CH), stiff, moist	453 @ 13'		
16	24	Reddish brown silty SAND (ML), wet, loose	498 @ 16'		
24	25	Reddish brown CLAY (CH), stiff, moist	87.0 @ 18'		
		Boring terminated @ 25'	87.9 @ 20'		
		Boring caved in @ 15' well advanced to 14.5' w/ geoprobe	22.3 @ 21'		
			53.3 @ 23'		
			21.7 @ 25'		

Water Level of Completed Well	
First water (ft. bgs): N/A	Date/Time Measured: 1-25-10/1200
Static Water (ft. bgs): 12.75	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	2.49
Depth to Top of Sand Pack (ft. bgs)	2.49
Depth to Bottom of Sand Pack (ft. bgs)	14.49
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	4.49
Depth to Top of Screen (ft. bgs)	4.49
Depth to Bottom of Screen (ft. bgs)	14.49
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
 GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
 SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
 ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
 OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
 CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-6		Permit Number:	Permit Date:
Date Work Began: 1/27/10		Date Work Ended: 1/27/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	1	Asphalt and gravel sub base	53.6 @ 1'		
1	2	Reddish brown silty CLAY (CL), stiff, dry	242 @ 3'		
2	7	Tan silty CLAY (CL), moist, stiff, heavy petroleum staining and odor	84.2 @ 5' 1267 @ 7'		
7	9	Tan silty SAND (SM), moist, med. stiffness, heavy petroleum staining and odor	1357 @ 9' 1368 @ 11'		
9	15	Tan silty CLAY (CL), moist, loose, heavy petroleum staining and odor	1262 @ 13' 486 @ 15'		10.5-11'
15	19	Orangish brown silty CLAY (CL), w/ tan and grey mottling, stiff, moist	1021 @ 17' 866 @ 20'		
19	20	Reddish brown silty CLAY (CL), stiff, moist			
		Boring terminated @ 20'			
		Boring caved in @ 18' well advanced to approx. 17' w/ geoprobe			

Water Level of Completed Well	
First water (ft. bgs): 12.35	Date/Time Measured: 1-27-10/1410
Static Water (ft. bgs): 12.06	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	4.71
Depth to Top of Sand Pack (ft. bgs)	4.71
Depth to Bottom of Sand Pack (ft. bgs)	16.71
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	6.71
Depth to Top of Screen (ft. bgs)	6.71
Depth to Bottom of Screen (ft. bgs)	16.71
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-7		Permit Number:	Permit Date:
Date Work Began: 1/28/10		Date Work Ended: 1/28/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
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Drilling Method: Geoprobe		Drilling Fluid: N/A			
Boring Diameter (inches): 2.25		Drilling Contractor: Carl Hugo			
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	4	No Recovery	0.0 @4'		
4	11	Grey CLAY (CH) w/ some sand, soft, moist	0.0 @ 5'		4.5-5'
11	16	Tan silty CLAY (CL), stiff, moist w/ some grey mottling	0.0 @ 7'		
16	20	Reddish brown silty CLAY (CL), stiff, moist	0.0 @ 9'		
		Boring terminated @ 20' - Refusal	0.0 @ 11'		
		Boring caved in @ 18' well advanced to approx. 18.5' w/	0.0 @ 13'		
		geoprobe	0.0 @ 15'		
			0.0 @ 17'		
			0.0 @ 19'		
			0.0 @ 20'		

Water Level of Completed Well	
First water (ft. bgs): 8.00	Date/Time Measured: 1-28-10/1015
Static Water (ft. bgs): 7.67	Date/Time Measured: 2-2-10

↑ Boring Location Sketch

See Figure 3

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	2.67
Depth to Top of Sand Pack (ft. bgs)	2.67
Depth to Bottom of Sand Pack (ft. bgs)	18.67
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	3.67
Depth to Top of Screen (ft. bgs)	3.67
Depth to Bottom of Screen (ft. bgs)	18.67
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
 GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
 SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
 ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
 OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
 CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-8		Permit Number:	Permit Date:
Date Work Began: 1/28/10		Date Work Ended: 1/28/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log

Drilling Method: Geoprobe	Drilling Fluid: N/A
Boring Diameter (inches): 2.25	Drilling Contractor: Carl Hugo

Depth from Surface		Description	PID	Odor Comments	Sample Interval
Feet	Feet				
0	1	Asphalt and gravel sub base	0.0 @ 4'		
1	12	Orangish brown silty CLAY (CL) w/ some sand and gravel, moist, med. stiffness	0.1 @ 8' 0.2 @ 12'		
12	16	Tan silty CLAY (CL) w/ some grey mottling, moist, med. stiffness	1321 @ 13' 80.1 @ 16'		12.5-13'
16	20	Reddish brown silty SAND (ML) w/ some grey and tan mottling, loose, moist	30.0 @ 17' 0.1 @ 20'		
		Boring terminated @ 20' - Refusal			
		Very little recovery 0-15'			
		Boring caved in @ 18'			

Water Level of Completed Well	
First water (ft. bgs): 12.45	Date/Time Measured: 1-28-10/1100
Static Water (ft. bgs): 12.04	Date/Time Measured: 2-2-10

↑ Boring Location Sketch

See Figure 3

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	1.50
Depth to Top of Sand Pack (ft. bgs)	1.50
Depth to Bottom of Sand Pack (ft. bgs)	18.00
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	3.00
Depth to Top of Screen (ft. bgs)	3.00
Depth to Bottom of Screen (ft. bgs)	18.00
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-9		Permit Number:	Permit Date:
Date Work Began: 1/26/10		Date Work Ended: 1/26/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log

Drilling Method: Geoprobe		Drilling Fluid: N/A	
Boring Diameter (inches): 2.25		Drilling Contractor: Carl Hugo	

Depth from Surface		Description	PID	Odor Comments	Sample Interval
Feet	Feet				
0	1	Asphalt and gravel sub base	0.1 @ 1'		
1	4.5	Orangish brown silty CLAY (CL), stiff, moist	1.2 @ 3'		
4.5	15	Tan silty CLAY (CL), moist, soft, heavy petroleum staining and odor, very little recovery from 8-15'	2.6 @ 5' 340 @ 7'		7.5-8'
15	24	Reddish brown silty SAND (ML) w/ some gravel, wet, loose	841 @ 8' 524 @ 15'		
24	25	No recovery	176 @ 17'		
		Boring terminated @ 25'	172 @ 19'		
		Boring caved in @ 20' well advanced to approx. 19' w/ geoprobe	12.4 @ 24'		

Water Level of Completed Well	
First water (ft. bgs): 12.16	Date/Time Measured: 1-26-10/1600
Static Water (ft. bgs): 15.20	Date/Time Measured: 2-2-10

Boring Location Sketch

↑

See Figure 3

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	2.76
Depth to Top of Sand Pack (ft. bgs)	2.76
Depth to Bottom of Sand Pack (ft. bgs)	18.76
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	3.76
Depth to Top of Screen (ft. bgs)	3.76
Depth to Bottom of Screen (ft. bgs)	18.76
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-10		Permit Number:	Permit Date:
Date Work Began: 1/25/10		Date Work Ended: 1/25/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	1	Gravel	1.4 @ 1'		
1	4	Dk. brown silty CLAY (CL), wet, soft	6.4 @ 3'		
4	6.5	Orangish brown sandy SILT (SM), moist, med. stiffness	0.5 @ 5'		
6.5	8	Tan/grey silty CLAY (CL), stiff, moist	0.8 @ 7'		
8	9	Reddish brown silty SAND (ML), wet, loose	1.1 @ 8'		
9	12	Reddish brown CLAY (CH) stiff, moist	202 @ 9'		8.5-9'
12	19.5	Orangish brown/grey silty CLAY (CL), stiff, moist	1.4 @ 11'		
19.5	20	Reddish brown CLAY (CH), stiff, moist	1.7 @ 13'		
		Boring terminated @ 20'	0.7 @ 15'		
		Boring caved in @ 15' well advanced to approx. 18' w/	1.2 @ 17'		
		geoprobe	1.0 @ 20'		

Water Level of Completed Well	
First water (ft. bgs): 12.32	Date/Time Measured: 1-25-10/1420
Static Water (ft. bgs): 8.77	Date/Time Measured: 2-2-10

Boring Location Sketch

See Figure 3

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	5.90
Depth to Top of Sand Pack (ft. bgs)	5.90
Depth to Bottom of Sand Pack (ft. bgs)	17.90
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	7.90
Depth to Top of Screen (ft. bgs)	7.90
Depth to Bottom of Screen (ft. bgs)	17.90
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-11		Permit Number:	Permit Date:
Date Work Began: 1/25/10		Date Work Ended: 1/25/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	0.5	Gravel/brick	1629 @ 1'		
0.5	4	Tan silty CLAY (CL), highly plastic, wet	383 @ 3'		
4	11	Tan/grey silty CLAY(CL), moist, stiff	200 @ 4'		
11	12	Orangish brown silty CLAY (CL), moist, stiff	63.3 @ 5'		
12	20	Reddish brown CLAY (CH) w/ some grey and tan	2.8 @ 7'		14.5-15'
		mottling, stiff, moist	7.2 @ 9'		
		Boring terminated @ 20'	47.7 @ 10'		
		Boring caved in @ 19'	442 @ 12'		
			1650 @ 15'		
			4.3 @ 16'		
			0.3 @ 18'		
			0.5 @ 20'		

Water Level of Completed Well	
First water (ft. bgs): 18.56	Date/Time Measured: 1-25-10/1430
Static Water (ft. bgs): 9.72	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	2.10
Depth to Top of Sand Pack (ft. bgs)	2.10
Depth to Bottom of Sand Pack (ft. bgs)	19.10
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	4.10
Depth to Top of Screen (ft. bgs)	4.10
Depth to Bottom of Screen (ft. bgs)	19.10
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-12		Permit Number:	Permit Date:
Date Work Began: 1/25/10		Date Work Ended: 1/25/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	1	Gravel	14.0 @ 1'		
1	4	Tan silty CLAY (CL), wet, high plasticity, heavy petroleum staining and odor	828 @ 3'		
			4.8 @ 5'		
4	12	Orangish brown silty CLAY (CL), moist, stiff w/ some grey mottling	1.7 @ 7'		
			2.3 @ 9'		
12	15	No recovery, soil is wet and fell out of liner.	3.4 @ 11'		
		Boring terminated @ 15'	1.6 @ 12'		

Water Level of Completed Well	
First water (ft. bgs): 7.23	Date/Time Measured: 1-25-10/1210
Static Water (ft. bgs): 6.67	Date/Time Measured: 2-2-10

Boring Location Sketch

See Figure 3

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	1.95
Depth to Top of Sand Pack (ft. bgs)	1.95
Depth to Bottom of Sand Pack (ft. bgs)	14.95
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	2.95
Depth to Top of Screen (ft. bgs)	2.95
Depth to Bottom of Screen (ft. bgs)	14.95
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
 GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
 SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
 ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
 OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
 CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-13		Permit Number:	Permit Date:
Date Work Began: 1/25/10		Date Work Ended: 1/25/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	1	Gravel/brick	5.6 @ 1'		
1	4	Grey silty CLAY (CL), wet, highly plastic, heavy petroleum staining	2.4 @ 3'		
			1.4 @ 5'		
4	6	Tan silty CLAY (CL), stiff, moist	1424 @ 8'		
6	8	Orangish brown silty CLAY (CL), stiff, moist	820 @ 9'		7.5-8'
8	15	Reddish brown silty SAND (ML) w/ some clay from 9-10', moist, loose	443 @ 10'		
			57.9 @ 12'		
		Boring terminated @ 15'	98.6 @ 13'		
		Boring caved in @ 6' well advanced to approx. 7' w/ geoprobe	6.4 @ 15'		

Water Level of Completed Well	
First water (ft. bgs): 3.05	Date/Time Measured: 1-25-10/1630
Static Water (ft. bgs): 4.20	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	0.75
Depth to Top of Sand Pack (ft. bgs)	0.75
Depth to Bottom of Sand Pack (ft. bgs)	7.00
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	1.00
Depth to Top of Screen (ft. bgs)	1.00
Depth to Bottom of Screen (ft. bgs)	7.00
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

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See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
 GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
 SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
 ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
 OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
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Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-14		Permit Number:	Permit Date:
Date Work Began: 1/26/10		Date Work Ended: 1/26/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe		Drilling Fluid: N/A			
Boring Diameter (inches): 2.25		Drilling Contractor: Carl Hugo			
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	1	Gravel	2.8 @ 1'		
1	6	Tan silty CLAY (CL), stiff, moist w/ some petroleum	7.8 @ 3'		4.5-5'
		Staining from 3-5'	9.8 @ 5'		
6	11	Orangish brown silty CLAY (CL) w/ some sand and gravel	0.0 @ 7'		
		stiff, moist	0.0 @ 9'		
11	12	Reddish brown silty CLAY (CL), moist, stiff	0.0 @ 11'		
12	15	Reddish brown silty SAND (ML), moist, loose	0.0 @ 13'		
		Boring terminated @ 15'	0.0 @ 15'		
		Boring caved in @ 12'			

Water Level of Completed Well	
First water (ft. bgs): 4.55	Date/Time Measured: 1-26-10/1510
Static Water (ft. bgs): 5.24	Date/Time Measured: 2-2-10

Boring Location Sketch

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See Figure 3

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	1.00
Depth to Top of Sand Pack (ft. bgs)	1.00
Depth to Bottom of Sand Pack (ft. bgs)	12.00
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	2.00
Depth to Top of Screen (ft. bgs)	2.00
Depth to Bottom of Screen (ft. bgs)	12.00
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
 GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
 SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
 ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
 OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
 CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-15		Permit Number:	Permit Date:
Date Work Began: 1/26/10		Date Work Ended: 1/26/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	1	Gravel	0.0 @ 1'		
1	2	Orangish brown CLAY (CH), stiff, moist	0.0 @ 3'		
2	5	Tan silty CLAY (CL), moist, highly plastic	2.1 @ 5'		4.5-5'
5	8.5	Orangish brown silty CLAY (CL) w/ grey/tan mottling,	0.0 @ 7'		
		stiff, moist	2.8 @ 9'		
8.5	15	Reddish brown silty SAND (ML), moist, loose	0.0 @ 11'		
		Boring terminated @ 15'	0.4 @ 13'		
		Boring caved in @ 13'	0.1 @ 15'		

Water Level of Completed Well	
First water (ft. bgs): NA	Date/Time Measured: 1-26-10/0910
Static Water (ft. bgs): 3.71	Date/Time Measured: 2-2-10

Boring Location Sketch

See Figure 3

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	1.00
Depth to Top of Sand Pack (ft. bgs)	1.00
Depth to Bottom of Sand Pack (ft. bgs)	12.98
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	2.98
Depth to Top of Screen (ft. bgs)	2.98
Depth to Bottom of Screen (ft. bgs)	12.98
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
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Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-16		Permit Number:	Permit Date:
Date Work Began: 1/26/10		Date Work Ended: 1/26/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	1	Organics/bark	0.1 @ 1'		
1	2	Orangish brown CLAY (CH), stiff, moist	0.1 @ 3'		3.5-4'
2	4	Tan/brown silty CLAY (CL), wet, soft	0.2 @ 5'		
4	7.5	Orangish brown silty CLAY (CL) stiff, moist w/ grey and tan mottling	0.2 @ 7'		6.5-7'
			0.6 @ 8'		
7.5	8	Reddish brown silty SAND (ML), wet, loose	0.1 @ 11'		
8	9.5	Orangish brown silty CLAY (CL), stiff, moist w/ some grey and tan mottling	0.1 @ 13'		
			0.1 @ 15'		
9.5	15	Reddish brown silty SAND (ML), loose, wet			
		Boring terminated @ 15'			
		Boring caved in @ 9' well advanced to approx. 8.5' w/ geoprobe			

Water Level of Completed Well	
First water (ft. bgs): 2.72	Date/Time Measured: 1-26-10/1305
Static Water (ft. bgs): 3.81	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	1.00
Depth to Top of Sand Pack (ft. bgs)	1.00
Depth to Bottom of Sand Pack (ft. bgs)	8.63
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	1.63
Depth to Top of Screen (ft. bgs)	1.63
Depth to Bottom of Screen (ft. bgs)	8.63
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

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See Figure 3


GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines. GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines. SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures. ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays. OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts. CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-17		Permit Number:	Permit Date:
Date Work Began: 1/26/10		Date Work Ended: 1/26/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	1	Gravel	0.2 @ 1'		
1	6.5	Tan silty CLAY (CL), soft, moist	0.2 @ 3'		
6.5	13	Reddish brown silty CLAY (CL), stiff, moist	0.2 @ 5'		6.5-7'
13	15	Grey CLAY (CH), high plasticity, moist	0.2 @ 7'		
15	17	Reddish brown CLAY (CH), stiff, moist	0.0 @ 9'		
17	18	Reddish brown silty SAND (ML) w/ some gravel, moist,	0.1 @ 11'		
		med. stiffness	0.1 @ 13'		
18	20	Reddish brown silty CLAY (CL), stiff, moist	0.1 @ 15'		
		Boring terminated @ 20'	0.3 @ 17'		
		Boring caved in @ 16.5'	0.1 @ 19'		

Water Level of Completed Well	
First water (ft. bgs): 8.34	Date/Time Measured: 1-26-10/1410
Static Water (ft. bgs): 8.81	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	0.75
Depth to Top of Sand Pack (ft. bgs)	0.75
Depth to Bottom of Sand Pack (ft. bgs)	16.40
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	1.40
Depth to Top of Screen (ft. bgs)	1.40
Depth to Bottom of Screen (ft. bgs)	16.40
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

 **Boring Location Sketch**

See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines. GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines. SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures. ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays. OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts. CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-18		Permit Number:	Permit Date:
Date Work Began: 1/26/10		Date Work Ended: 1/26/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	1	Gravel	0.1 @ 1'		
1	6	Tan silty CLAY (CL), wet, soft	0.0 @ 3'		
6	7	Reddish brown CLAY (CH), stiff, moist	0.1 @ 5'		6.5-7
7	10	Reddish brown silty SAND (ML) w/ some gravel, moist,	0.1 @ 7'		
		med. stiffness	0.1 @ 9'		
10	12	Reddish brown CLAY (CH), stiff, moist	0.1 @ 11'		
12	14	Orangish brown silty SAND (ML), wet, loose	0.1 @ 17'		
14	18	Orangish brown silty CLAY (CL), moist, stiff	0.1 @ 15'		
18	20	Reddish brown CLAY (CH) w/ grey and tan mottling,	0.2 @ 17'		
		stiff, moist	0.1 @ 20'		
		Boring terminated @ 20'			
		Boring caved in @ 15.5'			

Water Level of Completed Well	
First water (ft. bgs): 8.83	Date/Time Measured: 1-26-10/1405
Static Water (ft. bgs): 8.88	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	3.17
Depth to Top of Sand Pack (ft. bgs)	3.17
Depth to Bottom of Sand Pack (ft. bgs)	15.17
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	5.17
Depth to Top of Screen (ft. bgs)	5.17
Depth to Bottom of Screen (ft. bgs)	15.17
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
 GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
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Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-20		Permit Number:	Permit Date:
Date Work Began: 1/27/10		Date Work Ended: 1/27/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	1	Asphalt and moist black CLAY sub base	0.0 @ 1'		
1	4	Tan silty CLAY (CL), moist, stiff	0.0 @ 3'		1.5-2'
4	7	Orangish brown silty CLAY (CL) w/ some sand, moist, stiff	0.0 @ 5'		
			0.1 @ 7'		
7	8	Grey silty CLAY (CL), stiff, moist	0.1 @ 9'		
8	11	Reddish brown silty SAND (ML), wet, loose	0.1 @ 11'		
11	15	Reddish brown CLAY (CH), stiff, moist	0.1 @ 13'		
		Boring terminated @ 15'	0.1 @ 15'		
		Boring caved in @ approx. 9.5'			

Water Level of Completed Well	
First water (ft. bgs): 2.31	Date/Time Measured: 1-27-10/1245
Static Water (ft. bgs): 0.64	Date/Time Measured: 2-2-10

Boring Location Sketch

See Figure 3

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	0.75
Depth to Top of Sand Pack (ft. bgs)	0.75
Depth to Bottom of Sand Pack (ft. bgs)	9.31
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	1.00
Depth to Top of Screen (ft. bgs)	1.00
Depth to Bottom of Screen (ft. bgs)	9.31
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
 GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
 SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
 ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
 OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
 CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-21		Permit Number:	Permit Date:
Date Work Began: 1/27/10		Date Work Ended: 1/27/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log

Drilling Method: Geoprobe	Drilling Fluid: N/A
Boring Diameter (inches): 2.25	Drilling Contractor: Carl Hugo

Depth from Surface		Description	PID	Odor Comments	Sample Interval
Feet	Feet				
0	3	Asphalt and dk. brown CLAY sub base, moist, soft w/ Some brick fragments	0.0 @ 1'		
			0.0 @ 3'		
3	4	Tan silty CLAY (CL), moist, soft	0.0 @ 5'		2.5-3'
4	7	Orangish brown silty CLAY (CL), moist, med. stiffness w/ w/ grey and tan mottling	0.0 @ 7'		
			0.0 @ 9'		
7	12	Reddish brown silty SAND (ML) with some clay, wet, loose	0.0 @ 11'		
		Boring terminated @ 12'	0.0 @ 12'		
		Boring caved in @ 7'			

Water Level of Completed Well	
First water (ft. bgs): 2.45	Date/Time Measured: 1-27-10/1200
Static Water (ft. bgs): 0.15	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	0.75
Depth to Top of Sand Pack (ft. bgs)	0.75
Depth to Bottom of Sand Pack (ft. bgs)	6.75
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	1.00
Depth to Top of Screen (ft. bgs)	1.00
Depth to Bottom of Screen (ft. bgs)	6.75
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

↑

See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
 GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
 SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
 ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
 OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
 CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-22		Permit Number:	Permit Date:
Date Work Began: 1/27/10		Date Work Ended: 1/27/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log

Drilling Method: Geoprobe		Drilling Fluid: N/A	
Boring Diameter (inches): 2.25		Drilling Contractor: Carl Hugo	

Depth from Surface		Description	PID	Odor Comments	Sample Interval
Feet	Feet				
0	1	Asphalt and dk. brown CLAY sub base	0.0 @ 1'		
1	5	Tan silty CLAY (CL), moist, soft	0.0 @ 3'		1.5-2'
5	11	Reddish brown silty CLAY (CL) w/ some gravel, moist, stiff	0.0 @ 5'		
			0.0 @ 7'		
11	15	Orangish brown silty SAND (ML), moist, loose	0.0 @ 9'		
		Boring terminated @ 15'	0.0 @ 11'		
		Boring caved in @ 14'	0.0 @ 13'		
			0.0 @ 15'		

Water Level of Completed Well	
First water (ft. bgs): 4.61	Date/Time Measured: 1-27-10/1230
Static Water (ft. bgs): 5.65	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	1.00
Depth to Top of Sand Pack (ft. bgs)	1.00
Depth to Bottom of Sand Pack (ft. bgs)	14.06
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	2.00
Depth to Top of Screen (ft. bgs)	2.00
Depth to Bottom of Screen (ft. bgs)	14.06
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
 GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
 SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures.
 ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
 OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts.
 CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-23		Permit Number:	Permit Date:
Date Work Began: 1/28/10		Date Work Ended: 1/28/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	0.5	Gravel	0.3 @ 1'		
0.5	8	Tan silty CLAY (CL) w/ some sand and gravel, moist, med. stiffness	1.6 @ 3'		4.5-5'
			146 @ 5'		
8	11	Orangish brown silty SAND (ML), moist, loose	40.5 @ 7'		
11	12	Reddish brown silty CLAY (CL), stiff, moist	50.4 @ 9'		
12	16	Orangish brown silty SAND (ML), stiff, moist w/ some grey mottling	65.3 @ 11'		
			43.4 @ 13'		
16	20	Reddish brown silty CLAY (CL), stiff, moist	4.7 @ 15'		
		Boring terminated @ 20'	1.1 @ 17'		
		Boring caved in @ 16' well advanced to approx. 16.5' w/ geoprobe	0.6 @ 19'		

Water Level of Completed Well	
First water (ft. bgs): 11.00	Date/Time Measured: 1-28-10/1310
Static Water (ft. bgs): 10.05	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	4.29
Depth to Top of Sand Pack (ft. bgs)	4.29
Depth to Bottom of Sand Pack (ft. bgs)	16.29
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	6.29
Depth to Top of Screen (ft. bgs)	6.29
Depth to Bottom of Screen (ft. bgs)	16.29
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines. GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines. SP - Poorly graded sands and gravelly sands, little or no fines. SM - Silty sands, sand-silt mixtures. SC - Clayey sands, sand-clay mixtures. ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays. OL - Organic silts and organic silty clays of low plasticity. MH - Inorganic silts micaceous or diatomaceous fine sands or silts, elastic silts. CH - Inorganic clays or high plasticity, fat clays. OH - Organic clays of medium to high plasticity. PT - Peat, muck, and other highly organic soils

Page 1 of Page 1		Boring / Well Completion Report	
Boring / Well ID: B-24		Permit Number:	Permit Date:
Date Work Began: 1/28/10		Date Work Ended: 1/28/10	AEC Project No.: 05-056 RF-64
Address: 7950 Pulaski Highway		City / State: Rosedale, MD	

Geologic Log					
Drilling Method: Geoprobe			Drilling Fluid: N/A		
Boring Diameter (inches): 2.25			Drilling Contractor: Carl Hugo		
Depth from Surface		Description			
Feet	Feet	Soil Classification	PID	Odor Comments	Sample Interval
0	0.5	Gravel	0.3 @ 1'		
0.5	4	Tan silty CLAY (CL), moist, med. stiffness	0.2 @ 3'		
4	7	Orangish brown silty CLAY (CL), moist, med. stiffness	0.2 @ 5'		
7	8.5	Orangish brown silty CLAY (CL) w/ sand and grey mottling, med. stiffness, wet	0.2 @ 7'		
			10.3 @ 9'		8.5-9'
8.5	12	Reddish brown CLAY (CH), moist, stiff	0.2 @ 11'		
12	16	Orangish brown silty CLAY (CL), stiff, moist	0.2 @ 13'		
16	18	Orangish brown silty SAND (ML) and gravel, w/ some Clay, wet, loose	0.4 @ 15'		
			0.2 @ 17'		
18	20	Reddish brown CLAY (CH), stiff, moist	0.2 @ 19'		
		Boring terminated @ 20'			
		Boring caved in @ 17'			

Water Level of Completed Well	
First water (ft. bgs): 9.52	Date/Time Measured: 1-28-10/1320
Static Water (ft. bgs): 9.21	Date/Time Measured: 2-2-10

Well Construction Details	
Well Diameter (inches)	1
Depth to Top of Bentonite Seal (ft. bgs)	0.25
Depth to Bottom of Bentonite Seal (ft. bgs)	3.21
Depth to Top of Sand Pack (ft. bgs)	3.21
Depth to Bottom of Sand Pack (ft. bgs)	17.21
Depth to Top of Solid Casing (ft. bgs)	0.15
Depth to Bottom of Solid Casing (ft. bgs)	5.21
Depth to Top of Screen (ft. bgs)	5.21
Depth to Bottom of Screen (ft. bgs)	17.21
Solid Casing and Screen Material	Schedule 40 PVC
Screen Slot Size	10

Boring Location Sketch

See Figure 3

GW - Well-graded gravels and gravel-sand mixtures, little or no fines. GP - Poorly graded gravels and gravel-sand mixtures, little or no fines.
GM - Silty gravels, gravel-sand-silt mixtures. GC - Clayey gravels, gravel-sand-clay mixtures. SW - Well-graded sands and gravelly sands, little or no fines
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ML - Inorganic silts, very fine sands, rock flour, silty or clayey fine sands. CL - Inorganic clays of low to medium plasticity, gravelly/sandy/silty/lean clays.
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**APPENDIX J
LABORATORY ANALYTICAL REPORTS
AND
CHAIN-OF-CUSTODY DOCUMENTATION**

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: C-1	Date Sampled: 12/17/09
Site: RF-64	Date Received: 12/18/09
Job No: 05-056	Date Analyzed: 12/21/09

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 5.0	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	12/21/09
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	12/22/09

*** Oxygenates & BTEX in bold

12/22/2009

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: C-2	Date Sampled: 12/17/09
Site: RF-64	Date Received: 12/18/09
Job No: 05-056	Date Analyzed: 12/21/09

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	12/21/09
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	12/22/09

*** Oxygenates & BTEX in bold

12/22/2009

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: C-3	Date Sampled: 12/17/09
Site: RF-64	Date Received: 12/18/09
Job No: 05-056	Date Analyzed: 12/21/09

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 5.0	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	12/21/09
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	12/22/09

*** Oxygenates & BTEX in bold

12/22/2009

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: C-4	Date Sampled: 12/17/09
Site: RF-64	Date Received: 12/18/09
Job No: 05-056	Date Analyzed: 12/21/09

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	12/21/09
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	12/22/09

*** Oxygenates & BTEX in bold

12/22/2009

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: C-5	Date Sampled: 12/17/09
Site: RF-64	Date Received: 12/18/09
Job No: 05-056	Date Analyzed: 12/21/09

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	210
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	120
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	620
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	320
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	25
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	180
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	520
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	15	99-87-6	4-Isopropyltoluene	21
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	80
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	6.0	mg/Kg	EPA 8015M	0.5	12/21/09
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	12/22/09

Oxygenates & BTEX in bold

12/22/2009

Approved

Date

Environmental Sample Chain-of-Custody Record

Page 1 of 1

CLIENT: SMS		TURN-AROUND TIME: ST 2 Y LR					Analyses Requested		Section to be completed by Laboratory	
Job Number: 05-056		Site: RF-64							Metals: _____ Temp: _____ Custody seal: _____ Sample Storage: _____	
Sampler (s): Tom Kuzin		Report to: Plumb Rock Environ							VOA ONLY: _____ TPH: _____ W: Baffles: _____ (C.O.V): _____ Uptime Check: _____ NAB: 300: _____	
Sample ID	Date	Time	Comp	Grab	Matrix	Preserv. pH	# Bottles	Comments		
C-1	12/17/09	1500		X	Soil	None	1			
C-2		1502								
C-3		1504								
C-4		1506								
C-5		1507								
Relinquished By: <i>[Signature]</i>							Date/Time: 12/17/09 15:50	Received By: <i>[Signature]</i>	Date/Time: 12/18/09	
Relinquished By: <i>[Signature]</i>							Date/Time: _____	Received By: _____	Date/Time: _____	

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: 1205 Sump Discharge	Date Sampled: 01/21/10
Site: RF-64	Date Received: 01/25/10
Job No: 05-056	Date Analyzed: 01/26/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	1500
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	110	100-41-4	Ethylbenzene	300
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	1500
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	1300
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	60
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	40
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	430
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	430
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	85	99-87-6	4-Isopropyltoluene	40
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	600
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	15	mg/L	EPA 8015M	0.5	01/27/10
TPH - DRO	7.1	mg/L	EPA 8015M	0.5	01/27/10

Oxygenates & BTEX in bold

1/28/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: Sump 1205	Date Sampled: 02/18/10
Site: RF-64	Date Received: 02/19/10
Job No: 05-056	Date Analyzed: 02/23/10

EPA Method 8260 Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	15
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	60
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	50
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	16
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	20
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	0.5	mg/L	EPA 8015M	0.5	02/23/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/24/10

Oxygenates & BTEX in bold

2/24/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: Sump-1207	Date Sampled: 12/23/09
Site: RF-64	Date Received: 12/31/09
Job No: 05-056	Date Analyzed: 01/01/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/L	EPA 8015M	0.5	01/02/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	01/04/10

Oxygenates & BTEX in bold

1/6/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: Sump-1209	Date Sampled: 12/23/09
Site: RF-64	Date Received: 12/31/09
Job No: 05-056	Date Analyzed: 01/01/10

EPA Method 8260 Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/L	EPA 8015M	0.5	01/02/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	01/04/10

Oxygenates & BTEX in bold

1/6/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: Sump-1209 1/2	Date Sampled: 12/23/09
Site: RF-64	Date Received: 12/31/09
Job No: 05-056	Date Analyzed: 01/01/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/L	EPA 8015M	0.5	01/02/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	01/04/10

Oxygenates & BTEX in bold

1/6/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-1-12'	Date Sampled: 01/21/10
Site: RF-64	Date Received: 01/25/10
Job No: 05-056	Date Analyzed: 01/26/10

EPA Method 8260 Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	01/27/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	01/27/10

Oxygenates & BTEX in bold

1/28/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-2-11'	Date Sampled: 01/21/10
Site: RF-64	Date Received: 01/25/10
Job No: 05-056	Date Analyzed: 01/26/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	750
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	910
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	1300
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	1000
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	170
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	70
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	480
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	470
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	300	99-87-6	4-Isopropyltoluene	80
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	600
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	18	mg/Kg	EPA 8015M	0.5	01/27/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	01/27/10

Oxygenates & BTEX in bold

1/28/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-3-5'	Date Sampled: 01/21/10
Site: RF-64	Date Received: 01/25/10
Job No: 05-056	Date Analyzed: 01/26/10

EPA Method 8260 Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	30
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	7.6
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	30
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	18
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	5.6
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	15
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	21
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	01/27/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	01/27/10

Oxygenates & BTEX in bold

1/28/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-4 @ 13'	Date Sampled: 01/25/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260 Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	30
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	5.6
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	17
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	10
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	5.9
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 14	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** **Oxygenates & BTEX in bold**

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-5 @ 12'	Date Sampled: 01/25/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	6100
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	70	100-41-4	Ethylbenzene	2400
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	6200
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	2800
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	25
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	11
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	300
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	300
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	900	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	8.2
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	4.2	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	33	mg/Kg	EPA 8015M	10	02/02/10

Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-6 @ 11'	Date Sampled: 01/27/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260 Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	9900
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	3800
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	13000
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	5000
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	900
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	420
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	7700
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	8300
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	4100	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	8.2
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	140	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** **Oxygenates & BTEX in bold**

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-7 @ 5'	Date Sampled: 01/28/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260 Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	70
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	20
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	70
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	30
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	15
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	43
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	15	99-87-6	4-Isopropyltoluene	40
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	30
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	0.6	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-8 @ 13'	Date Sampled: 01/28/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	2000
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	800
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	2500
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	1100
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	80
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	43
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	1200
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	1300
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	1300	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	170
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	5.0	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	20	mg/Kg	EPA 8015M	10	02/02/10

Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-9 @ 8'	Date Sampled: 01/26/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260 Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	720
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	60
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	170
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	60
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	60
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	60
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	500	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	0.9	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-10 @ 9'	Date Sampled: 01/25/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260 Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	220
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	210
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	470
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	300
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	40
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	20
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	380
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	350
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	11	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	150
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	1.4	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	11	mg/Kg	EPA 8015M	10	02/02/10

*** **Oxygenates & BTEX in bold**

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-11 @ 15'	Date Sampled: 01/25/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	550
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	250
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	520
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	300
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	32
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	20.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	360
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	340.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	120	99-87-6	4-Isopropyltoluene	17.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	170
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	2.5	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	17	mg/Kg	EPA 8015M	10	02/02/10

Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-12 @ 3'	Date Sampled: 01/25/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	700
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	250
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	500
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	320
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	22
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	9.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	260.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	250
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	300	99-87-6	4-Isopropyltoluene	9.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	90
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	1.0	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-13 @ 8'	Date Sampled: 01/25/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	2300
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	670
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	2200
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	980
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	70
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	60
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	1200
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	1500
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	580	99-87-6	4-Isopropyltoluene	60
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	23
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	16	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	110	mg/Kg	EPA 8015M	10	02/02/10

Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B14 @ 5'	Date Sampled: 01/26/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	100
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	35
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	100
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	45
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	46
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	50.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	18	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	34
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	0.5	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-15 @ 5'	Date Sampled: 01/26/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	6.2
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	7.6
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-16 @ 4'	Date Sampled: 01/26/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-17 @ 7'	Date Sampled: 01/26/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B18 @ 7'	Date Sampled: 01/26/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-20 @ 2'	Date Sampled: 01/27/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-21 @ 3'	Date Sampled: 01/27/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-22 @ 2'	Date Sampled: 01/27/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260 Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	110
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	40
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	120
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	50
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	45
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	50
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	18	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	10
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-23 @ 5'	Date Sampled: 01/28/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260 Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	500
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	100
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	630
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	300
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	11
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	23
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	400
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	420
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	120	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	0.7	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	12	mg/Kg	EPA 8015M	10	02/02/10

*** **Oxygenates & BTEX in bold**

2/3/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Soil
Client ID: B-24 @ 9'	Date Sampled: 01/28/10
Site: RF 64	Date Received: 01/28/10
Job No: 05-056	Date Analyzed: 01/30/10

EPA Method 8260

Units: ug/Kg (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-4	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 5.0	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 20	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/Kg	EPA 8015M	0.5	02/01/10
TPH - DRO	< 10	mg/Kg	EPA 8015M	10	02/02/10

*** Oxygenates & BTEX in bold

2/3/2010

Approved

Date

Environmental Sample Chain-of-Custody Record

CLIENT: <u>AEC</u>		TURN-AROUND TIME: <u>Standard</u>		Analyses Requested		Shipment to be completed by Laboratory	
Job Number:	Site:	Comp.	Grab	Matrix	Preserv.	# Bottles	Notes
Sampler(s):	RF-64	Time	Temp.	Grab	Matrix	Preserv.	Notes
Report to:	j.stern@aec-enr.com						
Sample ID	Date	Time	Temp.	Grab	Matrix	Preserv.	# Bottles
B-4-13'	1/25/10	0100		X	Soil		1
B-5-12'		1045					
B-12-3'		1230					
B-10-9'		1340					
B-11-15'		1400					
B-13-8'		1500					
B-14-5'	1/24/10	0925					
B-15-5'		1005					
B-16-4'		1055					
B-17-7'		1335					
B-17-7'		1400					
B-9-8'		1545					
B-6-11'	1/27/10	0835					
B-21-3'		1045					
B-22-2'		1130					
B-20-2'		1330					
B-8-13'	1/28/10	0845					
B-7-5'		1100					

Retrieved By:	Date/Time	Received By:	Date/Time
<u>[Signature]</u>	<u>1/28/10</u>	<u>[Signature]</u>	<u>01/28/10</u>
<u>[Signature]</u>	<u>1/28/10</u>	<u>[Signature]</u>	<u>01/28/10</u>

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-1	Date Sampled: 02/01/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260 Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-4	Date Sampled: 02/02/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	700
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	110	100-41-4	Ethylbenzene	110
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	260
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	160
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	8.8
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	23
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	70
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	550	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	13
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	3.8	mg/L	EPA 8015M	0.5	02/08/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-10	Date Sampled: 02/02/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260 Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 50	108-88-3	Toluene	6400
74-87-3	Chloromethane	< 50	10061-02-1	Trans-1,3-dichloropropene	< 50
75-01-4	Vinyl chloride	< 50	79-00-5	1,1,2-Trichloroethane	< 50
74-83-9	Bromomethane	< 50	108-10-1	4-Methyl-2-pentanone	< 50
75-00-3	Chloroethane	< 50	591-78-6	2-Hexanone	< 50
75-69-4	Trichlorofluoromethane	< 50	127-18-4	Tetrachloroethene	< 50
75-35-4	1,1-Dichloroethene	< 50	142-28-9	1,3-Dichloropropane	< 50
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 50
1634-04-4	Methyl-Tert-butyl ether MTBE	< 50	106-93-4	1,2-Dibromoethane	< 50
75-09-2	Methylene chloride	< 50	108-90-7	Chlorobenzene	< 50
156-60-5	Trans-1,2-dichloroethene	< 50	630-20-6	1,1,1,2-Tetrachloroethane	< 50
108-20-3	Isopropyl ether DIPE	< 200	100-41-4	Ethylbenzene	110
637-92-3	Ethyl-tert-butyl ether ETBE	< 200	108-38-3	m,p-xylene	3600
994-05-8	Tert-amyl methyl ether TAME	< 500	95-47-6	o-xylene	1700
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 50
75-34-3	1,1-Dichloroethane	< 50	75-25-2	Bromoform	< 50
67-64-1	Acetone	< 50	98-82-8	Isopropylbenzene	50
75-15-0	Carbon disulfide	< 50	108-86-1	Bromobenzene	< 50
594-20-7	2,2-Dichloropropane	< 50	79-34-5	1,1,2,2-Tetrachloroethane	< 50
156-59-2	Cis-1,2-dichloroethene	< 50	96-18-4	1,2,3-Trichloropropane	< 50
75-27-4	Bromochloromethane	< 50	103-65-1	N-propylbenzene	< 50
67-66-3	Chloroform	< 50	95-49-8	2-Chlorotoluene	< 50
71-55-6	1,1,1-Trichloroethane	< 50	106-43-4	4-Chlorotoluene	< 50
56-23-5	Carbon tetrachloride	< 50	108-67-8	1,3,5-Trimethylbenzene	300
78-3-93	2-Butanone	< 50	98-06-6	Tert-butylbenzene	< 50
563-58-6	1,1-Dichloropropene	< 50	120-82-1	1,2,4-Trimethylbenzene	1000
108-05-4	Vinyl Acetate	< 50	135-98-8	Sec-butylbenzene	< 50
110-75-8	2-Chloroethylvinyl ether	< 50	541-73-1	1,3-Dichlorobenzene	< 50
71-43-2	Benzene	1700	99-87-6	4-Isopropyltoluene	< 50
107-06-2	1,2-Dichloroethane	< 50	106-46-7	1,4-Dichlorobenzene	< 50
79-01-6	Trichloroethene	< 50	95-50-1	1,2-Dichlorobenzene	< 50
75-65-0	Tert-amyl ethyl ether TAEE	< 200	104-51-8	n-Butylbenzene	< 50
78-87-5	1,2-Dichloropropane	< 50	96-12-8	1,2-Dibromo-3-chloropropan	< 50
74-95-3	Dibromomethane	< 50	120-82-1	1,2,4-Trichlorobenzene	< 50
75-27-4	Bromodichloromethane	< 50	87-68-3	Hexachlorobutadiene	< 50
10061-01-5	Cis-1,3-dichloropropene	< 50	91-20-3	Naphthalene	13
			87-61-6	1,2,3-Trichlorobenzene	< 50

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	20	mg/L	EPA 8015M	5.0	02/08/10
TPH - DRO	5.4	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-12	Date Sampled: 02/02/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260 Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 50	108-88-3	Toluene	5100
74-87-3	Chloromethane	< 50	10061-02-1	Trans-1,3-dichloropropene	< 50
75-01-4	Vinyl chloride	< 50	79-00-5	1,1,2-Trichloroethane	< 50
74-83-9	Bromomethane	< 50	108-10-1	4-Methyl-2-pentanone	< 50
75-00-3	Chloroethane	< 50	591-78-6	2-Hexanone	< 50
75-69-4	Trichlorofluoromethane	< 50	127-18-4	Tetrachloroethene	< 50
75-35-4	1,1-Dichloroethene	< 50	142-28-9	1,3-Dichloropropane	< 50
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 50
1634-04-4	Methyl-Tert-butyl ether MTBE	< 50	106-93-4	1,2-Dibromoethane	< 50
75-09-2	Methylene chloride	< 50	108-90-7	Chlorobenzene	< 50
156-60-5	Trans-1,2-dichloroethene	< 50	630-20-6	1,1,1,2-Tetrachloroethane	< 50
108-20-3	Isopropyl ether DIPE	< 200	100-41-4	Ethylbenzene	1500
637-92-3	Ethyl-tert-butyl ether ETBE	< 200	108-38-3	m,p-xylene	6400
994-05-8	Tert-amyl methyl ether TAME	< 500	95-47-6	o-xylene	2800
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 50
75-34-3	1,1-Dichloroethane	< 50	75-25-2	Bromoform	< 50
67-64-1	Acetone	< 50	98-82-8	Isopropylbenzene	240
75-15-0	Carbon disulfide	< 50	108-86-1	Bromobenzene	< 50
594-20-7	2,2-Dichloropropane	< 50	79-34-5	1,1,2,2-Tetrachloroethane	< 50
156-59-2	Cis-1,2-dichloroethene	< 50	96-18-4	1,2,3-Trichloropropane	< 50
75-27-4	Bromochloromethane	< 50	103-65-1	N-propylbenzene	130
67-66-3	Chloroform	< 50	95-49-8	2-Chlorotoluene	< 50
71-55-6	1,1,1-Trichloroethane	< 50	106-43-4	4-Chlorotoluene	< 50
56-23-5	Carbon tetrachloride	< 50	108-67-8	1,3,5-Trimethylbenzene	1100
78-3-93	2-Butanone	< 50	98-06-6	Tert-butylbenzene	< 50
563-58-6	1,1-Dichloropropene	< 50	120-82-1	1,2,4-Trimethylbenzene	3500
108-05-4	Vinyl Acetate	< 50	135-98-8	Sec-butylbenzene	< 50
110-75-8	2-Chloroethylvinyl ether	< 50	541-73-1	1,3-Dichlorobenzene	< 50
71-43-2	Benzene	390	99-87-6	4-Isopropyltoluene	130
107-06-2	1,2-Dichloroethane	< 50	106-46-7	1,4-Dichlorobenzene	< 50
79-01-6	Trichloroethene	< 50	95-50-1	1,2-Dichlorobenzene	< 50
75-65-0	Tert-amyl ethyl ether TAEE	< 200	104-51-8	n-Butylbenzene	< 50
78-87-5	1,2-Dichloropropane	< 50	96-12-8	1,2-Dibromo-3-chloropropan	< 50
74-95-3	Dibromomethane	< 50	120-82-1	1,2,4-Trichlorobenzene	< 50
75-27-4	Bromodichloromethane	< 50	87-68-3	Hexachlorobutadiene	< 50
10061-01-5	Cis-1,3-dichloropropene	< 50	91-20-3	Naphthalene	580
			87-61-6	1,2,3-Trichlorobenzene	< 50

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	51	mg/L	EPA 8015M	5.0	02/08/10
TPH - DRO	22	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-14	Date Sampled: 02/03/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	30
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	70	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	5.9
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	20
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	8.9
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	6.8
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	7.2	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	0.6	mg/L	EPA 8015M	0.5	02/08/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-15	Date Sampled: 02/03/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 50	108-88-3	Toluene	8300
74-87-3	Chloromethane	< 50	10061-02-1	Trans-1,3-dichloropropene	< 50
75-01-4	Vinyl chloride	< 50	79-00-5	1,1,2-Trichloroethane	< 50
74-83-9	Bromomethane	< 50	108-10-1	4-Methyl-2-pentanone	< 50
75-00-3	Chloroethane	< 50	591-78-6	2-Hexanone	< 50
75-69-4	Trichlorofluoromethane	< 50	127-18-4	Tetrachloroethene	< 50
75-35-4	1,1-Dichloroethene	< 50	142-28-9	1,3-Dichloropropane	< 50
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 50
1634-04-4	Methyl-Tert-butyl ether MTBE	< 50	106-93-4	1,2-Dibromoethane	< 50
75-09-2	Methylene chloride	< 50	108-90-7	Chlorobenzene	< 50
156-60-5	Trans-1,2-dichloroethene	< 50	630-20-6	1,1,1,2-Tetrachloroethane	< 50
108-20-3	Isopropyl ether DIPE	< 200	100-41-4	Ethylbenzene	800
637-92-3	Ethyl-tert-butyl ether ETBE	< 200	108-38-3	m,p-xylene	3800
994-05-8	Tert-amyl methyl ether TAME	< 500	95-47-6	o-xylene	1900
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 50
75-34-3	1,1-Dichloroethane	< 50	75-25-2	Bromoform	< 50
67-64-1	Acetone	< 50	98-82-8	Isopropylbenzene	63
75-15-0	Carbon disulfide	< 50	108-86-1	Bromobenzene	< 50
594-20-7	2,2-Dichloropropane	< 50	79-34-5	1,1,2,2-Tetrachloroethane	< 50
156-59-2	Cis-1,2-dichloroethene	< 50	96-18-4	1,2,3-Trichloropropane	< 50
75-27-4	Bromochloromethane	< 50	103-65-1	N-propylbenzene	< 50
67-66-3	Chloroform	< 50	95-49-8	2-Chlorotoluene	< 50
71-55-6	1,1,1-Trichloroethane	< 50	106-43-4	4-Chlorotoluene	< 50
56-23-5	Carbon tetrachloride	< 50	108-67-8	1,3,5-Trimethylbenzene	300
78-3-93	2-Butanone	< 50	98-06-6	Tert-butylbenzene	< 50
563-58-6	1,1-Dichloropropene	< 50	120-82-1	1,2,4-Trimethylbenzene	900
108-05-4	Vinyl Acetate	< 50	135-98-8	Sec-butylbenzene	< 50
110-75-8	2-Chloroethylvinyl ether	< 50	541-73-1	1,3-Dichlorobenzene	< 50
71-43-2	Benzene	3700	99-87-6	4-Isopropyltoluene	< 50
107-06-2	1,2-Dichloroethane	< 50	106-46-7	1,4-Dichlorobenzene	< 50
79-01-6	Trichloroethene	< 50	95-50-1	1,2-Dichlorobenzene	< 50
75-65-0	Tert-amyl ethyl ether TAEE	< 200	104-51-8	n-Butylbenzene	< 50
78-87-5	1,2-Dichloropropane	< 50	96-12-8	1,2-Dibromo-3-chloropropan	< 50
74-95-3	Dibromomethane	< 50	120-82-1	1,2,4-Trichlorobenzene	< 50
75-27-4	Bromodichloromethane	< 50	87-68-3	Hexachlorobutadiene	< 50
10061-01-5	Cis-1,3-dichloropropene	< 50	91-20-3	Naphthalene	110
			87-61-6	1,2,3-Trichlorobenzene	< 50

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	11	mg/L	EPA 8015M	0.5	02/08/10
TPH - DRO	11	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-16	Date Sampled: 02/03/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	540
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	36	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	54
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	170
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	90
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	13
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	44
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	340	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	7.2
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	0.5	mg/L	EPA 8015M	0.5	02/08/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-17	Date Sampled: 02/03/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	27
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	30
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	26
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	5.2
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	9.4
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	14	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	7.2
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-18	Date Sampled: 02/03/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260 Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	22
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	10
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	6.2
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-20	Date Sampled: 02/04/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	< 5.0
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-21	Date Sampled: 02/04/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	200
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	80	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	50
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	190
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	90
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	7.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	30
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	100
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	20	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	12
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	1.3	mg/L	EPA 8015M	0.5	02/08/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-22	Date Sampled: 02/04/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/08/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	8.8
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	< 5.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	8.5
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-3	Date Sampled: 02/03/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/09/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 50	108-88-3	Toluene	7100
74-87-3	Chloromethane	< 50	10061-02-1	Trans-1,3-dichloropropene	< 50
75-01-4	Vinyl chloride	< 50	79-00-5	1,1,2-Trichloroethane	< 50
74-83-9	Bromomethane	< 50	108-10-1	4-Methyl-2-pentanone	< 50
75-00-3	Chloroethane	< 50	591-78-6	2-Hexanone	< 50
75-69-4	Trichlorofluoromethane	< 50	127-18-4	Tetrachloroethene	< 50
75-35-4	1,1-Dichloroethene	< 50	142-28-9	1,3-Dichloropropane	< 50
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 50
1634-04-4	Methyl-Tert-butyl ether MTBE	500	106-93-4	1,2-Dibromoethane	< 50
75-09-2	Methylene chloride	< 50	108-90-7	Chlorobenzene	< 50
156-60-5	Trans-1,2-dichloroethene	< 50	630-20-6	1,1,1,2-Tetrachloroethane	< 50
108-20-3	Isopropyl ether DIPE	< 200	100-41-4	Ethylbenzene	700
637-92-3	Ethyl-tert-butyl ether ETBE	< 200	108-38-3	m,p-xylene	1900
994-05-8	Tert-amyl methyl ether TAME	< 500	95-47-6	o-xylene	1100
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 50
75-34-3	1,1-Dichloroethane	< 50	75-25-2	Bromoform	< 50
67-64-1	Acetone	< 50	98-82-8	Isopropylbenzene	63
75-15-0	Carbon disulfide	< 50	108-86-1	Bromobenzene	< 50
594-20-7	2,2-Dichloropropane	< 50	79-34-5	1,1,2,2-Tetrachloroethane	< 50
156-59-2	Cis-1,2-dichloroethene	< 50	96-18-4	1,2,3-Trichloropropane	< 50
75-27-4	Bromochloromethane	< 50	103-65-1	N-propylbenzene	< 50
67-66-3	Chloroform	< 50	95-49-8	2-Chlorotoluene	< 50
71-55-6	1,1,1-Trichloroethane	< 50	106-43-4	4-Chlorotoluene	< 50
56-23-5	Carbon tetrachloride	< 50	108-67-8	1,3,5-Trimethylbenzene	120
78-3-93	2-Butanone	< 50	98-06-6	Tert-butylbenzene	< 50
563-58-6	1,1-Dichloropropene	< 50	120-82-1	1,2,4-Trimethylbenzene	500
108-05-4	Vinyl Acetate	< 50	135-98-8	Sec-butylbenzene	< 50
110-75-8	2-Chloroethylvinyl ether	< 50	541-73-1	1,3-Dichlorobenzene	< 50
71-43-2	Benzene	4200	99-87-6	4-Isopropyltoluene	< 50
107-06-2	1,2-Dichloroethane	< 50	106-46-7	1,4-Dichlorobenzene	< 50
79-01-6	Trichloroethene	< 50	95-50-1	1,2-Dichlorobenzene	< 50
75-65-0	Tert-amyl ethyl ether TAEE	< 200	104-51-8	n-Butylbenzene	< 50
78-87-5	1,2-Dichloropropane	< 50	96-12-8	1,2-Dibromo-3-chloropropan	< 50
74-95-3	Dibromomethane	< 50	120-82-1	1,2,4-Trichlorobenzene	< 50
75-27-4	Bromodichloromethane	< 50	87-68-3	Hexachlorobutadiene	< 50
10061-01-5	Cis-1,3-dichloropropene	< 50	91-20-3	Naphthalene	100
			87-61-6	1,2,3-Trichlorobenzene	< 50

TPH - GRO	Concentration Detected	Units	Method	PQL	Date Analyzed
	70	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-5	Date Sampled: 02/03/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/09/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 50	108-88-3	Toluene	20000
74-87-3	Chloromethane	< 50	10061-02-1	Trans-1,3-dichloropropene	< 50
75-01-4	Vinyl chloride	< 50	79-00-5	1,1,2-Trichloroethane	< 50
74-83-9	Bromomethane	< 50	108-10-1	4-Methyl-2-pentanone	< 50
75-00-3	Chloroethane	< 50	591-78-6	2-Hexanone	< 50
75-69-4	Trichlorofluoromethane	< 50	127-18-4	Tetrachloroethene	< 50
75-35-4	1,1-Dichloroethene	< 50	142-28-9	1,3-Dichloropropane	< 50
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 50
1634-04-4	Methyl-Tert-butyl ether MTBE	500	106-93-4	1,2-Dibromoethane	< 50
75-09-2	Methylene chloride	< 50	108-90-7	Chlorobenzene	< 50
156-60-5	Trans-1,2-dichloroethene	< 50	630-20-6	1,1,1,2-Tetrachloroethane	< 50
108-20-3	Isopropyl ether DIPE	< 200	100-41-4	Ethylbenzene	5000
637-92-3	Ethyl-tert-butyl ether ETBE	< 200	108-38-3	m,p-xylene	12500
994-05-8	Tert-amyl methyl ether TAME	< 500	95-47-6	o-xylene	6300
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 50
75-34-3	1,1-Dichloroethane	< 50	75-25-2	Bromoform	< 50
67-64-1	Acetone	< 50	98-82-8	Isopropylbenzene	630
75-15-0	Carbon disulfide	< 50	108-86-1	Bromobenzene	< 50
594-20-7	2,2-Dichloropropane	< 50	79-34-5	1,1,2,2-Tetrachloroethane	< 50
156-59-2	Cis-1,2-dichloroethene	< 50	96-18-4	1,2,3-Trichloropropane	< 50
75-27-4	Bromochloromethane	< 50	103-65-1	N-propylbenzene	320
67-66-3	Chloroform	< 50	95-49-8	2-Chlorotoluene	< 50
71-55-6	1,1,1-Trichloroethane	< 50	106-43-4	4-Chlorotoluene	< 50
56-23-5	Carbon tetrachloride	< 50	108-67-8	1,3,5-Trimethylbenzene	2400
78-3-93	2-Butanone	< 50	98-06-6	Tert-butylbenzene	< 50
563-58-6	1,1-Dichloropropene	< 50	120-82-1	1,2,4-Trimethylbenzene	6600
108-05-4	Vinyl Acetate	< 50	135-98-8	Sec-butylbenzene	< 50
110-75-8	2-Chloroethylvinyl ether	< 50	541-73-1	1,3-Dichlorobenzene	< 50
71-43-2	Benzene	6500	99-87-6	4-Isopropyltoluene	320
107-06-2	1,2-Dichloroethane	< 50	106-46-7	1,4-Dichlorobenzene	< 50
79-01-6	Trichloroethene	< 50	95-50-1	1,2-Dichlorobenzene	< 50
75-65-0	Tert-amyl ethyl ether TAEE	< 200	104-51-8	n-Butylbenzene	< 50
78-87-5	1,2-Dichloropropane	< 50	96-12-8	1,2-Dibromo-3-chloropropan	< 50
74-95-3	Dibromomethane	< 50	120-82-1	1,2,4-Trichlorobenzene	< 50
75-27-4	Bromodichloromethane	< 50	87-68-3	Hexachlorobutadiene	< 50
10061-01-5	Cis-1,3-dichloropropene	< 50	91-20-3	Naphthalene	1200
			87-61-6	1,2,3-Trichlorobenzene	< 50

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	46	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-19	Date Sampled: 02/04/10
Site: RF-64	Date Received: 02/04/10
Job No: 05-056-64	Date Analyzed: 02/09/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	1900
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	110	100-41-4	Ethylbenzene	180
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	440
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	260
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	9.4
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	40
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	120
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	1100	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	20
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	5.9	mg/L	EPA 8015M	0.5	02/08/10

Oxygenates & BTEX in bold

2/9/2010

Approved

Date

Advantage Environmental Consultants, LLC

2610 Baltimore-Washington Blvd., Suite 217

Jessup, Maryland 20794

Phone/Fax: (301) 776-0500/(301) 775-1123

Environmental Sample Chain-of-Custody Record

CLIENT: <i>SAF</i>	TURN-AROUND TIME: <i>Standard</i>		Analyses Requested		Section to be completed by Laboratory						
	Job Number: <i>05-056-64</i>	Site: <i>RF-64</i>	Matrix	Preserv. pH	# Bottles	Initials	Temp.	Custody seal	Sample Storage		
Sample ID	Date	Time	Comp	Grab	Matrix	Preserv. pH	# Bottles	Initials	Temp.	Custody seal	Sample Storage
B-15	2/7/10	1235		X	420	4.0	3				
B-18	2/7/10	1600									
B-16	2/7/10	1505									
B-4	2/6/10	1430									
B-17	2/6/10	1425									
B-10	2/2/10	1420									
B-17	2/2/10	1545									
B-14	2/5/10	1300									
B-1	2/1/10	1000									
B-22	2/4/10	0500									
B-21	2/4/10	0440									
B-20	2/4/10	0700									
B-19	2/3/10	1150									
B-3	2/3/10	1750									
B-5	2/2/10	1515									

Handwritten notes:
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Relinquished By: <i>[Signature]</i>	Date/Time: <i>2-4-10 1:00</i>	Received By:	Date/Time:
Relinquished By: <i>[Signature]</i>	Date/Time: <i>2-4-10 1:00</i>	Received By: <i>[Signature]</i>	Date/Time: <i>2/28/10</i>

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-7	Date Sampled: 02/05/10
Site: RF-64	Date Received: 02/09/10
Job No: 05-056	Date Analyzed: 02/13/10

EPA Method 8260 Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	7.8
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	17	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	14
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	7.3
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	8.9
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/L	EPA 8015M	0.5	02/13/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/13/10

Oxygenates & BTEX in bold

2/14/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-8	Date Sampled: 02/05/10
Site: RF-64	Date Received: 02/09/10
Job No: 05-056	Date Analyzed: 02/13/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	500
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	40
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	250
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	120
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	20
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	70
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	250	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	20
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	1.0	mg/L	EPA 8015M	0.5	02/13/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/13/10

Oxygenates & BTEX in bold

2/14/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-23	Date Sampled: 02/05/10
Site: RF-64	Date Received: 02/09/10
Job No: 05-056	Date Analyzed: 02/13/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	5000
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	90	100-41-4	Ethylbenzene	900
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	4600
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	2200
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	130
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	50
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	600
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	1800
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	1800	99-87-6	4-Isopropyltoluene	60
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	540
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	18	mg/L	EPA 8015M	0.5	02/13/10
TPH - DRO	2.4	mg/L	EPA 8015M	0.5	02/13/10

Oxygenates & BTEX in bold

2/14/2010

Approved

Date

Laboratory Analysis Results

Client: Advantage Environmental	Matrix: Water
Client ID: B-24	Date Sampled: 02/05/10
Site: RF-64	Date Received: 02/09/10
Job No: 05-056	Date Analyzed: 02/13/10

EPA Method 8260

Units: ug/L (ppb)

CAS Number	Compound	Concentration Detected	CAS Number	Compound	Concentration Detected
75-71-8	Dichlorodifluoromethane	< 5.0	108-88-3	Toluene	5.6
74-87-3	Chloromethane	< 5.0	10061-02-1	Trans-1,3-dichloropropene	< 5.0
75-01-4	Vinyl chloride	< 5.0	79-00-5	1,1,2-Trichloroethane	< 5.0
74-83-9	Bromomethane	< 5.0	108-10-1	4-Methyl-2-pentanone	< 5.0
75-00-3	Chloroethane	< 5.0	591-78-6	2-Hexanone	< 5.0
75-69-4	Trichlorofluoromethane	< 5.0	127-18-4	Tetrachloroethene	< 5.0
75-35-4	1,1-Dichloroethene	< 5.0	142-28-9	1,3-Dichloropropane	< 5.0
75-65-0	Tert-butanol; TBA	< 50	124-48-1	Dibromochloromethane	< 5.0
1634-04-4	Methyl-Tert-butyl ether MTBE	< 5.0	106-93-4	1,2-Dibromoethane	< 5.0
75-09-2	Methylene chloride	< 5.0	108-90-7	Chlorobenzene	< 5.0
156-60-5	Trans-1,2-dichloroethene	< 5.0	630-20-6	1,1,1,2-Tetrachloroethane	< 5.0
108-20-3	Isopropyl ether DIPE	< 20	100-41-4	Ethylbenzene	< 5.0
637-92-3	Ethyl-tert-butyl ether ETBE	< 20	108-38-3	m,p-xylene	7.0
994-05-8	Tert-amyl methyl ether TAME	< 5.0	95-47-6	o-xylene	< 5.0
75-85-4	Tert-amyl alcohol TAA	< 200	100-42-5	Styrene	< 5.0
75-34-3	1,1-Dichloroethane	< 5.0	75-25-2	Bromoform	< 5.0
67-64-1	Acetone	< 5.0	98-82-8	Isopropylbenzene	< 5.0
75-15-0	Carbon disulfide	< 5.0	108-86-1	Bromobenzene	< 5.0
594-20-7	2,2-Dichloropropane	< 5.0	79-34-5	1,1,2,2-Tetrachloroethane	< 5.0
156-59-2	Cis-1,2-dichloroethene	< 5.0	96-18-4	1,2,3-Trichloropropane	< 5.0
75-27-4	Bromochloromethane	< 5.0	103-65-1	N-propylbenzene	< 5.0
67-66-3	Chloroform	< 5.0	95-49-8	2-Chlorotoluene	< 5.0
71-55-6	1,1,1-Trichloroethane	< 5.0	106-43-4	4-Chlorotoluene	< 5.0
56-23-5	Carbon tetrachloride	< 5.0	108-67-8	1,3,5-Trimethylbenzene	< 5.0
78-3-93	2-Butanone	< 5.0	98-06-6	Tert-butylbenzene	< 5.0
563-58-6	1,1-Dichloropropene	< 5.0	120-82-1	1,2,4-Trimethylbenzene	< 5.0
108-05-4	Vinyl Acetate	< 5.0	135-98-8	Sec-butylbenzene	< 5.0
110-75-8	2-Chloroethylvinyl ether	< 5.0	541-73-1	1,3-Dichlorobenzene	< 5.0
71-43-2	Benzene	< 5.0	99-87-6	4-Isopropyltoluene	< 5.0
107-06-2	1,2-Dichloroethane	< 5.0	106-46-7	1,4-Dichlorobenzene	< 5.0
79-01-6	Trichloroethene	< 5.0	95-50-1	1,2-Dichlorobenzene	< 5.0
75-65-0	Tert-amyl ethyl ether TAEE	< 20	104-51-8	n-Butylbenzene	< 5.0
78-87-5	1,2-Dichloropropane	< 5.0	96-12-8	1,2-Dibromo-3-chloropropan	< 5.0
74-95-3	Dibromomethane	< 5.0	120-82-1	1,2,4-Trichlorobenzene	< 5.0
75-27-4	Bromodichloromethane	< 5.0	87-68-3	Hexachlorobutadiene	< 5.0
10061-01-5	Cis-1,3-dichloropropene	< 5.0	91-20-3	Naphthalene	< 5.0
			87-61-6	1,2,3-Trichlorobenzene	< 5.0

	Concentration Detected	Units	Method	PQL	Date Analyzed
TPH - GRO	< 0.5	mg/L	EPA 8015M	0.5	02/13/10
TPH - DRO	< 0.5	mg/L	EPA 8015M	0.5	02/13/10

Oxygenates & BTEX in bold

2/14/2010

Approved

Date

Laboratory Analysis Results

Laboratory:	Anabell Environmental Lab	Date Sampled:	02/01-02/03/10
Client:	Advantage Environmental Inc.	Date Received:	02/09/10
Site:	RF-64	Matrix:	Water
Project NO.:	05-056		

	Concentration Detected	Units	Method	PQL	Date Analyzed
B-3					
TPH/DRO	60	mg/L	EPA 8015	0.5	02/13/10
B-19					
TPH/DRO	< 0.5	mg/L	EPA 8015	0.5	02/13/10



02/14/10

Approved

Date

**APPENDIX K
J&E MODEL OUTPUT**

DATA ENTRY SHEET

GW-SCREEN
Version 3.1: 02/04

Reset to
Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION
(enter "X" in "YES" box and initial groundwater conc. below)

YES

ENTER	ENTER	ENTER	ENTER	ENTER
Chemical CAS No. (numbers only, no dashes)	Initial groundwater conc., C_w ($\mu\text{g/L}$)	Depth below grade to enclosed space floor, L_f (cm)	Depth below grade to water table, L_{wt} (cm)	Average soil groundwater temperature, T_s ($^{\circ}\text{C}$)
71432	2.00E+01			
Chemical		Benzene		

MORE

ENTER
Average vapor flow rate into bldg. (Leave blank to calculate)
 Q_{soil} (L/m)

MORE

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Vadose zone soil type (used to estimate soil vapor permeability)	User-defined vadose zone soil vapor permeability, k_v (cm^2)	SCS soil type directly above water table	SCS soil type	Vadose zone soil dry bulk density, ρ_b (g/cm^3)	Vadose zone soil total porosity, n_v (unitless)
	0.00E+00			1.5	0.43
L		L		L	
		Lookup Soil Parameters		Vadose zone soil water-filled porosity, θ_w (cm^3/cm^3)	
				0.148	

MORE

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Target risk for carcinogens, TR (unitless)	Target hazard quotient for noncarcinogens, THQ (unitless)	Averaging time for carcinogens, ATC (yrs)	Averaging time for noncarcinogens, ATNC (yrs)	Exposure duration, ED (yrs)	Exposure frequency, EF (days/yr)
1.0E-05	1	70	30	30	350

Used to calculate risk-based groundwater concentration.

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	1.79E+06	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
9.4E-07	9.3E-03

DATA ENTRY SHEET

GW-SCREEN
Version 3.1: 02/04

Reset to
Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION
(enter "X" in "YES" box and initial groundwater conc. below)

YES

ENTER	ENTER	ENTER	ENTER	ENTER
Chemical CAS No. (numbers only, no dashes)	Initial groundwater conc., C_w ($\mu\text{g/L}$)	Depth below grade to water table, L_{WT} (cm)	SCS soil type directly above water table	Average soil/groundwater temperature, T_s ($^{\circ}\text{C}$)
108883	2.00E+02	60	L	10
Chemical		Toluene		

MORE ↓

ENTER
Average vapor flow rate into bldg. (Leave blank to calculate)
 Q_{soil} (L/m)

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Vadose zone soil type (used to estimate soil vapor permeability)	User-defined vadose zone soil vapor permeability, k_v (cm^2)	SCS soil type	soil dry bulk density, ρ_b (g/cm^3)	soil total porosity, n_v (unitless)	Vadose zone soil water-filled porosity, θ_w (cm^3/cm^3)
L	0.00E+00	L	1.5	0.43	0.148
Lookup Soil Parameters					

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER
Target risk for carcinogens, TR (unitless)	Target hazard quotient for noncarcinogens, THQ (unitless)	Averaging time for carcinogens, ATC (yrs)	Averaging time for noncarcinogens, AT _{NC} (yrs)	Exposure duration, ED (yrs)
1.0E-05	1	70	30	30
Used to calculate risk-based groundwater concentration.		Exposure frequency, EF (days/yr)		

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater carcinogen (µg/L)	Indoor exposure groundwater noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	5.26E+05	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.3E-03

DATA ENTRY SHEET

GW-SCREEN
Version 3.1: 02/04

Reset to
Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION
(enter "X" in "YES" box and initial groundwater conc. below)

YES

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Chemical CAS No. (numbers only, no dashes)	Initial groundwater conc., C_w ($\mu\text{g/L}$)	Depth below grade to water table, L_{WT} (cm)	SCS soil type directly above water table	Average soil/groundwater temperature, T_s ($^{\circ}\text{C}$)	Chemical
100414	5.00E+01	60	L	10	Ethylbenzene

MORE ↓

ENTER Average vapor flow rate into bldg. (Leave blank to calculate)
 Q_{tot} (L/m)

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Vadose zone SCS soil type (used to estimate soil vapor permeability)	User-defined vadose zone soil vapor permeability, k_v (cm^2)	Depth below grade to water table, L (cm)	SCS soil type	soil dry bulk density, ρ_b (g/cm^3)	soil total porosity, n_v (unitless)	Vadose zone soil water-filled porosity, θ_w (cm^3/cm^3)
L	0.00E+00	60	L	1.5	0.43	0.148

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Target risk for carcinogens, TR (unitless)	Target hazard quotient for noncarcinogens, THQ (unitless)	Averaging time for carcinogens, ATc (yrs)	Averaging time for noncarcinogens, ATnc (yrs)	Exposure duration, ED (yrs)	Exposure frequency, EF (days/yr)
1.0E-05	1	70	30	30	350

Used to calculate risk-based groundwater concentration.

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	1.69E+05	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.9E-04

DATA ENTRY SHEET

GW-SCREEN
Version 3.1: 02/04

Reset to
Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES OR

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION
(enter "X" in "YES" box and initial groundwater conc. below)

YES X

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Chemical CAS No. (numbers only, no dashes)	Initial groundwater conc., C_w ($\mu\text{g/L}$)	Chemical	Initial groundwater conc., C_w ($\mu\text{g/L}$)	Chemical	Initial groundwater conc., C_w ($\mu\text{g/L}$)
108383	1.90E+02	m-Xylene	1.90E+02	m-Xylene	1.90E+02

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Depth below grade of enclosed space floor, L_f (cm)	Depth below grade to water table, L_{WT} (cm)	SCS soil type directly above water table	Average soil/groundwater temperature, T_s ($^{\circ}\text{C}$)	Average soil/groundwater temperature, T_s ($^{\circ}\text{C}$)	Average soil/groundwater temperature, T_s ($^{\circ}\text{C}$)
15	60	L	10	10	10

ENTER
Average vapor flow rate into bldg. (Leave blank to calculate)
 Q_{rad} (L/m)

5

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Vadose zone SCS soil type (used to estimate soil vapor permeability)	User-defined vadose zone soil vapor permeability, k_v (cm^2)	Vadose zone SCS soil type	Vadose zone soil density, ρ_b (g/cm^3)	Vadose zone soil total porosity, n_v (unitless)	Vadose zone soil water-filled porosity, θ_{wv} (cm^3/cm^3)	Vadose zone soil density, ρ_b (g/cm^3)	Vadose zone soil total porosity, n_v (unitless)
L	0.00E+00	L	1.5	0.43	0.148	1.5	0.43

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Target risk for carcinogens, TR (unitless)	Target hazard quotient for noncarcinogens, THQ (unitless)	Averaging time for carcinogens, AT _C (yrs)	Averaging time for noncarcinogens, AT _{NC} (yrs)	Exposure duration, ED (yrs)	Exposure frequency, EF (days/yr)	Exposure duration, ED (yrs)	Exposure frequency, EF (days/yr)
1.0E-05	1	70	30	30	350	30	350

Used to calculate risk-based groundwater concentration.

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen ($\mu\text{g/L}$)	Indoor exposure groundwater conc., noncarcinogen ($\mu\text{g/L}$)	Risk-based indoor exposure groundwater conc. ($\mu\text{g/L}$)	Pure component water solubility, S ($\mu\text{g/L}$)	Final indoor exposure groundwater conc. ($\mu\text{g/L}$)
NA	NA	NA	1.61E+05	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.3E-02

DATA ENTRY SHEET

GW-SCREEN
Version 3.1: 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES

ENTER Initial groundwater conc., C_w ($\mu\text{g/L}$) Chemical
 95476 9.00E+01 o-Xylene

MORE ↓

ENTER Depth below grade of enclosed space floor, L_f (cm) ENTER Depth below grade to water table, L_{WT} (cm) ENTER SCS soil type directly above water table ENTER Average soil/groundwater temperature, T_s ($^{\circ}\text{C}$)

15 60 L L 10

ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{ind} (L/m)

5

MORE ↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability) ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)

L 0.00E+00

ENTER Vadose zone SCS soil type (Lookup Soil Parameters) ENTER Vadose zone soil dry bulk density, ρ_b (g/cm^3) ENTER Vadose zone soil total porosity, n_v (unitless) ENTER Vadose zone soil water-filled porosity, θ_{wv} (cm^3/cm^3)

L 1.5 0.43 0.148

MORE ↓

ENTER Target risk for carcinogens, TR (unitless) ENTER Target hazard quotient for noncarcinogens, THQ (unitless) ENTER Averaging time for carcinogens, ATc (yrs) ENTER Averaging time for noncarcinogens, ATnc (yrs)

1.0E-05 1 70 30

ENTER Exposure duration, ED (yrs) ENTER Exposure frequency, EF (days/yr)

30 350

Used to calculate risk-based groundwater concentration.

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen [$\mu\text{g/L}$]	Indoor exposure groundwater conc., noncarcinogen [$\mu\text{g/L}$]	Risk-based indoor exposure groundwater conc. [$\mu\text{g/L}$]	Pure component water solubility, S [$\mu\text{g/L}$]	Final indoor exposure groundwater conc. [$\mu\text{g/L}$]
NA	NA	NA	1.78E+05	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.0E-02

DATA ENTRY SHEET

GW-SCREEN
Version 3.1: 02/04

Reset to
Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION
(enter "X" in "YES" box and initial groundwater conc. below)

YES

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_w ($\mu\text{g/L}$)	ENTER Chemical
91203	1.20E+01	Naphthalene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_f (cm)	ENTER Depth below grade to water table, L_{wt} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_s ($^{\circ}\text{C}$)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
15	60	L	10	5

MORE
↓

ENTER Vadose zone soil type (used to estimate soil vapor permeability)	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b (g/cm^3)	ENTER Vadose zone soil total porosity, n_v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w (cm^3/cm^3)
L	0.00E+00	L	1.5	0.43	0.148

MORE
↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, ATC (yrs)	ENTER Averaging time for noncarcinogens, ATNC (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-05	1	70	30	30	350
Used to calculate risk-based groundwater concentration.					

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc. (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc. (µg/L)
NA	NA	NA	3.10E+04	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	8.3E-03

DATA ENTRY SHEET

GW-SCREEN
Version 3.1: 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES OR

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES X

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Chemical CAS No. (numbers only, no dashes)	Initial groundwater conc., C_w ($\mu\text{g/L}$)	Chemical			
1634044	8.00E+01	MTBE			

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER
Depth below grade of enclosed space floor, L_f (cm)	Depth below grade to water table, L_{wt} (cm)	SCS soil type directly above water table	Average soil/groundwater temperature, T_s ($^{\circ}\text{C}$)	Average vapor flow rate into bldg. (Leave blank to calculate) Q_{ind} (L/m)
15	60	L	10	5

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Vadose zone SCS soil type (used to estimate soil vapor permeability)	User-defined vadose zone soil vapor permeability, k_v (cm^2)	Vadose zone SCS soil type	Vadose zone soil dry bulk density, ρ_b (g/cm^3)	Vadose zone soil total porosity, n_v (unitless)	Vadose zone soil water-filled porosity, θ_{wv} (cm^3/cm^3)	
L	0.00E+00	L	1.5	0.43	0.148	

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Target risk for carcinogens, TR (unitless)	Target hazard quotient for noncarcinogens, carcinogens, THQ (unitless)	Averaging time for carcinogens, AT _C (yrs)	Averaging time for noncarcinogens, AT _{NC} (yrs)	Exposure duration, ED (yrs)	Exposure frequency, EF (days/yr)
1.0E-05	1	70	30	30	350

Used to calculate risk-based groundwater concentration.

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen ($\mu\text{g/L}$)	Indoor exposure groundwater conc., noncarcinogen ($\mu\text{g/L}$)	Risk-based indoor exposure groundwater conc. ($\mu\text{g/L}$)	Pure component water solubility, S ($\mu\text{g/L}$)	Final indoor exposure groundwater conc. ($\mu\text{g/L}$)
NA	NA	NA	5.10E+07	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.1E-04

SL-SCREEN
Version 3.1: 02/04

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES

ENTER Initial soil conc., C_p ($\mu\text{g}/\text{kg}$)
Chemical CAS No. (numbers only, no dashes)

71432	1.80E+01	Benzene
-------	----------	---------

ENTER Depth below grade to bottom of enclosed space floor, L_f (15 or 200 cm) (cm) ENTER Average soil temperature, T_s ($^{\circ}\text{C}$)

15	61	10	L	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)	ENTER 0.00E+00
----	----	----	---	---	----------------

MORE

ENTER Vadose zone soil type SCS (Lookup Soil Parameters)

ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)

ENTER Vadose zone soil total porosity, n_v (unitless)

ENTER Vadose zone soil water-filled porosity, θ_{wv} (unitless)

ENTER Vadose zone soil organic carbon fraction, f_{oc} (unitless)

L	1.5	0.43	0.148	0.002	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{tot} (L/m)
---	-----	------	-------	-------	---

MORE

ENTER Averaging time for carcinogens, AT_c (yrs)

ENTER Averaging time for noncarcinogens, AT_{nc} (yrs)

ENTER Exposure duration, ED (yrs)

ENTER Exposure frequency, EF (days/yr)

ENTER Target risk for carcinogens, TR (unitless)

70	30	30	350	1.0E-05	1
----	----	----	-----	---------	---

MORE

Used to calculate risk-based soil concentration.

END

RESULTS SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

Indoor exposure soil carcinogen (µg/kg)	Indoor exposure soil conc., noncarcinogen (µg/kg)	Risk-based indoor exposure soil conc., (µg/kg)	Soil saturation conc., C_{sat} (µg/kg)	Final indoor exposure soil conc., (µg/kg)
NA	NA	NA	4.26E+05	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
8.9E-05	8.9E-01

SL-SCREEN
Version 3.1: 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES OR

YES X

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

ENTER Initial soil conc., C_0 ($\mu\text{g}/\text{kg}$) Chemical

108883	1.10E+02	Toluene
--------	----------	---------

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER
Depth below grade to bottom of enclosed space floor, L_f (15 or 200 cm)	Depth below grade to top of contamination, L_1 (cm)	Average soil temperature, T_s ($^{\circ}\text{C}$)	Vadose zone SCS soil type (used to estimate soil vapor permeability)	User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	61	10	L	0.00E+00

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Vadose zone SCS soil type	Vadose zone soil total porosity, n_v (unitless)	Vadose zone soil water-filled porosity, θ_w (unitless)	Vadose zone soil organic carbon fraction, f_{oc} (unitless)	Average vapor flow rate into bldg. (Leave blank to calculate)	Q_{soil} (L/m)
L	1.5	0.43	0.148	0.002	5

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER
Averaging time for carcinogens, AT_c (yrs)	Averaging time for noncarcinogens, AT_{nc} (yrs)	Exposure duration, ED (yrs)	Exposure frequency, EF (days/yr)	Target risk for carcinogens, TR (unitless)
70	30	30	350	1.0E-05

END

1	Used to calculate risk-based soil concentration.
---	--

RESULTS SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

Indoor exposure soil carcinogen (µg/kg)	Indoor exposure soil conc., noncarcinogen (µg/kg)	Risk-based indoor exposure soil conc., (µg/kg)	Soil saturation conc., C_{sat} (µg/kg)	Final indoor exposure soil conc., (µg/kg)
NA	NA	NA	2.56E+05	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.2E-01

SL-SCREEN
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES

ENTER

Initial soil conc., C_0 ($\mu\text{g}/\text{kg}$)

Chemical

100414 4.00E+01 Ethylbenzene

MORE

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Depth below grade to bottom of enclosed space floor, L_f (15 or 200 cm)	Depth below grade to top of contamination, L_t (cm)	Average soil temperature, T_s ($^{\circ}\text{C}$)	Vadose zone SCS soil type (used to estimate soil vapor permeability)	User-defined vadose zone soil vapor permeability, k_v (cm^2)	
15	61	10	L	0.00E+00	

MORE

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Vadose zone SCS soil type	Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	Vadose zone soil total porosity, n_v (unitless)	Vadose zone soil water-filled porosity, $\theta_{w,v}$ (cm^3/cm^3)	Vadose zone soil organic carbon fraction, f_{oc} (unitless)	Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.5	0.43	0.148	0.002	5

MORE

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Averaging time for carcinogens, AT_C (yrs)	Averaging time for noncarcinogens, AT_{nc} (yrs)	Exposure duration, ED (yrs)	Exposure frequency, EF (days/yr)	Target risk for carcinogens, TR (unitless)	Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-05	1

END

Used to calculate risk-based soil concentration.

RESULTS SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

Indoor exposure soil conc., carcinogen ($\mu\text{g}/\text{kg}$)	Indoor exposure soil conc., noncarcinogen ($\mu\text{g}/\text{kg}$)	Risk-based indoor exposure soil conc., ($\mu\text{g}/\text{kg}$)	Soil saturation conc., C_{sw} ($\mu\text{g}/\text{kg}$)	Final indoor exposure soil conc., ($\mu\text{g}/\text{kg}$)
NA	NA	NA	1.44E+05	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.8E-02

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CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES

ENTER

Initial soil conc., C_R ($\mu\text{g}/\text{kg}$)
Chemical

108883 1.20E+02 m-Xylene

MORE

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Depth below grade to bottom of enclosed space floor, L_f (15 or 200 cm)	Depth below grade to top of contamination, L (cm)	Average soil temperature, T_s ($^{\circ}\text{C}$)	Vadose zone SCS soil type (used to estimate soil vapor permeability)	User-defined vadose zone soil vapor permeability, k_v (cm^2)	
15	61	10	L	0.00E+00	

MORE

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Vadose zone SCS soil type (Lookup Soil Parameters)	Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	Vadose zone soil total porosity, n^V (unitless)	Vadose zone soil water-filled porosity, θ_v (cm^3/cm^3)	Vadose zone soil organic carbon fraction, f_{oc} (unitless)	Average vapor flow rate into bldg. (Leave blank to calculate) Q_{net} (L/m)
L	1.5	0.43	0.148	0.002	5

MORE

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Averaging time for carcinogens, ATC (yrs)	Averaging time for noncarcinogens, AT _{NC} (yrs)	Exposure duration, ED (yrs)	Exposure frequency, EF (days/yr)	Target risk for carcinogens, TR (unitless)	Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-05	1

END

Used to calculate risk-based soil concentration.

RESULTS SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

Indoor exposure carcinogen (µg/kg)	Indoor exposure soil conc., noncarcinogen (µg/kg)	Risk-based indoor exposure soil conc., (µg/kg)	Soil saturation conc., C_{sw} (µg/kg)	Final indoor exposure soil conc., (µg/kg)
NA	NA	NA	1.51E+05	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.5E-01

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Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter 'X' in 'YES' box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter 'X' in 'YES' box and initial soil conc. below)

YES

ENTER

Initial soil conc., C_s ($\mu\text{g}/\text{kg}$)
Chemical

96476 5.00E+01 o-Xylene

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Depth below grade to bottom of enclosed space floor, L_b (15 or 200 cm)	Depth below grade to top of contamination, L_t (cm)	Average soil temperature, T_s ($^{\circ}\text{C}$)	Vadose zone SCS soil type (used to estimate soil vapor permeability)	User-defined vadose zone soil vapor permeability, k_v (cm^2)	
15	61	10	L	0.00E+00	

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Vadose zone SCS soil type	Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	Vadose zone soil total porosity, n^V (unitless)	Vadose zone soil water-filled porosity, θ_w^V (unitless)	Vadose zone soil organic carbon fraction, f_{oc}^V (unitless)	Average vapor flow rate into bldg. (Leave blank to calculate) Q_{tot} (L/m)
L	1.5	0.43	0.148	0.002	5

MORE ↓

ENTER	ENTER	ENTER	ENTER	ENTER	ENTER
Averaging time for carcinogens, AT_C (yrs)	Averaging time for noncarcinogens, AT_{NC} (yrs)	Exposure duration, ED (yrs)	Exposure frequency, EF (days/yr)	Target risk for carcinogens, TR (unitless)	Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-05	1

END

Used to calculate risk-based soil concentration.

RESULTS SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

Indoor exposure soil conc., carcinogen ($\mu\text{g}/\text{kg}$)	Indoor exposure soil conc., noncarcinogen ($\mu\text{g}/\text{kg}$)	Risk-based indoor exposure soil conc., ($\mu\text{g}/\text{kg}$)	Soil saturation conc., C_{sat} ($\mu\text{g}/\text{kg}$)	Final indoor exposure soil conc., ($\mu\text{g}/\text{kg}$)
NA	NA	NA	1.50E+05	NA

MESSAGE SUMMARY BELOW:

END

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.6E-01

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Reset to Defaults

YES OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and Initial soil conc. below)

YES X

ENTER Initial soil conc.,
CAS No. (numbers only, no dashes)
C_a (µg/kg)

Chemical

91203 1.00E+01 Naphthalene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L _f (15 or 200 cm)	ENTER Depth below grade to top of contamination, L _t (cm)	ENTER Average soil temperature, T _s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	ENTER User-defined vadose zone soil vapor permeability, k _v (cm ²)
15	61	10	L	0.00E+00

MORE ↓

ENTER Vadose zone SCS soil type	ENTER Vadose zone soil dry bulk density, ρ _s ^A (g/cm ³)	ENTER Vadose zone soil total porosity, n ^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ _w ^V (cm ³ /cm ³)	ENTER Vadose zone soil organic carbon fraction, f _{oc} ^V (unitless)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q _v (L/m)
L	1.5	0.43	0.148	0.002	5

MORE ↓

ENTER Averaging time for carcinogens, AT _C (yrs)	ENTER Averaging time for noncarcinogens, AT _{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350	1.0E-05	1

END

Used to calculate risk-based soil concentration.

RESULTS SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

Indoor exposure soil conc., carcinogen (ug/kg)	Indoor exposure soil conc., noncarcinogen (ug/kg)	Risk-based indoor exposure soil conc., carcinogen (ug/kg)	Soil saturation conc., C_{sat} (ug/kg)	Final indoor exposure soil conc., carcinogen (ug/kg)
NA	NA	NA	1.27E+05	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.4E-02

MESSAGE SUMMARY BELOW:

END