

**HICKORY MGP SITE  
GROUND WATER  
REMEDIAL ACTION PLAN**

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Prepared By:  
RC Roberts Consulting Inc.  
19611 Schooner Dr.  
Cornelius, NC 28031  
C-3004

Prepared For:  
Piedmont Natural Gas Company  
PO Box 33068  
Charlotte, NC 28233



# HICKORY MGP SITE GROUND WATER REMEDIAL ACTION PLAN

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# HICKORY MGP SITE GROUND WATER REMEDIAL ACTION PLAN

## 1.0 Introduction

Piedmont Natural Gas Company (PNG) is the identified responsible party for the investigation and any required remedial action at the Hickory MGP site. In accordance with the Administrative Order on Consent (AOC) (Docket #00-SF-192) between the North Carolina Department of Environment and Natural Resources (DENR) Division of Waste Management and the MGP Group, the Division determined that an investigation of the Hickory MGP site should be conducted.

PNG completed an investigation of the site soils. Based on the investigation data and information, a Remedial Action Plan (RAP) for site soils was prepared. The RAP was implanted during the spring of 2009

An investigation of the site ground water was completed in the fall of 2011. This RAP is proposed to address the ground water impacts identified at the site.

### 1.1 Contact Information

The contact information for MGP issues and other environmental concerns at PNG is:

Mr. Michael DePalma, Environmental Engineer  
Piedmont Natural Gas Company  
PO Box 33068  
Charlotte, NC 28233

Phone: 704-731-4506  
Email: [.DePalma@piedmontng.com](mailto:DePalma@piedmontng.com)

PNG has contracted with RC Roberts Consulting Inc. to manage the site investigation and remediation activities. Communication associated with this MGP site should be sent to:

Mr. Ralph C. Roberts, P.E.  
RC Roberts Consulting Inc.  
19611 Schooner Dr.  
Cornelius, NC 28031

Phone: 704-578-8009  
Email: [@gmail.com](mailto:@gmail.com)

## 1.2 Remedial Action Objective

The primary objective of the remedial actions described in this plan is to ensure that the site conditions are protective of human health and the environment, and that any present and potential future uses of the site will present no risks in excess of the designated threshold values.

## 1.3 Site Location, History and Description

The Hickory MGP site is located at 625 12<sup>th</sup> Street Drive NW, Hickory, in Catawba County, NC, see Figure 1. The property is a narrow strip of land between 12<sup>th</sup> Street Drive NW and the Carolina & Northwestern Railroad. It is approximately 2,060 feet long and generally about 100 feet wide. The MGP site is estimated to have used a little over one acre in the central part of the property near where 7<sup>th</sup> Ave. NW intersects 12<sup>th</sup> Street Drive NW.

The MGP site is located at approximately 34.7428 degrees north latitude and 81.3655 degrees west longitude. A portion of the USGS Hickory Quadrangle topographic map is provided in Figure 2.

The site is currently owned by:

Retail Propane Company, LLC  
PO Box 6789  
Helena, MT 59604

The property is currently used as a propane distribution center and is zoned industrial I-2. Numerous residential and commercial sized propane tanks are stored at the site. In addition there are two large propane storage tanks. An operation center office building with a warehouse/shop area and a propane-filling shed are also located on the property. A survey of the entire property was completed in July 2007 and is provided in Figure 3.

This site was undeveloped prior to 1933. At that time a carbureted water gas plant was built at the site and continued operations until 1948. At that time a propane plant was placed into operation. The gas plant had two CWG generators that were removed from the building around 1959. The building was demolished in 1991.

One gas holder was located at the site and was approximately 40 feet in diameter and 80 feet tall. The gas holder was demolished around 1971.

Two tar wells were utilized at the site. The dimensions of the tar wells were approximately 10 feet by 18 feet and three feet deep. They were constructed with cinder block with an open top. The tar wells were partially removed around 1972 and filled with dirt.

Two purifiers were utilized at the site. They sat on concrete foundations and were located approximately 25 feet south of the building. They were removed around 1964. A site plan including historic MGP structures is provided in Figure 4.

During the period when the site was used as an operations center an underground storage tank (UST) was located on the property. A leak in this tank was reported to DENR in 1991. Although an investigation of the environmental impacts of the leak was initiated, the investigation was never completed and there was no remediation performed.

#### 1.4 Previous Documents

The following documents have been submitted to the Superfund Section Division Waste Management, DENR, for this site:

- *Hickory MGP Site Investigation Plan*, RC Roberts Consulting Inc., September 26, 2007.
- *Hickory MGP Site Investigation Report*, RC Roberts Consulting Inc., June 15 2009. Includes the *Phase 1 Groundwater Report* by Shield Engineering Inc. and the *Calculation of Soil Remedial Objectives* by Environmental Operations Inc.
- *Hickory MGP Site Remedial Action Plan*, RC Roberts Consulting Inc., October 9, 2009.
- *Hickory MGP Soil Removal Report*, RC Roberts Consulting Inc., October 14, 2010
- *Hickory MGP Report of Phase 2 Groundwater Investigation*, Shield Engineering, Inc., September 16, 2011

## 2.0 Soil Investigation

The *Hickory MGP Site Investigation Plan* was submitted to DENR on September 26, 2007. The investigation was conducted in November 2007 and the work activities and results of the investigation were described in the *Hickory MGP Site Investigation Report* dated June 15, 2009.

A combination of soil investigation techniques was used. Trenching was used in many of the sample locations in the MGP area. Direct push technology using Geoprobe sampling equipment was used in many of the perimeter areas and a hand auger was used in a couple of locations that were inaccessible for the Geoprobe.

A total of 28 soil samples were collected from six trenches. Forty samples were collected from 17 Geoprobe borings and two samples were collected from two hand auger borings.

Thirty-one samples were submitted to the laboratory for semi-volatile (SVOC) and volatile organic (VOC) compound analysis by EPA methods 8270 and 8260. Thirty-nine soil samples were submitted to the laboratory for an abbreviated VOC analysis that included only benzene, toluene, ethylbenzene and Xylene (BTEX) plus naphthalene by EPA Method 8260.

Three samples, all from the Trench (#6) located near the former purifiers, were analyzed for RCRA metals (AS, BA, Cd, Cr, Pb, Hg, Se, and Ag) and metals Ni and Fe by Methods 6010 and 7471. These three samples were also analyzed for Total and Amenable cyanide by Method 9014 and for Available cyanide by method 1677.

## 2.1 SVOC Sample Results

Analytical results indicated that SVOCs were detected in 25 out of 32 samples. Three surface soil samples and four subsurface soil samples had all SVOCs below their respective detection limits.

All samples exceeded the SRG for Benzo(a)pyrene (BaP), even the locations where the concentration of all SVOCs were below the detection limit.

The surface sample collected at the east end of Trench #1 had the highest concentration of cPAH as BaP with a concentration at 360.30 mg/kg. cPAH is a calculated concentration equal to the sum of the carcinogenic polynuclear aromatic hydrocarbon compounds multiplied by their toxicity factors. The only other sample location to exceed a cPAH as BaP concentration of 100 mg/kg was the bottom of the west end of Trench #3, at 260.86 mg/kg. Six subsurface and three surface samples had cPAH as BaP concentrations between 20 and 100 mg/kg. Thirteen samples had cPAH as BaP concentrations between 1 and 20 mg/kg with the remaining eight samples had a cPAH as BaP concentration below 1 mg/kg.

## 2.2 VOC Sample Results

BTEX compounds were detected in 13 samples. Only one sample exceeded the SRG for any BTEX compound. That was the sample collected from the east end of Trench #4 at a depth of two to seven feet. Several samples had detection limits above the SRGs because of high naphthalene values.

Other VOC compounds were detected in 13 of the 39 samples. One compound, 1,2,4 Trimethylbenzene, exceeded the SRG and that was in four samples.

Naphthalene was detected in 52 of the 70 samples. The SRG for naphthalene was exceeded in 28 of those samples. The maximum concentration of naphthalene detected was 4,300 mg/kg in the sample collected from the bottom of the west end of Trench #3. A total of seven samples had naphthalene concentrations exceeding 1,000 mg/kg. Thirty-one samples had naphthalene concentrations exceeding 300 mg/kg.

### 2.3 Metals and Cyanide Sample Results

The three soil samples from Trench #6, located near the former purifiers, were analyzed for metals and available cyanide. Arsenic was detected as a concentration exceeding the SRG (4.4 mg/kg) in the surface sample (6.9 mg/kg) and the 2-7 foot deep sample (4.7 mg/kg). All other metals and cyanide were less than the SRGs.

### 2.4 Investigation Conclusions

The investigation of the Hickory MGP site found the central portion of the site, in the vicinity of the former gas holder, had significant concentrations of MGP residue predominantly as SVOC compounds. These impacts extended from the ground surface and were still evident at the deepest soil sample locations. Beyond the central portion of the site, SVOC compounds were detected above the SRG concentrations for most of the remainder of the surface soils in the MGP area. Significant concentrations of VOC, metals and cyanide were not detected although four locations exceeded the SRG concentration for 1,2,4 Trimethylbenzene, two locations for arsenic and one location for ethylbenzene.

## 3.0 Site Specific Soil Remediation Objectives

Site-specific soil remedial objectives (SROs) were calculated for the primary chemicals of concern typically identified in soil at MGP sites. The SROs calculation was performed by Environmental Operations, Inc. and presented in the *Calculation of Soil Remedial Objectives Hickory MGP Site Hickory, North Carolina*, April 21, 2009. This report was submitted to the DENR as Appendix 5 of the *Hickory MGP Site Investigation Report*.

Surface and subsurface remedial goals were calculated for each chemical based on potential exposure via ingestion, dermal and inhalation pathways. Surface soil remedial goals were calculated based on normal activities for industrial/commercial workers and potential trespassers, while subsurface soil remedial goals were determined for a construction worker involved in potential construction activities. A summary of the SROs for both the surface and subsurface soil is provided in Table 1.

### 3.1 Selection of the Chemicals of Concern

Chemicals of Concern were defined as the typical primary chemicals associated with MGP sites and all other chemicals detected at least once during the site investigation.

### 3.2 Exposure Assessment

Individuals who were most likely to come in contact with the chemicals of concern included:

- Industrial/commercial worker – surface soil exposure (0-2 feet below ground surface) via ingestion, dermal and inhalation pathways.
- Construction worker –subsurface (2-12 feet below ground surface) exposure via ingestion, dermal and inhalation pathways.
- Child Trespasser – surface soil exposure via ingestion, dermal and inhalation pathways.

A utility worker and a groundskeeper could potentially be exposed to site soils; However, these exposure scenarios are typically considerably lower compared to the industrial/commercial and construction worker exposures. Consequently, these scenarios were not used to develop the site-specific SROs.

### 3.3 Toxicity Assessment

Toxicity values included cancer slope factors for carcinogenic endpoints and reference doses for non-carcinogenic endpoints. Values were obtained from the most current toxicity database available from the US EPA and other published peer-reviewed literature sources at the time of the risk assessment calculation.

### 3.4 Risk Characterization

Calculated intakes were combined with chemical specific toxicological parameter to determine cancer risks and hazard indices for each exposure pathway and receptor. Results were compared to the US EPA benchmarks of acceptable risks and hazard indices. The benchmarks used in the assessment were cumulative risk of  $1 \times 10^{-4}$  and for non-carcinogens, a cumulative hazard index of 1.0.

## 4.0 Interim Remedial Actions

A plan to remove MGP impacted soil was detailed in the *Hickory MGP Site Remedial Action Plan, October 9, 2009*. PNG received a RAP approval letter from DENR dated December 22, 2009. Crews mobilized to the site to start the preliminary field activities on March 15, 2010. Excavation and the removal of soil started a week later, on March

22, 2010. The project continued for 13 weeks, until June 15, 2010 when the crews vacated the site. The site excavation process was complicated by the requirement to minimize the impact to the propane operation which had to be kept operational during the project.

#### 4.1 Excavated Material

The excavation of the site contaminants was performed using a track-hoe and the material was loaded directly into trucks. The area of the excavation was limited by the 12<sup>th</sup> Avenue NW right-of-way to the west, the railroad right-of-way to the east and by the two large propane storage tanks on the site.

The depth of the excavation varied from two feet to 18 feet. The excavation extended to a depth where the contaminant concentrations met the subsurface cleanup goals as determined by the confirmation sampling or a depth of at least 10 feet. For much of the area the cleanup goals could not be achieved at a depth of less than 10 feet and the excavation depth was extended to remove additional material. In the central portion of the site the excavation extended to a depth of 18 feet, which was the practical depth limit of the track-hoe, in an attempt to remove as much heavily contaminated material as possible. Figure 5 shows the area and depths of the excavation.

Atypical of most MGP sites, very little debris was encountered at this MGP site. There was some limited debris associated with the tar wells and the gas holder. There were also several small pipes and one large pipe that ran through much of the length of the site.

All of the material removed from the site was placed in the Republic Services Landfill located at Lowe's Motor Speedway in Concord, NC. Transportation of the material was provided by Hilco Trucking. A total of 15,931 tons of material was shipped in 762 truckloads to the landfill.

#### 4.2 Backfill Material

The site was backfilled to the original grade except for some minor variations to promote proper drainage. A total of 797 truckload of backfill were brought to the site. The backfill was compacted using a Caterpillar CP-433 compactor as it was placed in the excavation. Compaction testing was not performed.

All of the backfill came from the quarry in Catawba County. To verify that the backfill was suitable for placement at the site, the backfill was sampled for VOC and SVOC.

#### 4.3 ORC

Oxygen Releasing Compound (ORC) was placed in the bottom of the deeper sections of the excavation prior to backfilling. The ORC was supplied by Regenesis Corporation. A total of 480 pounds of ORC were used at the site.

ORC enhances aerobic biodegradation of organic contaminants in the ground water.

#### 4.4 Engineered Controls

A strip of land located adjacent to the railroad could not be excavated due to railroad excavation limitations. The ditch adjacent to the railroad was cleared of debris and vegetation and the bank lined with a geotextile and covered with riprap to protect the area from erosion and to prevent contact with any remaining contaminants.

#### 4.5 Verification Sampling

A total of 152 soil verification samples were collected and sent to the laboratory for analysis during the excavation process. The samples were analyzed for VOC and SVOC by Pace Analytical Services, a NC certified laboratory.

Seventy-eight samples were collected from the sidewalls of the excavation at an approximated spacing of 25 feet. Seventy-two samples were collected from the bottom of the excavation at a maximum spacing of one sample for every 625 square feet. Figure 6 shows the sample locations. A summary of the SVOC analytical results is provided in Table 2. A summary of the VOC analytical results is provided in Table 3.

##### 4.5.1 Side Wall Sample Analytical Results

A total of 47 sidewall samples did not meet the SRG's. Thirty-nine of these were collected from the ground surface to a depth of two feet and did not meet the surface soil SRG's. The remaining eight samples were collected below a depth of two feet to the bottom of the excavation at that location and exceeded the subsurface SRG's.

All of the subsurface sidewall samples that exceeded the SRG's were because of the compounds B(a)P or Naphthalene or both compounds. One sample also exceeded the SRG's for two additional compounds. The maximum detected concentration of B(a)P was 107 mg/kg in subsurface sample SWR-45

Four sidewall samples exceeded the SRG's for VOC. Benzene was the only VOC to exceed the SRG's. The maximum concentration of Benzene detected was 96.8 mg/kg in a subsurface sample. The locations of the sidewall samples are shown in Figure 7.

##### 4.5.2 Bottom Sample Analytical Results

A total of 72 bottom samples were collected from the excavation, see Figure 8. No part of the excavation was less than two feet deep, and therefore no bottom samples were collected at a depth of less than two feet. Thirty bottom samples were collected at depths of less than 10 feet and the analytical results were compared to the subsurface soil cleanup goals. Forty-two bottom samples were collected at depths between 10 feet and 18 feet. The RAP states that the cleanup goal for soils at depths of 10 feet and greater is the "removal of source material." But, for reference purposes the analytical results are compared to the subsurface soil cleanup goals

The analytical results for 21 bottom samples did not meet the subsurface cleanup goals. Four of these samples were collected at a depth of two feet. The remaining 17 bottom samples that did not meet the subsurface cleanup goals were collected at depths of 10 feet or greater.

Naphthalene exceeded the cleanup goal in 14 of the 17 deep samples. B(a)P also exceeded the goal in 14 of the samples, and Dibenzo(a,h)anthracene exceeded the goal in seven of the 17 deep samples. Only one sample had any additional compounds above the cleanup goals.

The concentration of naphthalene exceeded 1,000 mg/kg in six of the samples with the maximum concentration being 9,260 mg/kg. The maximum concentration of B(a)P detected was 136 mg/kg.

Four bottom samples exceeded the SRG for VOC. Benzene was the only VOC to exceed the SRG. The maximum concentration of Benzene detected was 116 mg/kg. The locations of the bottom samples are shown in Figure 8.

## **5.0 Ground Water Investigation**

The ground water investigation was conducted in two phases. Phase 1 was performed in 2008, before the interim remedial action. Phase 1 was designed to obtain an initial indication of ground water quality. Nine wells were previously installed at the site as part of an underground storage tank leak investigation. Four of these wells were selected to be sampled for the Phase 1 investigation, plus two new wells installed near the MGP tar wells. Compounds typical of gasoline were detected in two of the wells installed for the UST investigation and typical MGP constituents were detected in the two wells installed near the tar wells. The results of the Phase 1 investigation are included in the *Hickory MGP Site Investigation Report*, June 15 2009.

The Phase 2 ground water investigation was performed in 2011, after the interim remedial action was completed. To further address the gasoline constituent plume on the north end of the site, one shallow monitoring well was installed east of the UST

area. To help delineate the contaminant plume from the MGP area three additional shallow monitoring wells were installed around the perimeter of the site. A fourth shallow well was also installed in the area with the highest naphthalene concentration in the soil remained after the soil removal action. The shallow wells were installed to depths between 20 and 25 feet. To address the vertical extent of ground water impacts and potential dense, non-aqueous phase liquids in the subsurface a Type III “telescoping” well was installed near Tar Well #1, four and one half feet into bedrock to a total depth of 38.5 feet. Monitoring well locations are provided in Figure 9. For the Phase 2 Investigation 16 wells were sampled; including eight wells from the previous UST investigation, the two wells installed for the Phase 1 investigation and the six wells installed for the Phase 2 investigation. Results of the Phase 2 Investigation are provided in the *Hickory MGP Report of Phase 2 Groundwater Investigation*, Shield Engineering, Inc., September 16, 2011

## 5.1 Hydrogeology

The Phase 2 report indicated that the native soils at the site are a product of in-place weathering of the parent bedrock and that the soils generally consisted of silty fine sand to slightly clayey fine sand to a depth of 10-15 feet underlain by coarser grained soils consisting of sandy silt and sand. The transition from soil to partially weathered rock occurred at depths of approximately 25 to 30 feet below ground surface. The bedrock was classified as a fine-grained gneiss with schist layers at a depth of 34 feet.

Depth to ground water in the shallow on-site wells ranged from 13.9 to 19.67 feet below the top of well casings. Thus the surficial aquifer extends well up into the soil material overlying the partially weathered bedrock. A potentiometric surface map showing ground water flow direction is provided in Figure 10. The depth to water in the deep well was less than the depth to water in the adjacent shallow well, an indication of an upward hydraulic gradient in that portion of the site.

## 5.2 Ground Water Analytical Results and Plume Delineation

A summary of laboratory analytical results for the sampling events in 2008 and 2011 are provided in Table 4. An isoconcentration map for benzene in ground water is shown in Figure 11 and for naphthalene Figures 12. The vertical extent of the naphthalene contaminant plume is shown on Figure 13.

Several volatile organic compounds (VOCs) detected in the UST source area and down gradient exceeded the North Carolina 15A NCAC 2L .0202 Standards for the 2011 sampling event. But, the concentrations have declined considerably since the 2008 event. The 2008 sampling event detected measurable thicknesses of free product in two wells, but no free product was detected in the 2011 sampling event.

Analytical results for the wells in the MGP source area had five compounds with concentrations that exceeded the 2L Standards. The concentrations of benzene and naphthalene did not change substantially in the well located near the center of the contaminant plume (MW-10) but declined significantly in well MW-11 near the down gradient edge of the plume.

Dissolved oxygen (DO) concentrations in ground water outside of the plume areas are considerably higher than those concentrations within the plume with the exception of well MW-13. The apparent reduction in DO within the plume is an indication of natural biodegradation of organic constituents in the subsurface. The higher DO in well MW-13 may be due to the application of ORC during the excavation of the MGP source areas in 2010. A higher concentration of manganese within the plume areas versus outside the plume areas is also an indication of natural degradation of the organic compounds in the subsurface.

## **6.0 Conceptual Site Model**

This section presents a site conceptual model. It is based on the site-specific data, generated during the soil and ground water site investigations.

- The Site is located in an industrial/commercial area. The MGP was the first development at the site. At the time of the initial development the surrounding property was primarily rural. The MGP started operation in 1933 and ceased operations about 15 years later in 1948.
- The primary source of contamination from the MGP appears to be from coal tar. The majority of the tar generated at the site was probably taken off site for re-use or disposal, although some on-site use as a road tar is suspected. During the soil removal project some tar was encountered in the tar wells and in the vicinity of the demolished gas holder but limited piping was discovered and did not contain significant volumes of tar.
- Much of the MGP contaminant source material was removed during the soil removal project.
- The former UST is an apparent source of ground water impact.
- The MGP is an apparent source of ground water impact.
- The migration pathway from each contaminant source begins in the unsaturated zone. The subsurface consists of transitioning weathering horizons that range from soil, to partially weathered rock to bedrock. The relatively coarse-grained soils in the saturated zone above the partially weathered rock would indicate they have a relatively high transmissivity for the Piedmont.

- The zone of partially weathered rock and upper bedrock are likely the most transmissive zone in the soil/rock profile. However, foliation in the partially weathered rock and bedrock may cause anisotropic transmissivity with vertical being less than lateral. This may explain why the constituent plumes have not migrated to the partially weathered rock and bedrock.
- Ground water flow in the Piedmont can best be described by a topographically dependent flow model. Ground water flow direction from the site source areas is to the south-southeast. Discharge of ground water from the site likely occurs at Frye Creek located approximately 900 feet south of the site.
- The natural DO content of the ground water in the site area is conducive to aerobic degradation of contaminants. The application of ORC during the excavation project likely aided this process. Evidence points to ongoing aerobic degradation occurring in portions of each constituent plume.

## **7.0 Summary of Present Site Contaminants**

Soil contamination with SVOC compounds at concentrations above the site specific remediation objectives exist along the eastern boundary of the site. This is an area that could not be excavated because of the railroad right-of-way. Engineered controls, namely the placement of riprap, were used in this area to decrease human exposure.

Contaminated soil also remains in the middle section of the site. In an effort to remove as much contaminated material as possible in this area the excavation was extended to a depth of 18. But the analytical results for the bottom soil samples indicated that contaminated material remains in some areas.

Ground water contamination exists at the site above the North Carolina 15A NCAC 2L 0.202 ground water standards for both volatile and semi-volatile organic compounds. The predominant contaminants are benzene and naphthalene. Analytical results for the 2011 sampling event detected no compounds above the gross contaminant level.

## **8.0 Evaluation of Available Remedies**

A number of technologies are available for the treatment of ground water. Options include both in situ and ex situ technologies and the processes may be broadly categorized as biological or physical/chemical.

### **8.1 In Situ Biological Treatment Technologies**

The main advantage of in situ treatment is that it allows ground water to be treated without being brought to the surface, resulting in cost savings. But in situ treatment generally requires longer time periods.

Enhanced biodegradation, natural attenuation and phytoremediation are in-situ biological treatment technologies. The current use of the Hickory MGP site as a propane distribution operations center eliminates phytoremediation as a possible remediation technology.

Bioremediation is a process in which microorganisms metabolize organic contaminants in the ground water. This can be an aerobic process where the organisms use oxygen to metabolize organic material or it may be an anaerobic process where the microorganisms use nitrate. Aerobic bioremediation metabolizes contaminants quicker than the anaerobic process. Natural attenuation relies on the existing oxygen and nitrate concentrations in the ground water. Enhanced bioremediation attempts to add oxygen to the ground water to prevent oxygen from being a limiting factor in the metabolic process. Some methods that have been used to add oxygen to the ground water include the use of ORC, air sparging or by adding hydrogen peroxide. Air sparging is typically combined with soil vapor extraction to enhance the removal of volatile compounds.

The injection of hydrogen peroxide is expensive plus there are safety concerns. In addition, the network of injection points required for hydrogen peroxide or air sparging would significantly impact the current use of the site during the treatment period.

The capital costs for natural attenuation and for enhanced bioremediation using ORC are lower than most other treatment technologies. The O&M costs are also low, but the treatment duration is expected to be longer than most other options. The impacts to operations at the site are minimal.

## 8.2 In Situ Physical/Chemical Treatment Technologies

Air sparging, chemical oxidation, and passive treatment walls are in situ physical and chemical treatment technologies.

Air sparging is a technology that injects air into the aquifer to volatilize the contaminants and flush them into the unsaturated zone where they are removed by a vapor extraction system. The injection rate is much higher than that used in enhanced bioremediation. Both capital and O&M costs are high and the expected treatment duration is average. The network of air injection points would significantly impact the current use of the site.

Chemical Oxidation converts the organic contaminants in the ground water to less toxic compounds by injecting oxidizers into the aquifer. Common oxidizers used include ozone, hydrogen peroxide, hypochlorite, chlorine, and chlorine dioxide. The network of oxidizer injection points would significantly impact the current use of the site.

Passive Treatment Walls are barriers constructed across the flow path of the contaminant plume that allow the passage of water while retaining or degrading the contaminants by employing such agents as sorbents and microbes.

### 8.3 Ex Situ Treatment Technologies

Ex situ treatment technologies require a network of recovery wells to bring the contaminated ground water to the surface for treatment. The main advantage of ex situ treatment is that it generally requires a shorter time period compared to in situ treatment. Pumping of ground water increases costs and engineering for equipment, permitting and material handling.

Once the ground water is brought to the surface there are a number of treatment options available including bioreactors, wet lands, air stripping, granulated activated carbon, sprinkler systems, and sending to a sewage treatment plant.

### 8.4 Engineering Controls

Engineering controls have been effectively used to eliminate exposures to contaminated soils and ground water on other MGP sites. This approach can involve isolating the soil and ground water contamination from contact through the use of surface caps. Engineering controls are protective of human health and the environment due to the elimination of exposure pathways. They do require long term continued maintenance and impact future uses of the property. Engineering controls can be effectively used were the removal of MGP impacted material practical. Engineering controls are typically supplemented with the implementation of Institutional Controls.

### 8.5 Institutional Controls

Institutional controls have been effectively used to eliminate exposures to contaminated soil and ground water on other MGP sites. Typically the controls disallow any subsurface activities and prohibit certain uses of the property. Institutional controls are protective of human health and the environment due to the elimination of exposure pathways. These controls can be effectively implemented in the short-term, but provisions, such as the filing of deed restrictions that run with the property at the local Register of Deeds office, must be made to ensure their long term success.

## 9.0 Proposed Remedial Action

The proposed remedial actions to address the exposure to ground water contaminants include a combination of institutional controls and monitored natural attenuation.

Previous remedial actions included contaminant source removal and the application of ORC to enhance the aerobic biodegradation of contaminants in the ground water.

## 9.1 Natural Attenuation

Natural attenuation includes a variety of physical, chemical, and biological processes that, under favorable conditions, reduce the mass, toxicity, mobility, volume and concentration of contaminants in the ground water. The mechanisms of natural attenuation may be classified as destructive, resulting in a decrease in contaminant mass, or non-destructive, resulting in a decrease in contaminant concentrations but not mass. The primary destructive mechanisms are biological and may be aerobic or anaerobic. The primary non-destructive mechanisms are typically physical processes such as volatilization, dispersion and sorption.

Aerobic biodegradation of organic contaminants is more rapid than anaerobic biodegradation. Initially aerobic biodegradation is the predominant process. But once the oxygen in the contaminated zone has been depleted, anaerobic processes continue, using nitrates ( $\text{NO}_3^-$ ), sulfates ( $\text{SO}_4^-$ ), iron ( $\text{Fe}^{3+}$ ), and manganese ( $\text{Mn}^{4+}$ ).

A review of the organic and inorganic ground water analytical results suggests that natural attenuation is occurring at the site. It also suggests that the ORC placed in the excavation increased the oxygen level in the groundwater in the central part of the site.

Monitored natural attenuation is cost effective and protective of human health and the environment. It has the least impact to activities at the site and the local community. The biologic activity destroys the contaminants.

## 9.2 Monitoring Plan

The objectives of the monitoring plan are to demonstrate that attenuation of contaminants is occurring by verifying that the contaminant levels are decreasing and to confirm that the contaminant plume is not migrating or impacting to down-gradient receptors

A total of ten wells will be monitored. The monitoring will include seven wells in the MGP area (MW-8, 10, 11, 13, 14, 16, and 17) and three wells in the UST area (MW-1, 6, and 15). The list includes wells both in the source areas and along the perimeter of the plume. The wells will be sampled quarterly. The list of wells sampled and the frequency of sampling may be adjusted in the future based on the sampling results.

The samples will be analyzed for VOC by Method 8260 and SVOC by Method 8270. The wells will also be analyzed for alkalinity (EPA Method 2320B), nitrate (EPA Method 353.2), sulfate (EPA Method 300), iron (EPA Method 6010), manganese (EPA Method 6010), and nitrogen (TKN) (Method 351.2). The dissolved oxygen of the ground water will be determined in the field at the time of sample collection.

A ground water monitoring report will be submitted to NCDENR after each sampling event.

### 9.3 Institutional Controls

Institutional controls in the form of land use restrictions will be implemented on this property. Proposed restrictions include:

- Limiting the property use to commercial or industrial.
- Prohibiting the use of surface water and ground water, except for monitoring purposes.
- Prohibiting the construction, excavation, and disturbances of soil below a depth of ten feet unless the activity has DENR approval.
- Prohibiting the disturbances of soil at any depth in certain areas.
- The installation of a vapor barrier on all new construction.
- Prohibiting the use of the property for day care facilities, agriculture, kennels, animal pens and athletic fields.
- A yearly letter sent from the property owner to DENR certifying that the land use restrictions are still recorded at the register of deeds office and that all restrictions are being adhered to.

The land use restrictions will be finalized after approval of this RAP.

### 10.0 Schedule

Implementation of the RAP will start within 30 days of approval of the RAP.

### 11.0 Conclusion

The proposed ground water remedial action for the Hickory MGP site is monitored natural attenuation and the recordation of land use restrictions.

Previous remedial activities included source removal by excavating MGP impacted soil, and engineered controls to decrease exposure to soil that could not be excavated and enhanced bioremediation by ORC.

**Table 1**  
**SUMMARY OF SOIL REMEDIAL OBJECTIVES**  
**Piedmont Natural Gas Company - Hickory MGP Site, Hickory, NC**

Chemical of Interest	Soil Remedial Objective	
	Surface Soil <sup>(1)</sup>	Subsurface Soil
<b>SVOCs</b>		
2-Methylnaphthalene	2,736	8,289
Acenaphthene	36,670	1,173,903
Acenaphtylene	36,670	1,173,903
Anthracene	183,351	5,869,515
Benzo(a)anthracene	2.3	188
Benzo(a)pyrene	0.23	19
Benzo(b)fluoranthene	2.3	188
Benzo(g,h,i)perylene	18,335	586,952
Benzo(k)fluoranthene	23	1,876
Chrysene	234	18,761
Dibenzo(a,h)anthracene	0.23	19
Dibenzofuran	1,368	8,289
Fluoranthene	24,447	782,602
Fluorene	24,447	782,602
Indeno(1,2,3-cd)pyrene	2.3	188
Naphthalene	432	196
Phenanthrene	183,351	5,869,515
Pyrene	18,335	586,952
<b>VOCs</b>		
1,2,4-Trimethylbenzene	173	76
1,3,5-Trimethylbenzene	122	539
Acetone	340,156	206,581
Benzene	2.2	25
n-Butylbenzene	9,436	4,513
sec-Butylbenzene	7,394	3,472
Ethylbenzene	12,645	6,119
Isopropylbenzene	7,237	3,393
p-Isopropyltoluene	53,760	57,358
n-Propylbenzene	8,122	3,839
Styrene	30,681	43,061
Toluene	32,062	21,731
Xylenes, total	1,608	17,855

**Table 5**  
**SUMMARY OF SOIL REMEDIAL OBJECTIVES**  
**Piedmont Natural Gas Company - Hickory MGP Site, Hickory, NC**

Chemical of Interest	Soil Remedial Objective	
	Surface Soil <sup>(1)</sup>	Subsurface Soil
<b>Inorganics</b>		
Arsenic	1.8	105
Barium	169,088	243,828
Cadmium	502	1,230
Chromium	315	550
Lead <sup>(2)</sup>	400	400
Mercury	341	7,742
Nickel	22,711	51,616
Cyanide	22,585	43,675

Units in mg/kg.

1 - Surface soil remedial objectives are the lowest of the industrial/commercial worker and child trespasser remedial objective

2 - Lead surface and subsurface soil remedial objective is the EPA and NCDENR residential soil standard.

Table 2  
**HICKORY MGP Site**  
**SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	Soil Remedial Objectives		9265989001		9265989002		9265989003		9265989004	
	Soil Remedial Objectives		SWR-001		BR-002		BR-003		BR-004	
			Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
			3/22/2010		3/22/2010		3/22/2010		3/22/2010	
	Surface Soils (mg/kg)	Subsurface Soils (mg/kg)	Analysis Result (mg/kg)	Detection Limit (mg/kg)						
2-Methylnaphthalene	2,736	8,289	0.528	---	3.69	---	9.55	---		
Acenaphthene	36,670	1,173,903	0.217	0.433	1.02	---	3.7	7.4	0.19	0.38
Acenaphthylene	36,670	1,173,903	0.772	---	3.88	7.75	18.5	---	0.863	---
Anthracene	183,351	5,869,515	0.517	---	52.7	---	48.3	---	0.19	0.38
Benzo(a)anthracene	2.3	188	0.833	---	0.19	0.388	35.8	---	3.26	---
Benzo(a)pyrene	0.23	19	0.728	---	12.5	---	26.5	---	2.22	---
Benzo(b)fluoranthene	2.1	188	0.799	---	0.19	0.388	32.7	---	2.39	---
Benzo(g,h,i)perylene	18,335	586,952	0.739	---	9.2	---	19.9	---	1.3	---
Benzo(k)fluoranthene	23	1876	0.507	---	0.19	0.388	12.3	---	1.11	---
Chrysene	234	18,762	0.859	---	0.19	0.388	34.3	---	2.87	---
Dibenzo(a,h)anthracene	0.23	19	0.217	0.433	0.19	0.388	3.7	7.4	0.19	0.38
Dibenzofuran	1,368	8,289	0.217	0.433	2.08	---	3.7	7.4	0.19	0.38
Fluoranthene	24,447	782,602	1.49	---	39.3	---	45.3	---	2.58	---
Fluorene	24,447	782,602	0.217	0.433	10.4	---	20.9	---	0.19	0.38
Indeno(1,2,3-c,d)pyrene	2.3	188	0.217	0.433	0.19	0.388	16.4	---	0.815	---
Naphthalene	432	196	0.217	0.433	3.7	---	13.1	---	0.19	0.38
Phenanthrene	183,351	5,869,515	1.08	---	70	---	71.6	---	0.398	---
Pyrene	18,335	586,952	2.12	---	0.19	0.388	73.4	---	5.17	---
<b>Total PAH</b>	530406.16	16863958.00	12.27		209.80		489.65		24.12	
<b>Total CPAH</b>	264.16	21240.00	4.16		13.64		161.70		12.86	
<b>Total CPAH as BaP</b>	1.59	131.92	1.14		12.75		38.85		3.07	

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis Result column.

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Analytical results exceeding the SRG are shown in Red

**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9265989005		9265989006		9265989007		9265989008		9265989009	
	BR-005		BR-006		BR-007		BR-008		BR-009	
	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface		Subsurface Soil	
	3/23/2010		3/23/2010		3/23/2010		3/23/2010		3/23/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	0.202	0.405	0.204	0.408	0.216	0.431	2.01	4.01	0.204	0.408
Acenaphthene	0.202	0.405	0.204	0.408	0.216	0.431	2.01	4.01	0.204	0.408
Acenaphthylene	0.433	---	0.204	0.408	0.216	0.431	2.01	4.01	0.204	0.408
Anthracene	0.202	0.405	0.204	0.408	0.216	0.431	2.01	4.01	0.204	0.408
Benzo(a)anthracene	1.04	---	0.204	0.408	0.216	0.431	8.55	---	0.204	0.408
Benzo(a)pyrene	0.88	---	0.204	0.408	0.216	0.431	12.1	---	0.488	---
Benzo(b)fluoranthene	0.62	---	0.204	0.408	0.216	0.431	10.7	---	0.51	---
Benzo(g,h,i)perylene	0.202	0.405	0.204	0.408	0.216	0.431	9.49	---	0.204	0.408
Benzo(k)fluoranthene	1.1	---	0.204	0.408	0.216	0.431	4.1	---	0.204	0.408
Chrysene	0.966	---	0.204	0.408	0.216	0.431	7.53	---	0.204	0.408
Dibenzo(a,h)anthracene	0.202	0.405	0.204	0.408	0.216	0.431	2.01	4.01	0.204	0.408
Dibenzofuran	0.202	0.405	0.204	0.408	0.216	0.431	2.01	4.01	0.204	0.408
Fluoranthene	0.8	---	0.204	0.408	0.216	0.431	7.17	---	0.204	0.408
Fluorene	0.202	0.405	0.204	0.408	0.216	0.431	2.01	4.01	0.204	0.408
Indeno(1,2,3-c,d)pyrene	0.202	0.405	0.204	0.408	0.216	0.431	7.97	---	0.204	0.408
Naphthalene	0.202	0.405	0.204	0.408	0.216	0.431	2.01	4.01	0.204	0.408
Phenanthrene	0.489	---	0.204	0.408	0.216	0.431	2.01	4.01	0.204	0.408
Pyrene	1.24	---	1.07	---	0.866	---	17.7	---	1.18	---
<b>Total PAH</b>	9.39		4.54		4.54		103.40		5.24	
<b>Total CPAH</b>	5.01		1.43		1.51		52.96		2.02	
<b>Total CPAH as BaP</b>	1.28		0.47		0.50		16.88		0.79	

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Analytical results exceeding the SRG's are shown in Red

**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9265989010		9265989011		9265989012		9265989013		9265989014	
	BR-010		BR-011		BR-012		SWR-013		SWR-014	
	Subsurface Soil		Subsurface Soil		Subsurface Soil		Surface Soil		Surface Soil	
	3/23/2010		3/23/2010		3/23/2010		3/23/2010		3/23/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	111	221		---	0.207	0.413	4.1	8.2		---
Acenaphthene	111	221	0.196	0.392	0.207	0.413	4.1	8.2	4.78	9.56
Acenaphthylene	111	221	0.196	0.392	0.459	---	4.1	8.2	4.78	9.56
Anthracene	111	221	0.196	0.392	0.207	0.413	4.1	8.2	4.78	9.56
Benzo(a)anthracene	111	221	0.544	---	1.07	---	4.1	8.2	16.4	---
Benzo(a)pyrene	111	221	0.708	---	2.1	---	4.1	8.2	13.4	---
Benzo(b)fluoranthene	111	221	0.754	---	1.91	---	4.1	8.2	14.8	---
Benzo(g,h,i)perylene	111	221	0.551	---	0.862	---	4.1	8.2	10.2	---
Benzo(k)fluoranthene	111	221	0.192	0.392	0.825	---	4.1	8.2	4.78	9.56
Chrysene	111	221	0.537	---	1.1	---	4.1	8.2	14.7	---
Dibenzo(a,h)anthracene	111	221	0.192	0.392	0.207	0.413	4.1	8.2	4.78	9.56
Dibenzofuran	111	221	0.192	0.392	0.207	0.413	4.1	8.2	4.78	9.56
Fluoranthene	111	221	0.519	---	0.565	---	4.1	8.2	26.7	---
Fluorene	111	221	0.192	---	0.207	0.413	4.1	8.2	4.78	9.56
Indeno(1,2,3-c,d)pyrene	111	221	0.452	---	0.779	---	4.1	8.2	4.78	9.56
Naphthalene	111	221	0.192	0.392	0.207	0.413	4.1	8.2	4.78	9.56
Phenanthrene	111	221	0.192	0.392	0.207	0.413	4.1	8.2	19.8	---
Pyrene	389	---	1.01	---	2.31	---	12.8	---	50.2	---
<b>Total PAH</b>	2276.00		6.82		13.64		82.50		209.22	
<b>Total CPAH</b>	777.00		3.38		7.99		28.70		73.64	
<b>Total CPAH as BaP</b>	256.52		1.08		2.69		9.48		21.84	

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Analytical results exceeding the SRG's are shown in Red

**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9265989015		9265989016		265989017		9265989018		9266437001	
	SWR-015		SWR-016		SWR-017		SWR-018		BR-019	
	Surface Soil		Surface Soil		Surface Soil		Surface Soil		Subsurface Soil	
	3/23/2010		3/23/2010		3/23/2010		3/23/2010		3/30/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene			4.801	9.62	4.97	9.93	0.227	0.453	0.212	0.424
Acenaphthene	5.15	10.3	4.801	9.62	4.97	9.93	0.227	0.453	0.212	0.424
Acenaphthylene	21.2	---	9.94	---	4.97	9.93	0.227	0.453	0.836	---
Anthracene	12.1	---	4.801	9.62	4.97	9.93	0.227	0.453	0.212	0.424
Benzo(a)anthracene	69.4	---	30.6	---	29.3	---	0.227	0.453	1.49	---
Benzo(a)pyrene	66.7	---	30.4	---	22.6	---	0.227	0.453	2.32	---
Benzo(b)fluoranthene	70.4	---	28.5	---	25.1	---	0.227	0.453	2.05	---
Benzo(g,h,i)perylene	48.6	---	20.4	---	11.9	---	0.227	0.453	1.55	---
Benzo(k)fluoranthene	27.8	---	11.3	---	10.4	---	0.227	0.453	0.838	---
Chrysene	59.5	---	25.5	---	23.3	---	0.227	0.453	1.37	---
Dibenzo(a,h)anthracene	12.4	---	4.801	9.62	4.97	9.93	0.227	0.453	0.212	0.424
Dibenzofuran	5.15	10.3	4.801	9.62	4.97	9.93	0.227	0.453	0.212	0.424
Fluoranthene	105	---	36.6	---	27.7	---	0.227	0.453	1.93	---
Fluorene	5.15	10.3	4.801	9.62	4.97	9.93	0.227	0.453	0.212	0.424
Indeno(1,2,3-c,d)pyrene	41.3	---	17.3	---	10.6	---	0.227	0.453	1.33	---
Naphthalene	5.15	10.3	4.801	9.62	4.97	9.93	0.227	0.453	0.212	0.424
Phenanthrene	26.5	---	4.801	9.62	4.97	9.93	0.227	0.453	1.42	---
Pyrene	215	---	78.9	---	57.4	---	0.227	0.453	3.39	---
<b>Total PAH</b>	796.50		327.85		263.03		4.09		20.01	
<b>Total CPAH</b>	347.50		148.40		126.27		1.59		9.61	
<b>Total CPAH as BaP</b>	97.55		42.98		34.20		0.52		3.03	

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis Result column.

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9266437002		9266437003		9266437004		9266437005		9266437006	
	BR-020		SWR-021		SWR-022		SWR-023		SWR-024	
	Subsurface Soil		Surface Soil		Surface Soil		Surface Soil		Surface Soil	
	3/30/2010		3/30/2010		3/30/2010		3/30/2010		3/30/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	1.06	2.11	0.196	0.391	0.695	---	0.204	0.407	0.213	0.425
Acenaphthene	1.06	2.11	0.196	0.391	0.196	0.391	0.204	0.407	0.213	0.425
Acenaphthylene	12.20	---	0.196	0.391	3.1	---	0.204	0.407	0.213	0.425
Anthracene	7.20	---	0.196	0.391	3.92	---	0.204	0.407	0.213	0.425
Benzo(a)anthracene	53.10	---	0.196	0.391	8.00	---	0.204	0.407	1.18	---
Benzo(a)pyrene	55.20	---	0.196	0.391	5.11	---	0.204	0.407	1.29	---
Benzo(b)fluoranthene	53.30	---	0.196	0.391	6.83	---	0.204	0.407	1.32	---
Benzo(g,h,i)perylene	34.30	---	0.196	0.391	3.15	---	0.204	0.407	0.73	---
Benzo(k)fluoranthene	15.80	---	0.196	0.391	2.87	---	0.204	0.407	0.536	---
Chrysene	44.70	---	0.196	0.391	6.84	---	0.204	0.407	1.02	---
Dibenzo(a,h)anthracene	5.51	---	0.196	0.391	0.773	---	0.204	0.407	0.213	0.423
Dibenzofuran	1.06	2.11	0.196	0.391	0.529	---	0.204	0.407	0.213	0.425
Fluoranthene	102.00	---	0.196	0.391	17.1	---	0.204	0.407	1.53	---
Fluorene	2.37	---	0.196	0.391	2.77	---	0.204	0.407	0.213	0.425
Indeno(1,2,3-c,d)pyrene	19.10	---	0.196	0.391	2.83	---	0.204	0.407	0.637	---
Naphthalene	1.06	2.11	0.196	0.391	0.85	---	0.204	0.407	0.213	0.425
Phenanthrene	27.90	---	0.196	0.391	33.5	---	0.204	0.407	0.213	0.425
Pyrene	160.00	---	0.196	0.391	29.4	---	0.543	---	3.06	---
<b>Total PAH</b>	596.92		3.53		128.46		4.01		13.22	
<b>Total CPAH</b>	246.71		1.37		33.25		1.43		6.20	
<b>Total CPAH as BaP</b>	73.46		0.45		7.68		0.47		1.82	

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Analytical results exceeding the SRG's are shown in Red

**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9266582001		9266582002		9266582003		9266582004		9266582005	
	BR-025		BR-026		BR-027		BR-028		BR-029	
	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
	4/1/2010		4/1/2010		4/1/2010		4/1/2010		4/1/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	0.180	0.390	0.098	0.195				0.426	0.21	0.42
Acenaphthene	0.180	0.390	0.098	0.195	0.184	0.368	0.213	0.426	0.21	0.42
Acenaphthylene	0.180	0.390	0.098	0.195	0.566	---	0.213	0.426	0.21	0.42
Anthracene	0.180	0.390	0.098	0.195	0.444	---	0.213	0.426	0.21	---
Benzo(a)anthracene	0.180	0.390	0.098	0.195	1.52	---	0.213	0.426	0.21	0.42
Benzo(a)pyrene	0.180	0.390	0.098	0.195	1.14	---	0.448	---	0.21	0.42
Benzo(b)fluoranthene	0.180	0.390	0.098	0.195	0.948	---	0.213	0.426	0.441	---
Benzo(g,h,i)perylene	0.180	0.390	0.098	0.195	0.969	---	0.213	0.426	0.21	0.42
Benzo(k)fluoranthene	0.180	0.390	0.098	0.195	1.26	---	0.213	0.426	0.21	0.42
Chrysene	0.180	0.390	0.098	0.195	1.49	---	0.213	0.426	0.21	0.42
Dibenzo(a,h)anthracene	0.180	0.390	0.098	0.195	0.184	0.368	0.213	0.426	0.21	0.42
Dibenzofuran	0.180	0.390	0.098	0.195	0.184	0.368	0.213	0.426	0.21	0.42
Fluoranthene	0.180	0.390	0.098	0.195	3.36	---	0.213	0.426	0.21	0.42
Fluorene	0.180	0.390	0.098	0.195	0.184	0.368	0.213	0.426	0.21	0.42
Indeno(1,2,3-c,d)pyrene	0.180	0.390	0.098	0.195	0.853	---	0.213	0.426	0.21	0.42
Naphthalene	0.180	0.390	0.098	0.195	0.184	0.368	0.213	0.426	0.21	0.42
Phenanthrene	0.180	0.390	0.098	0.195	1.72	---	0.213	0.426	0.21	0.42
Pyrene	0.180	0.390	0.098	0.195	5.01	---	0.213	0.426	1.1	---
<b>Total PAH</b>	3.24		1.76		20.20		3.86		4.86	
<b>Total CPAH</b>	1.26		0.69		7.40		1.73		1.70	
<b>Total CPAH as BaP</b>	0.42		0.23		1.67		0.73		0.51	

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Analytical results exceeding the SRG's are shown in Red

**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9266582006		9266582007		9266582008		9266582009		9266582010	
	SWR-030		SWR-031		SWR-032		SWR-033		SWR-034	
	Surface Soil		Surface Soil		Surface Soil		Surface Soil		Surface Soil	
	4/1/2010		4/1/2010		4/1/2010		4/1/2010		4/1/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene		---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Acenaphthene	0.2	0.399	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Acenaphthylene	0.776	---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Anthracene	0.428	---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Benzo(a)anthracene	2.48	---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Benzo(a)pyrene	2.3	---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Benzo(b)fluoranthene	2.36	---	0.219	0.437	0.209	0.418	0.215	0.429	0.477	---
Benzo(g,h,i)perylene	2.32	---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Benzo(k)fluoranthene	0.986	---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Chrysene	2.19	---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Dibenzo(a,h)anthracene	0.542	---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Dibenzofuran	0.2	0.399	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Fluoranthene	3.76	---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Fluorene	0.2	0.399	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Indeno(1,2,3-c,d)pyrene	1.87	---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Naphthalene	0.2	0.399	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Phenanthrene	1.43	---	0.219	0.437	0.209	0.418	0.215	0.429	0.218	0.435
Pyrene	6.64	---	0.219	0.437	0.541	---	0.215	0.429	0.831	---
<b>Total PAH</b>	28.88		3.94		4.09		3.87		4.80	
<b>Total CPAH</b>	12.73		1.53		1.46		1.51		1.79	
<b>Total CPAH as BaP</b>	3.53		0.51		0.48		0.50		0.53	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9267003001		9267003002		9267003003		9267003004		9267003005	
	BR-035		SWR-036		SWR-37		BR-038		BR-039	
	Subsurface Soil		Surface Soil		Surface Soil		Subsurface Soil		Subsurface Soil	
	4/6/2010		4/6/2010		4/6/2010		4/6/2010		4/6/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	24.2	---	9.8	19.6	0.67	---	10.05	20.1	0.205	0.409
Acenaphthene	1.95	---	9.8	19.6	0.201	0.402	10.05	20.1	0.205	0.409
Acenaphthylene	0.196	0.391	9.8	19.6	8.31	---	10.05	20.1	0.205	0.409
Anthracene	9.24	---	9.8	19.6	3.13	---	10.05	20.1	0.205	0.409
Benzo(a)anthracene	5.81	---	28.3	---	8.62	---	47.7	---	0.616	---
Benzo(a)pyrene	4.93	---	23.4	---	15.6	---	52.2	---	0.563	---
Benzo(b)fluoranthene	4.10	---	28.9	---	14.7	---	48.1	---	0.535	---
Benzo(g,h,i)perylene	3.40	---	19.9	---	11.2	---	32.5	---	0.205	0.409
Benzo(k)fluoranthene	1.74	---	9.8	19.6	3.93	---	24.00	---	0.205	0.409
Chrysene	4.88	---	25.7	---	7.81	---	37.6	---	0.618	---
Dibenzo(a,h)anthracene	0.77	---	9.8	19.6	2.75	---	10.05	20.1	0.205	0.409
Dibenzofuran	4.08	---	9.8	19.6	0.201	0.402	10.05	20.1	0.205	0.409
Fluoranthene	14.5	---	30.9	---	13.8	---	85.8	---	0.483	---
Fluorene	12.9	---	9.8	19.6	0.717	---	10.05	20.1	0.205	0.409
Indeno(1,2,3-c,d)pyrene	2.77	---	9.80	19.6	9.00	---	25.9	---	0.205	0.409
Naphthalene	27.3	---	9.8	19.6	1.5	---	10.05	20.1	0.205	0.409
Phenanthrene	25.7	---	25.8	---	3.31	---	49.00	---	0.205	0.409
Pyrene	15.2	---	62.1	---	10.9	---	158.00	---	1.16	---
<b>Total PAH</b>	163.67		343.00		116.35		641.20		6.44	
<b>Total CPAH</b>	25.00		135.70		62.41		245.55		2.95	
<b>Total CPAH as BaP</b>	6.99		40.02		21.63		74.70		0.91	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9267003006		9267003007		9267003008		9267003009		9267003010	
	SWR-040		SWR-041		SWR-042		SWR-043		SWR-044	
	Surface Soil		Surface Soil		Surface Soil		Subsurface Soil		Subsurface Soil	
	4/6/2010		4/6/2010		4/6/2010		4/6/2010		4/6/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	0.212	0.423	10.3	20.6	10.6	21.2	0.373	---	7.18	---
Acenaphthene	0.212	0.423	10.3	20.6	10.6	21.2	0.185	0.369	1.9	3.8
Acenaphthylene	0.212	0.423	10.3	20.6	10.6	21.2	0.649	---	8.11	---
Anthracene	0.212	0.423	10.3	20.6	10.6	21.2	0.424	---	1.9	3.8
Benzo(a)anthracene	0.842	---	10.3	20.6	47.8	---	0.468	---	7.57	---
Benzo(a)pyrene	1.48	---	10.3	20.6	51.1	---	0.462	---	8.56	---
Benzo(b)fluoranthene	1.36	---	222	---	42.9	---	0.439	---	8.09	---
Benzo(g,h,i)perylene	1.18	---	10.3	20.6	30.5	---	0.185	0.369	5.6	---
Benzo(k)fluoranthene	0.56	---	10.3	20.6	25.8	---	0.185	0.369	1.9	3.8
Chrysene	0.917	---	10.3	20.6	40.4	---	0.416	---	6.42	---
Dibenzo(a,h)anthracene	0.212	0.423	10.3	20.6	10.6	21.2	0.185	0.369	1.9	3.8
Dibenzofuran	0.212	0.423	10.3	20.6	10.6	21.2	0.185	0.369	1.9	3.8
Fluoranthene	0.794	---	10.3	20.6	63.0	---	0.723	---	13.5	---
Fluorene	0.212	0.423	10.3	20.6	10.6	21.2	0.494	---	3.87	---
Indeno(1,2,3-c,d)pyrene	0.975	---	10.3	20.6	26.0	---	0.185	0.369	4.5	---
Naphthalene	0.212	0.423	10.3	20.6	10.6	21.2	0.185	0.369	17.5	---
Phenanthrene	0.212	0.423	10.3	20.6	10.6	21.2	1.84	---	14.3	---
Pyrene	1.62	---	36.9	---	127	---	1.24	---	21.4	---
<b>Total PAH</b>	11.64		423.70		549.90		8.82		136.10	
<b>Total CPAH</b>	6.35		283.80		244.60		2.34		38.94	
<b>Total CPAH as BaP</b>	2.02		44.97		73.67		0.76		12.50	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9267003011		9267003012		9267003013		9267003014		9267093001	
	SWR-045		SWR-046		SWR-047		SWR-048		BR-049	
	Subsurface Soil		Subsurface Soil		Surface Soil		Surface Soil		Subsurface Soil	
	4/6/2010		4/6/2010		4/6/2010		4/6/2010		4/7/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	622	---	0.184	0.367	0.197	0.394	2.00	3.9	0.193	0.386
Acenaphthene	28.1	---	0.184	0.367	0.197	0.394	2.00	3.9	0.193	0.386
Acenaphthylene	503	---	0.184	0.367	0.562	---	9.10	---	0.428	---
Anthracene	199	---	0.184	0.367	0.197	0.394	4.12	---	0.390	---
Benzo(a)anthracene	110	---	0.184	0.367	1.67	---	43.60	---	0.785	---
Benzo(a)pyrene	107	---	0.184	0.367	1.57	---	50.50	---	0.909	---
Benzo(b)fluoranthene	85.6	---	0.184	0.367	1.01	---	42.60	---	0.973	---
Benzo(g,h,i)perylene	58.3	---	0.184	0.367	1.16	---	29.20	---	0.764	---
Benzo(k)fluoranthene	37.5	---	0.184	0.367	1.46	---	17.00	---	0.485	---
Chrysene	89.2	---	0.184	0.367	1.67	---	33.80	---	0.800	---
Dibenzo(a,h)anthracene	8.8	17.5	0.184	0.367	0.197	0.394	6.26	---	0.193	0.386
Dibenzofuran	58	---	0.184	0.367	0.197	0.394	2.00	3.9	0.193	0.386
Fluoranthene	251	---	0.184	0.367	2.7	---	72.80	---	1.390	---
Fluorene	244	---	0.184	0.367	0.197	0.394	2.00	3.9	0.386	---
Indeno(1,2,3-c,d)pyrene	48.1	---	0.184	0.367	0.901	---	23.90	---	0.606	---
Naphthalene	990	---	0.184	0.367	0.197	0.394	2.00	---	0.193	0.386
Phenanthrene	665	---	0.184	0.367	0.693	---	7.29	---	1.790	---
Pyrene	364	---	0.184	0.367	4.17	---	113.00	---	2.270	---
<b>Total PAH</b>	4468.60		3.31		18.95		463.17		12.94	
<b>Total CPAH</b>	486.20		1.29		8.48		217.66		4.75	
<b>Total CPAH as BaP</b>	140.63		0.43		2.14		67.97		1.34	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9267093002		9267093003		9267093004		9267093005		9267093006	
	SWR-050		SWR-051		SWR-052		BR-053		BR-054	
	Surface Soil		Surface Soil		Surface Soil		Subsurface Soil		Subsurface Soil	
	4/7/2010		4/7/2010		4/7/2010		4/7/2010		4/7/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	0.207	0.413	4.95	9.90	0.194	0.387	0.205	0.409	13.4	---
Acenaphthene	0.207	0.413	4.95	9.90	0.194	0.387	0.205	0.409	0.442	---
Acenaphthylene	0.207	0.413	4.95	9.90	0.194	0.387	0.205	0.409	6.76	---
Anthracene	0.207	0.413	4.95	9.90	0.194	0.387	0.205	0.409	2.71	---
Benzo(a)anthracene	0.207	0.413	12.5	---	0.194	0.387	0.205	0.409	2.6	---
Benzo(a)pyrene	0.207	0.413	14.1	---	0.194	0.387	0.420	---	2.52	---
Benzo(b)fluoranthene	0.207	0.413	13.1	---	0.194	0.387	0.205	0.409	3.48	---
Benzo(g,h,i)perylene	0.207	0.413	11.4	---	0.194	0.387	0.205	0.409	1.46	---
Benzo(k)fluoranthene	0.207	0.413	4.95	9.90	0.194	0.387	0.205	0.409	3.04	---
Chrysene	0.207	0.413	11.6	---	0.194	0.387	0.205	0.409	2.33	---
Dibenzo(a,h)anthracene	0.207	0.413	4.95	9.90	0.194	0.387	0.205	0.409	0.493	---
Dibenzofuran	0.207	0.413	4.95	9.90	0.194	0.387	0.205	0.409	0.915	---
Fluoranthene	0.207	0.413	16.8	---	0.194	0.387	0.205	0.409	7.88	---
Fluorene	0.207	0.413	4.95	9.90	0.194	0.387	0.205	0.409	3.81	---
Indeno(1,2,3-c,d)pyrene	0.207	0.413	4.95	9.90	0.194	0.387	0.205	0.409	1.25	---
Naphthalene	0.207	0.413	4.95	9.90	0.194	0.387	0.205	0.409	41.0	---
Phenanthrene	0.207	0.413	4.95	9.90	0.194	0.387	0.205	0.409	15.7	---
Pyrene	0.593	---	29.4	---	0.194	0.387	0.536	---	11.9	---
<b>Total PAH</b>	4.11		163.35		3.49		4.24		121.69	
<b>Total CPAH</b>	1.45		66.15		1.36		1.65		15.71	
<b>Total CPAH as BaP</b>	0.48		22.17		0.45		0.69		3.78	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9267093007		9267093008		9267093009		9267093010		9267093011	
	BR-055		BR-056		BR-057		BR-058		BR-059	
	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
	4/7/2010		4/7/2010		4/7/2010		4/8/2010		4/8/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	0.723	---	0.197	0.394	7.20	---	1820	---	2450	---
Acenaphthene	0.19	0.379	0.197	0.394	0.498	---	10.8	21.6	26.2	---
Acenaphthylene	1.78	---	0.197	0.394	2.34	---	97.1	---	515	1030
Anthracene	1.21	---	0.197	0.394	7.63	---	95.5	---	149	---
Benzo(a)anthracene	2.64	---	0.197	0.394	5.59	---	71.8	---	96	---
Benzo(a)pyrene	2.59	---	0.197	0.394	5.31	---	73.5	---	104	---
Benzo(b)fluoranthene	1.69	---	0.197	0.394	1.95	---	35.1	---	49	---
Benzo(g,h,i)perylene	1.68	---	0.197	0.394	1.94	---	35.0	---	52.6	---
Benzo(k)fluoranthene	2.30	---	0.197	0.394	3.05	---	52.2	---	74.5	---
Chrysene	2.45	---	0.197	0.394	3.91	---	62.3	---	85.6	---
Dibenzo(a,h)anthracene	0.611	---	0.197	0.394	0.556	---	10.8	21.6	10.3	20.6
Dibenzofuran	0.19	0.379	0.197	0.394	1.49	---	41.7	---	58.4	---
Fluoranthene	6.14	---	0.197	0.394	13.7	---	193	---	515	1030
Fluorene	1.09	---	0.197	0.394	8.86	---	156	---	515	1030
Indeno(1,2,3-c,d)pyrene	1.56	---	0.197	0.394	1.66	---	28.4	---	43	---
Naphthalene	1.21	---	0.197	0.394	2.76	---	8560	---	9280	---
Phenanthrene	5.55	---	0.197	0.394	32.9	---	1140	---	1620	---
Pyrene	10.1	---	0.197	0.394	17.7	---	540	1080	515	1030
<b>Total PAH</b>	43.70		3.55		119.04		13023.20		16158.60	
<b>Total CPAH</b>	13.84		1.38		22.03		334.10		462.40	
<b>Total CPAH as BaP</b>	3.82		0.46		6.82		98.41		133.93	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9267093012		9267093013		9267333001		9267333002		9267333003	
	SWR-060		SWR-061		SWR-062		SWR-063		BR-064	
	Surface Soil		Subsurface Soil		Surface Soil		Subsurface Soil		Subsurface Soil	
	4/8/2010		4/8/2010		4/12/2010		4/12/2010		4/12/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	975	1950	2100	---	0.198	0.395	323	---	322	---
Acenaphthene	112	---	73.7	---	0.198	0.395	18.8	---	19.6	---
Acenaphthylene	975	1950	1025	2050	0.198	0.395	212	---	160	---
Anthracene	975	1950	1025	2050	0.198	0.395	120	---	109	---
Benzo(a)anthracene	975	1950	1025	2050	0.198	0.395	71.1	---	84.9	---
Benzo(a)pyrene	975	1950	1025	2050	0.198	0.395	68.4	---	85.3	---
Benzo(b)fluoranthene	110	---	134	---	0.198	0.395	58.2	---	70.8	---
Benzo(g,h,i)perylene	111	---	126	---	0.198	0.395	39.5	---	47.2	---
Benzo(k)fluoranthene	173	---	191	---	0.198	0.395	21.0	---	31.9	---
Chrysene	975	1950	1025	2050	0.198	0.395	59.6	---	70.1	---
Dibenzo(a,h)anthracene	42.2	---	47	---	0.198	0.395	9.33	---	9.89	---
Dibenzofuran	144	---	158	---	0.198	0.395	43.4	---	45.6	---
Fluoranthene	975	1950	1025	2050	0.198	0.395	174	---	149	---
Fluorene	975	1950	1025	2050	0.198	0.395	173	---	166	---
Indeno(1,2,3-c,d)pyrene	94.3	---	108	---	0.198	0.395	33.6	---	38.9	---
Naphthalene	5970	---	7710	---	1.78	---	411	---	498	---
Phenanthrene	975	1950	1025	2050	0.45	---	275	---	214	---
Pyrene	975	1950	1025	2050	0.198	0.395	158	---	135	---
<b>Total PAH</b>	16506.50		19872.70		5.40		2268.93		2257.19	
<b>Total CPAH</b>	3344.50		3555.00		1.39		321.23		391.79	
<b>Total CPAH as BaP</b>	1137.84		1201.64		0.46		94.29		115.04	

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Analytical results exceeding the SRG's are shown in Red

**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9267333004		9267333005		9267333006		9267333007		9267333008	
	BR-065		SWR-066		SWR-067		SWR-068		SWR-069	
	Subsurface Soil		Surface Soil		Subsurface Soil		Surface Soil		Subsurface Soil	
	4/12/2010		4/12/2010		4/12/2010		4/13/2010		4/13/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	494	---	762	---	366	---	2.38	---	33.7	---
Acenaphthene	9.05	18.1	26.6	---	25.4	---	1.01	2.02	0.99	1.97
Acenaphthylene	136	---	482	---	276	---	1.01	2.02	10.6	---
Anthracene	85.9	---	158	---	166	---	1.01	2.02	4.76	---
Benzo(a)anthracene	62.6	---	93.5	---	105	---	1.01	2.02	3.76	---
Benzo(a)pyrene	60.9	---	90.3	---	101	---	1.01	2.02	3.27	---
Benzo(b)fluoranthene	47.5	---	74.0	---	85.3	---	1.01	2.02	3.14	---
Benzo(g,h,i)perylene	36.9	---	51.6	---	57.6	---	1.01	2.02	2.09	---
Benzo(k)fluoranthene	31.8	---	38.0	---	42.5	---	1.01	2.02	0.99	1.97
Chrysene	52.7	---	78.7	---	93.4	---	1.01	2.02	3.43	---
Dibenzo(a,h)anthracene	9.05	18.1	10.2	20.4	10.0	19.9	1.01	2.02	0.99	1.97
Dibenzofuran	29.3	---	52.6	---	55.8	---	1.01	2.02	0.99	1.97
Fluoranthene	147	---	226	---	266	---	2.72	---	8.77	---
Fluorene	112	---	209	---	224	---	1.01	2.02	6.30	---
Indeno(1,2,3-c,d)pyrene	9.05	18.1	10.2	20.4	49.0	---	1.01	2.02	0.99	1.97
Naphthalene	1100	---	1110	---	1150	---	7.12	---	68.3	---
Phenanthrene	362	---	590	---	649	---	4.23	---	17.8	---
Pyrene	159	---	262	---	294	---	3.88	---	10.3	---
<b>Total PAH</b>	2944.75		4324.70		4016.00		33.46		181.17	
<b>Total CPAH</b>	273.60		394.90		486.20		7.07		16.57	
<b>Total CPAH as BaP</b>	82.24		118.73		135.45		2.33		5.06	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9267333009		9267333010		9267333011		9267333012		9267565001	
	BR-070		BR-071		BR-072		BR-073		BR-074	
	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
	4/13/2010		4/13/2010		4/13/2010		4/13/2010		4/14/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	1.42	---	0.20	0.399	50.8	---	217	---	215	---
Acenaphthene	0.199	0.397	0.20	0.399	3.06	---	10.0	20.0	4.78	9.56
Acenaphthylene	0.426	---	0.20	0.399	30.9	---	165	---	51.2	---
Anthracene	0.199	0.397	0.20	0.399	21.2	---	85.9	---	40.4	---
Benzo(a)anthracene	0.199	0.397	0.20	0.399	13.0	---	47.1	---	28.6	---
Benzo(a)pyrene	0.199	0.397	0.20	0.399	13.2	---	46.8	---	25.8	---
Benzo(b)fluoranthene	0.199	0.397	0.20	0.399	10.8	---	38.7	---	24.3	---
Benzo(g,h,i)perylene	0.199	0.397	0.20	0.399	8.19	---	25.3	---	14.0	---
Benzo(k)fluoranthene	0.199	0.397	0.20	0.399	5.12	---	21.3	---	11.4	---
Chrysene	0.199	0.397	0.20	0.399	11.8	---	41.4	---	26.3	---
Dibenzo(a,h)anthracene	0.199	0.397	0.20	0.399	1.01	2.01	10.0	20.0	4.78	9.56
Dibenzofuran	0.199	0.397	0.20	0.399	7.05	---	28.0	---	14.4	---
Fluoranthene	0.199	0.397	0.20	0.399	30.6	---	119	---	55.9	---
Fluorene	0.554	---	0.20	0.399	26.7	---	116	---	51.3	---
Indeno(1,2,3-c,d)pyrene	0.199	0.397	0.20	0.399	6.61	---	20.4	---	4.78	9.56
Naphthalene	4.60	---	0.734	---	144	---	979	---	441	---
Phenanthrene	1.19	---	0.20	0.399	76.1	---	307	---	154	---
Pyrene	0.672	---	0.20	0.399	39.1	---	141	---	84.3	---
<b>Total PAH</b>	11.25		4.13		499.24		2418.90		1252.24	
<b>Total CPAH</b>	1.39		1.40		61.54		225.70		125.96	
<b>Total CPAH as BaP</b>	0.46		0.46		17.31		67.67		36.49	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9267565002		9267830001		926730002		926730003		926730004	
	BR-075		BR-076		SWR-077		SWR-078		BR-079	
	Subsurface Soil		Subsurface Soil		Surface Soil		Subsurface Soil		Subsurface Soil	
	4/15/2010		4/19/2010		4/19/2010		4/19/2010		4/19/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	170	---	0.95	1.90	0.20	0.401	1.66	---	10.4	---
Acenaphthene	7.91	---	0.95	1.90	0.20	0.401	0.154	0.307	1.99	1.97
Acenaphthylene	41.0	---	0.95	1.90	0.20	0.401	0.154	0.307	3.16	---
Anthracene	52.0	---	0.95	1.90	0.20	0.401	0.154	0.307	2.44	---
Benzo(a)anthracene	35.1	---	2.40	---	0.20	0.401	0.154	0.307	1.99	1.97
Benzo(a)pyrene	38.1	---	0.95	1.90	0.20	0.401	0.154	0.307	1.99	1.97
Benzo(b)fluoranthene	32.3	---	0.95	1.90	0.20	0.401	0.154	0.307	1.99	1.97
Benzo(g,h,i)perylene	23.0	---	0.95	1.90	0.20	0.401	0.154	0.307	1.99	1.97
Benzo(k)fluoranthene	14.1	---	0.95	1.90	0.20	0.401	0.154	0.307	1.99	1.97
Chrysene	30.6	---	2.69	---	0.20	0.401	0.154	0.307	1.99	1.97
Dibenzo(a,h)anthracene	4.91	---	0.95	1.90	0.20	0.401	0.154	0.307	1.99	1.97
Dibenzofuran	17.8	---	0.95	1.90	0.20	0.401	0.154	0.307	1.99	1.97
Fluoranthene	86.3	---	3.74	---	0.20	0.401	0.564	---	4.23	---
Fluorene	67.8	---	0.95	1.90	0.20	0.401	0.154	0.307	3.74	---
Indeno(1,2,3-c,d)pyrene	18.8	---	0.95	1.90	0.20	0.401	0.154	0.307	1.99	1.97
Naphthalene	295	---	0.95	1.90	0.20	0.401	0.844	---	36.5	---
Phenanthrene	132	---	1.91	---	0.20	0.401	0.507	---	10.1	---
Pyrene	102	---	4.82	---	0.20	0.401	0.824	---	4.64	---
<b>Total PAH</b>	1168.72		27.91		3.60		6.40		95.11	
<b>Total CPAH</b>	173.91		9.84		1.40		1.08		13.93	
<b>Total CPAH as BaP</b>	51.80		2.34		0.46		0.36		4.60	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	926730005		9268070001		9268070002		9268070003		926807004	
	BR-080		SWR-081		BR-082		BR-083		BR-084	
	Subsurface Soil		Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
	4/19/2010		4/21/2010		4/21/2010		4/21/2010		4/21/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	8.89	---	216	---	311	---	5.25	10.5	0.19	0.379
Acenaphthene	0.209	0.417	50.0	100	52.0	104	0.557	---	0.19	0.379
Acenaphthylene	1.61	---	50.0	100	52.0	104	2.3	---	0.19	0.379
Anthracene	1.12	---	50.0	100	52.0	104	1.8	---	0.19	0.379
Benzo(a)anthracene	0.209	0.417	50.0	100	52.0	104	0.994	---	0.19	0.379
Benzo(a)pyrene	7.21	---	50.0	100	52.0	104	1.09	---	0.19	0.379
Benzo(b)fluoranthene	0.209	0.417	16.1	---	52.0	104	0.955	---	0.19	0.379
Benzo(g,h,i)perylene	0.209	0.417	14.9	---	52.0	104	7.22	---	0.19	0.379
Benzo(k)fluoranthene	0.454	---	18.7	---	52.0	104	6.3	---	0.19	0.379
Chrysene	0.209	0.417	50.0	100	52.0	104	0.971	---	0.19	0.379
Dibenzo(a,h)anthracene	0.209	0.417	4.57	---	52.0	104	0.21	0.419	0.19	0.379
Dibenzofuran	0.669	---	17.5	---	52.0	104	0.501	---	0.19	0.379
Fluoranthene	1.61	---	50.0	100	139	---	2.67	---	0.19	0.379
Fluorene	2.10	---	50.0	100	128	---	1.92	---	0.19	0.379
Indeno(1,2,3-c,d)pyrene	0.209	0.417	12.5	---	52.0	104	0.57	---	0.19	0.379
Naphthalene	9.54	---	865	---	1140	---	24.3	---	0.19	0.379
Phenanthrene	5.09	---	171	---	316	---	5.25	10.5	0.19	0.379
Pyrene	1.92	---	50.0	100	195	---	2.85	---	0.19	0.379
<b>Total PAH</b>	41.68		1786.27		2853.00		65.71		3.42	
<b>Total CPAH</b>	8.71		201.87		364.00		11.09		1.33	
<b>Total CPAH as BaP</b>	7.49		62.67		120.17		1.62		0.44	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9268070005		9268070006		9268262001		9268262002		9268262003	
	SWR-085		SWR-086		BR-087		BR-088		SWR-089	
	Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Surface Soil	
	4/21/2010		4/21/2010		4/26/2010		4/26/2010		4/27/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	0.184	0.367	0.184	0.367	122	---	1.44	---	0.191	0.381
Acenaphthene	0.184	0.367	0.184	0.367	10.5	21.0	0.191	0.382	0.191	0.381
Acenaphthylene	0.184	0.367	0.184	0.367	62.4	---	1.02	---	0.191	0.381
Anthracene	0.184	0.367	0.184	0.367	31.7	---	0.396	---	0.191	0.381
Benzo(a)anthracene	0.184	0.367	0.184	0.367	22.2	---	0.733	---	0.191	0.381
Benzo(a)pyrene	0.184	0.367	0.184	0.367	10.5	21.0	0.563	---	0.191	0.381
Benzo(b)fluoranthene	0.184	0.367	0.504	---	10.5	21.0	0.476	---	0.191	0.381
Benzo(g,h,i)perylene	0.184	0.367	0.426	---	10.5	21.0	0.447	---	0.191	0.381
Benzo(k)fluoranthene	0.184	0.367	0.184	0.367	10.5	21.0	0.588	---	0.191	0.381
Chrysene	0.184	0.367	0.464	---	10.5	21.0	0.691	---	0.191	0.381
Dibenzo(a,h)anthracene	0.184	0.367	0.184	0.367	10.5	21.0	0.191	0.382	0.191	0.381
Dibenzofuran	0.184	0.367	0.184	0.367	10.5	21.0	0.191	0.382	0.191	0.381
Fluoranthene	0.184	0.367	0.184	0.367	47.3	---	1.46	---	0.191	0.381
Fluorene	0.184	0.367	0.633	---	53.3	---	0.593	---	0.191	0.381
Indeno(1,2,3-c,d)pyrene	0.184	0.367	0.184	0.367	10.5	21.0	0.408	---	0.191	0.381
Naphthalene	0.184	0.367	0.184	0.367	221	---	3.55	---	0.191	0.381
Phenanthrene	0.184	0.367	0.184	0.367	116	---	1.92	---	0.191	0.381
Pyrene	0.184	0.367	0.903	---	56.3	---	1.91	---	0.191	0.381
<b>Total PAH</b>	3.31		5.32		826.70		16.77		3.44	
<b>Total CPAH</b>	1.29		1.89		85.20		3.65		1.34	
<b>Total CPAH as BaP</b>	0.43		0.46		25.44		0.92		0.44	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9268262004		9268262005		9268262006		9268262007		9268262008	
	SWR-090		SWR-091		SWR-092		BR-093		BR-094	
	Subsurface Soil		Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
	4/27/2010		4/27/2010		4/27/2010		4/27/2010		4/27/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	0.189	0.378	0.952	---	0.798	---	3.50	---	2.38	---
Acenaphthene	0.189	0.378	0.200	0.399	0.189	0.377	0.50	---	0.98	1.95
Acenaphthylene	0.189	0.378	0.686	---	0.189	0.377	2.39	---	3.14	---
Anthracene	0.189	0.378	0.407	---	0.189	0.377	1.92	---	0.98	1.95
Benzo(a)anthracene	0.189	0.378	0.200	0.399	0.189	0.377	1.36	---	2.66	---
Benzo(a)pyrene	0.189	0.378	0.200	0.399	0.189	0.377	1.38	---	2.94	---
Benzo(b)fluoranthene	0.189	0.378	0.200	0.399	0.189	0.377	0.765	---	0.98	1.95
Benzo(g,h,i)perylene	0.189	0.378	0.200	0.399	0.189	0.377	0.69	---	0.98	1.95
Benzo(k)fluoranthene	0.189	0.378	0.200	0.399	0.189	0.377	1.02	---	2.49	---
Chrysene	0.189	0.378	0.200	0.399	0.189	0.377	1.21	---	2.47	---
Dibenzo(a,h)anthracene	0.189	0.378	0.200	0.399	0.189	0.377	0.189	0.378	0.98	1.95
Dibenzofuran	0.189	0.378	0.200	0.399	0.189	0.377	0.584	---	0.98	1.95
Fluoranthene	0.189	0.378	0.854	---	0.189	0.377	3.23	---	4.3	---
Fluorene	0.189	0.378	0.534	---	0.189	0.377	2.73	---	0.98	1.95
Indeno(1,2,3-c,d)pyrene	0.189	0.378	0.200	0.399	0.189	0.377	0.619	---	0.98	1.95
Naphthalene	0.189	0.378	2.33	---	1.98	---	7.54	---	3.49	---
Phenanthrene	0.189	0.378	1.67	---	0.189	0.377	8.28	---	4.82	---
Pyrene	0.189	0.378	0.988	---	0.189	0.377	4.46	---	6.45	---
<b>Total PAH</b>	3.40		10.42		5.80		42.37		42.98	
<b>Total CPAH</b>	1.32		1.40		1.32		6.54		13.50	
<b>Total CPAH as BaP</b>	0.44		0.46		0.44		1.85		4.41	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9268451001		9268451002		9268451003		9268451004		9268451005	
	BR-095		BR-096		BR-097		SWR-098		SWR-099	
	Subsurface Soil		Subsurface Soil		Subsurface Soil		Surface Soil		Subsurface Soil	
	4/28/2010		4/29/2010		4/29/2010		4/29/2010		4/29/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	33.4	---	0.491	---	0.19	0.38	1.00	2.00	6.86	---
Acenaphthene	0.99	1.97	0.199	0.397	0.19	0.38	1.00	2.00	0.96	1.91
Acenaphthylene	16.0	---	0.199	0.397	0.19	0.38	1.00	2.00	0.96	1.91
Anthracene	9.9	---	0.752	---	0.19	0.38	1.00	2.00	0.96	1.91
Benzo(a)anthracene	5.93	---	0.658	---	0.19	0.38	1.00	2.00	0.96	1.91
Benzo(a)pyrene	5.88	---	0.656	---	0.19	0.38	1.00	2.00	0.96	1.91
Benzo(b)fluoranthene	3.09	---	0.199	0.397	0.19	0.38	1.00	2.00	0.96	1.91
Benzo(g,h,i)perylene	2.7	---	0.199	0.397	0.19	0.38	1.00	2.00	0.96	1.91
Benzo(k)fluoranthene	4.04	---	0.43	---	0.19	0.38	1.00	2.00	0.96	1.91
Chrysene	5.07	---	0.553	---	0.19	0.38	1.00	2.00	0.96	1.91
Dibenzo(a,h)anthracene	0.99	1.97	0.199	0.397	0.19	0.38	1.00	2.00	0.96	1.91
Dibenzofuran	3.2	---	0.199	0.397	0.19	0.38	1.00	2.00	0.96	1.91
Fluoranthene	13.9	---	1.41	---	0.19	0.38	1.00	2.00	0.96	1.91
Fluorene	12.8	---	0.446	---	0.19	0.38	2.4	---	0.96	1.91
Indeno(1,2,3-c,d)pyrene	2.53	---	0.199	0.397	0.19	0.38	1.00	2.00	0.96	1.91
Naphthalene	108	---	2.30	---	3.38	---	1.00	2.00	237	---
Phenanthrene	33.4	---	2.43	---	0.19	0.38	1.00	2.00	0.96	1.91
Pyrene	16.3	---	1.98	---	0.19	0.38	3.82	---	2.12	---
<b>Total PAH</b>	278.03		13.50		6.61		22.22		260.38	
<b>Total CPAH</b>	27.53		2.89		1.33		7.00		6.72	
<b>Total CPAH as BaP</b>	8.07		0.97		0.44		2.31		2.22	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9268451007		9269219002		9269219003		9269219004		9269219005	
	BR-100		BR-101		BR-102		BR-103		SWR-104	
	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Surface Soil	
	4/29/2010		5/5/2010		5/10/2010		5/10/2010		5/10/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	0.198	0.395	0.192	0.384	0.188	0.375	0.185	0.370	0.945	1.890
Acenaphthene	0.198	0.395	0.192	0.384	0.188	0.375	0.185	0.370	0.945	1.890
Acenaphthylene	0.198	0.395	0.192	0.384	0.188	0.375	0.185	0.370	0.945	1.890
Anthracene	0.198	0.395	0.192	0.384	0.188	0.375	0.185	0.370	0.945	1.890
Benzo(a)anthracene	0.198	0.395	0.737	---	0.188	0.375	0.185	0.370	4.46	---
Benzo(a)pyrene	0.198	0.395	0.874	---	0.188	0.375	0.185	0.370	6.24	---
Benzo(b)fluoranthene	0.198	0.395	0.608	---	0.188	0.375	0.185	0.370	3.32	---
Benzo(g,h,i)perylene	0.198	0.395	0.825	---	0.188	0.375	0.185	0.370	5.09	---
Benzo(k)fluoranthene	0.198	0.395	0.820	---	0.188	0.375	0.185	0.370	5.07	---
Chrysene	0.198	0.395	0.746	---	0.188	0.375	0.185	0.370	4.21	---
Dibenzo(a,h)anthracene	0.198	0.395	0.192	0.384	0.188	0.375	0.185	0.370	1.99	---
Dibenzofuran	0.198	0.395	0.192	0.384	0.188	0.375	0.185	0.370	0.945	1.890
Fluoranthene	0.198	0.395	1.23	---	0.188	0.375	0.185	0.370	3.1	---
Fluorene	0.198	0.395	0.192	0.384	0.188	0.375	0.185	0.370	0.945	1.890
Indeno(1,2,3-c,d)pyrene	0.198	0.395	0.730	---	0.188	0.375	0.185	0.370	4.42	---
Naphthalene	0.825	---	0.192	0.384	0.188	0.375	0.185	0.370	0.945	1.890
Phenanthrene	0.782	---	0.192	0.384	0.188	0.375	0.185	0.370	0.945	1.890
Pyrene	0.198	0.395	1.52	---	0.188	0.375	0.185	0.370	9.27	---
<b>Total PAH</b>	4.78		9.82		3.38		3.33		54.73	
<b>Total CPAH</b>	1.39		4.71		1.32		1.30		29.71	
<b>Total CPAH as BaP</b>	0.46		1.28		0.43		0.43		9.50	

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Analytical results exceeding the SRG's are shown in Red

**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9269219006		9269219007		9269219008		9269430001		9269430002	
	SWR-105		SWR-106		BR-107		BR-108		BR-109	
	Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
	5/10/2010		5/11/2010		5/11/2010		5/12/2010		5/12/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	3.66	7.32	0.188	0.375	114.0	---	691	---	0.199	0.397
Acenaphthene	3.66	7.32	0.188	0.375	20.0	40.0	24.5	---	0.199	0.397
Acenaphthylene	19.9	---	0.188	0.375	20.0	40.0	173	---	0.199	0.397
Anthracene	8.8	---	0.188	0.375	20.0	40.0	130	---	0.199	0.397
Benzo(a)anthracene	16.7	---	0.188	0.375	20.0	40.0	99.1	---	0.563	---
Benzo(a)pyrene	12.4	---	0.516	---	20.0	40.0	97.5	---	0.199	0.397
Benzo(b)fluoranthene	18.3	---	0.188	0.375	20.0	40.0	72.7	---	0.199	0.397
Benzo(g,h,i)perylene	24.0	---	0.188	0.375	20.0	40.0	69.0	---	0.199	0.397
Benzo(k)fluoranthene	27.9	---	0.188	0.375	20.0	40.0	53.1	---	0.199	0.397
Chrysene	18.7	---	0.188	0.375	20.0	40.0	82.6	---	0.523	---
Dibenzo(a,h)anthracene	10.0	---	0.188	0.375	20.0	40.0	24.4	---	0.199	0.397
Dibenzofuran	3.66	7.32	0.188	0.375	20.0	40.0	48.8	---	0.199	0.397
Fluoranthene	29.7	---	0.188	0.375	41.4	---	213	---	0.199	0.397
Fluorene	3.66	7.32	0.188	0.375	20.0	40.0	169	---	0.199	0.397
Indeno(1,2,3-c,d)pyrene	23.1	---	0.188	0.375	20.0	40.0	45.6	---	0.199	0.397
Naphthalene	7.46	---	0.188	0.375	158.0	---	993	---	1.07	---
Phenanthrene	27.2	---	0.188	0.375	77.2	---	313	---	0.566	---
Pyrene	38.7	---	0.188	0.375	53.2	---	204	---	0.713	---
<b>Total PAH</b>	297.46		3.71		703.80		3503.30		6.02	
<b>Total CPAH</b>	127.10		1.64		140.00		475.00		2.08	
<b>Total CPAH as BaP</b>	28.51		0.76		46.22		144.25		0.50	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9269430003		9269430004		9269430005		9269430006		9269430007	
	SWR-110		SWR-111		HA-112		HA-113		BR-114	
	Subsurface Soil		Surface Soil		Surface Soil		Surface Soil		Subsurface Soil	
	5/12/2010		5/12/2010		5/12/2010		5/12/2010		5/13/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	0.194	0.387	0.200	0.400	1000	---	1.47	---	0.195	0.390
Acenaphthene	0.194	0.387	0.200	0.400	63.3	---	0.175	0.349	0.195	0.390
Acenaphthylene	0.194	0.387	0.200	0.400	488	---	2.91	---	0.195	0.390
Anthracene	0.194	0.387	0.200	0.400	399	---	1.31	---	0.195	0.390
Benzo(a)anthracene	0.194	0.387	0.663	---	496	---	5.84	---	0.765	---
Benzo(a)pyrene	0.194	0.387	0.687	---	451	---	5.83	---	0.481	---
Benzo(b)fluoranthene	0.194	0.387	0.497	---	284	---	4.46	---	0.195	0.390
Benzo(g,h,i)perylene	0.194	0.387	0.485	---	240	---	4.50	---	0.195	0.390
Benzo(k)fluoranthene	0.194	0.387	0.573	---	351	---	6.00	---	0.473	---
Chrysene	0.194	0.387	0.649	---	440	---	6.34	---	0.859	---
Dibenzo(a,h)anthracene	0.194	0.387	0.200	0.400	67.1	---	1.14	---	0.195	0.390
Dibenzofuran	0.194	0.387	0.200	0.400	126	---	0.175	0.349	0.195	0.390
Fluoranthene	0.194	0.387	1.70	---	1240	---	11.3	---	0.564	---
Fluorene	0.194	0.387	0.200	0.400	552	---	0.652	---	0.195	0.390
Indeno(1,2,3-c,d)pyrene	0.194	0.387	0.406	---	224	---	3.93	---	0.195	0.390
Naphthalene	0.194	0.387	1.60	---	1490	---	6.28	---	0.195	0.390
Phenanthrene	0.194	0.387	0.862	---	1770	---	6.87	---	0.195	0.390
Pyrene	0.194	0.387	2.40	---	1380	---	15.7	---	0.976	---
<b>Total PAH</b>	3.49		11.92		11061.40		84.88		6.46	
<b>Total CPAH</b>	1.36		3.68		2313.10		33.54		3.16	
<b>Total CPAH as BaP</b>	0.45		1.05		622.45		8.46		0.80	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9269430008		9269430009		9269430010		9269995001		9269995002	
	SWR-115		SWR-116		BR-117		BR-118		BR-119	
	Subsurface Soil		Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
	5/13/2010		5/13/2010		5/13/2010		5/14/2010		5/14/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	35.1	---	21.1	---	4.19	---	14.7	---	112	---
Acenaphthene	1.40	---	9.25	18.5	5.25	---	0.98	1.96	10.4	20.8
Acenaphthylene	10.5	---	87.3	---	3.24	---	6.63	---	10.4	20.8
Anthracene	7.08	---	49.0	---	3.09	---	4.00	---	10.4	20.8
Benzo(a)anthracene	6.38	---	139	---	6.49	---	9.16	---	10.4	20.8
Benzo(a)pyrene	6.00	---	137	---	9.13	---	8.74	---	10.4	20.8
Benzo(b)fluoranthene	3.80	---	86.3	---	5.11	---	6.56	---	10.4	20.8
Benzo(g,h,i)perylene	3.48	---	78.5	---	5.33	---	6.20	---	10.4	20.8
Benzo(k)fluoranthene	4.27	---	108	---	7.02	---	7.85	---	10.4	20.8
Chrysene	5.70	---	126	---	6.23	---	8.67	---	10.4	20.8
Dibenzo(a,h)anthracene	0.784	---	20.5	---	1.29	---	0.98	1.96	10.4	20.8
Dibenzofuran	3.00	---	9.25	18.5	0.728	---	0.98	1.96	10.4	20.8
Fluoranthene	18.5	---	274	---	13.9	---	19.3	---	32.5	---
Fluorene	11.3	---	36.6	---	3.32	---	4.75	---	28.9	---
Indeno(1,2,3-c,d)pyrene	3.02	---	70.7	---	4.68	---	5.44	---	10.4	20.8
Naphthalene	107	---	34.3	---	11.4	---	24.8	---	259	---
Phenanthrene	31.9	---	182	---	10.1	---	15.9	---	71.0	---
Pyrene	19.8	---	358	---	15.4	---	26.1	---	33.2	---
<b>Total PAH</b>	279.01		1826.80		115.90		171.74		661.40	
<b>Total CPAH</b>	29.95		687.50		39.95		47.40		72.80	
<b>Total CPAH as BaP</b>	8.15		188.31		12.12		11.92		24.03	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9269995003		9269995004		9269995005		9269995006		9269995007	
	SWR-120		SWR-121		BR-122		BR-123		SWR-124	
	Subsurface Soil		Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
	5/14/2010		5/14/2010		5/20/2010		5/20/2010		5/20/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	119	---	9.15	18.3	32.9	---	100	---	294	---
Acenaphthene	9.75	19.5	9.15	18.3	0.213	0.426	1.98	3.96	10.25	20.5
Acenaphthylene	44.6	---	25.1	---	0.69	---	7.20	---	139	---
Anthracene	33.9	---	9.15	18.3	3.11	---	6.35	---	57.1	---
Benzo(a)anthracene	29.4	---	96.7	---	1.40	---	1.98	3.96	40.1	---
Benzo(a)pyrene	29.1	---	100	---	1.17	---	1.98	3.96	43.3	---
Benzo(b)fluoranthene	9.75	19.5	83.0	---	0.567	---	1.98	3.96	22.1	---
Benzo(g,h,i)perylene	9.75	19.5	82.2	---	0.547	---	1.98	3.96	24.3	---
Benzo(k)fluoranthene	23.5	---	93.1	---	0.878	---	1.98	3.96	31.2	---
Chrysene	26.7	---	94.1	---	1.16	---	1.98	3.96	36.2	---
Dibenzo(a,h)anthracene	9.75	19.5	27.1	---	0.213	0.426	1.98	3.96	10.25	20.5
Dibenzofuran	9.75	19.5	9.15	18.3	1.43	---	1.98	3.96	22.3	---
Fluoranthene	97.8	---	172	---	4.15	---	9.42	---	124	---
Fluorene	53.6	---	9.15	18.3	4.56	---	10.4	---	88.4	---
Indeno(1,2,3-c,d)pyrene	9.75	19.5	72.0	---	0.508	---	1.98	3.96	20.9	---
Naphthalene	195	---	9.15	18.3	42.0	---	271	---	1310	---
Phenanthrene	176	---	28.3	---	11.3	---	22.4	---	246	---
Pyrene	93	---	236	---	4.52	---	10.6	---	128	---
<b>Total PAH</b>	980.10		1164.50		111.32		457.17		2647.40	
<b>Total CPAH</b>	137.95		566.00		5.90		13.86		204.05	
<b>Total CPAH as BaP</b>	44.00		153.30		1.64		4.58		62.21	

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Analytical results exceeding the SRG's are shown in Red

**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9269995008		9270204002		9270204003		9270204004		9270204005	
	SWR-125		BR-126		BR-127		SWR-128		SWR-129	
	Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		Surface Soil	
	5/20/2010		5/21/2010		5/21/2010		5/21/2010		5/21/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	10.15	20.3	1100	---	5.18	---	2.80	---	92.5	185
Acenaphthene	10.15	20.3	94.5	189	1.04	2.07	0.214	0.428	92.5	185
Acenaphthylene	10.15	20.3	647	---	1.04	2.07	0.214	0.428	92.5	185
Anthracene	10.15	20.3	203	---	1.04	2.07	0.214	0.428	92.5	185
Benzo(a)anthracene	33.2	---	94.5	189	1.04	2.07	0.214	0.428	92.5	185
Benzo(a)pyrene	52.3	---	94.5	189	1.04	2.07	0.214	0.428	92.5	185
Benzo(b)fluoranthene	31.4	---	94.5	189	1.04	2.07	0.214	0.428	92.5	185
Benzo(g,h,i)perylene	35.8	---	94.5	189	1.04	2.07	0.214	0.428	92.5	185
Benzo(k)fluoranthene	40.6	---	94.5	189	1.04	2.07	0.214	0.428	92.5	185
Chrysene	32.1	---	94.5	189	1.04	2.07	0.214	0.428	92.5	185
Dibenzo(a,h)anthracene	10.15	20.3	94.5	189	1.04	2.07	0.214	0.428	92.5	185
Dibenzofuran	10.15	20.3	94.5	189	1.04	2.07	0.214	0.428	92.5	185
Fluoranthene	53.1	---	313	---	1.04	2.07	1.25	---	92.5	185
Fluorene	10.15	20.3	343	---	1.04	2.07	0.214	0.428	92.5	185
Indeno(1,2,3-c,d)pyrene	30.8	---	94.5	189	1.04	2.07	0.214	0.428	92.5	185
Naphthalene	10.15	20.3	4060	---	6.08	---	6.13	---	92.5	185
Phenanthrene	10.15	20.3	751	---	2.46	---	1.77	---	92.5	185
Pyrene	77.8	---	355	---	3.91	---	0.497	---	92.5	185
Total PAH	478.45		8717.00		32.19		15.23		1665.00	
Total CPAH	230.55		661.50		7.28		1.50		647.50	
Total CPAH as BaP	72.43		218.39		2.40		0.49		213.77	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9270204006		9270204007		9270204008		9270204009		9270445001	
	BR-130		BR-131		SWR-132		SWR-133		BR-134	
	Subsurface Soil		Subsurface Soil		Subsurface Soil		Surface Soil		Subsurface Soil	
	5/25/2010		5/25/2010		5/25/2010		5/25/2010		5/27/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	51.4	---	64.3	---	2.93	---	22.7	---	953	---
Acenaphthene	20.4	40.8	19.5	39.0	0.211	0.422	9.65	19.3	53.5	---
Acenaphthylene	20.4	40.8	19.5	39.0	0.211	0.422	40.1	---	547	---
Anthracene	20.4	40.8	19.5	39.0	0.211	0.422	60.7	---	311	---
Benzo(a)anthracene	20.4	40.8	19.5	39.0	0.211	0.422	42.3	---	153	---
Benzo(a)pyrene	20.4	40.8	19.5	39.0	0.211	0.422	47.7	---	136	---
Benzo(b)fluoranthene	20.4	40.8	19.5	39.0	0.211	0.422	27.6	---	61.2	---
Benzo(g,h,i)perylene	20.4	40.8	19.5	39.0	0.211	0.422	29.6	---	59.0	---
Benzo(k)fluoranthene	20.4	40.8	19.5	39.0	0.211	0.422	34.4	---	99.1	---
Chrysene	20.4	40.8	19.5	39.0	0.211	0.422	38.6	---	130	---
Dibenzo(a,h)anthracene	20.4	40.8	19.5	39.0	0.211	0.422	9.65	19.3	19.7	---
Dibenzofuran	20.4	40.8	19.5	39.0	0.211	0.422	9.65	19.3	94.4	---
Fluoranthene	20.4	40.8	19.5	39.0	0.211	0.422	148	---	457	---
Fluorene	20.4	40.8	19.5	39.0	0.211	0.422	45.8	---	428	---
Indeno(1,2,3-c,d)pyrene	20.4	40.8	19.5	39.0	0.211	0.422	24.5	---	48.5	---
Naphthalene	20.4	40.8	95.6	---	0.211	0.422	48.4	---	1650	---
Phenanthrene	20.4	40.8	19.5	39.0	0.705	---	224	---	1200	---
Pyrene	20.4	40.8	19.5	39.0	0.211	0.422	169	---	631	---
<b>Total PAH</b>	398.20		471.90		7.01		1032.35		7031.40	
<b>Total CPAH</b>	142.80		136.50		1.48		224.75		647.50	
<b>Total CPAH as BaP</b>	47.14		45.06		0.49		67.17		183.09	

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**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9270445002		9270445003		9270445004		9270445005		9270445006	
	SWR-135		SWR-136		SWR-137		SWR-138		SWR-139	
	Subsurface Soil		Subsurface Soil		Surface Soil		Surface Soil		Surface Soil	
	5/27/2010		5/27/2010		5/27/2010		5/27/2010		5/27/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	170	---	0.205	0.410	1.93	3.86	1.85	3.70	0.196	0.392
Acenaphthene	71.3	---	0.205	0.410	1.93	3.86	1.85	3.70	0.196	0.392
Acenaphthylene	63.7	---	0.205	0.410	7.25	---	7.52	---	0.196	0.392
Anthracene	72.6	---	0.205	0.410	17.2	---	10.1	---	0.196	0.392
Benzo(a)anthracene	31.6	---	0.205	0.410	22.6	---	39.1	---	0.196	0.392
Benzo(a)pyrene	28.1	---	0.205	0.410	19.8	---	37.5	---	0.196	0.392
Benzo(b)fluoranthene	12.8	---	0.205	0.410	9.86	---	23.3	---	0.196	0.392
Benzo(g,h,i)perylene	10.8	---	0.205	0.410	7.72	---	22.2	---	0.196	0.392
Benzo(k)fluoranthene	17.9	---	0.205	0.410	15.4	---	29.1	---	0.196	0.392
Chrysene	25.6	---	0.205	0.410	17.9	---	31.9	---	0.196	0.392
Dibenzo(a,h)anthracene	2.05	4.01	0.205	0.410	1.93	3.86	5.90	---	0.196	0.392
Dibenzofuran	19.9	---	0.205	0.410	1.93	3.86	1.85	3.70	0.196	0.392
Fluoranthene	92.9	---	0.578	---	45.3	---	90.8	---	0.196	0.392
Fluorene	91.6	---	0.205	0.410	7.97	---	1.85	3.70	0.196	0.392
Indeno(1,2,3-c,d)pyrene	9.33	---	0.205	0.410	7.18	---	17.6	---	0.196	0.392
Naphthalene	257	---	1.04	---	1.93	3.86	1.85	3.70	0.196	0.392
Phenanthrene	240	---	0.841	---	39.5	---	21.1	---	0.196	0.392
Pyrene	122	---	0.205	0.410	69.5	---	128	---	0.196	0.392
Total PAH	1339.18		5.53		296.83		473.37		3.53	
Total CPAH	127.38		1.44		94.67		184.40		1.37	
Total CPAH as BaP	35.73		0.47		25.87		51.72		0.45	

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis Result column.

A value in the Detection Limit column indicates the parameter was less than the value and 1/2 the detection is reported in the Analysis Result column.

Analytical results exceeding the SRG's are shown in Red

**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9270445007		9270445008		9270445009		9270445010		9270445011	
	SWR-140		SWR-141		SWR-142		SWR-143		SWR-144	
	Subsurface Soil		Surface Soil		Surface Soil		Surface Soil		Surface Soil	
	5/27/2010		5/27/2010		5/27/2010		5/27/2010		5/27/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	0.230	0.459	0.186	0.371	1.87	3.74	1.87	3.74	1.90	3.79
Acenaphthene	0.230	0.459	0.186	0.371	1.87	3.74	1.87	3.74	1.90	3.79
Acenaphthylene	0.230	0.459	0.186	0.371	1.87	3.74	1.87	3.74	1.90	3.79
Anthracene	0.230	0.459	0.186	0.371	1.87	3.74	1.87	3.74	1.90	3.79
Benzo(a)anthracene	0.230	0.459	0.186	0.371	4.30	---	1.87	3.74	1.90	3.79
Benzo(a)pyrene	0.230	0.459	0.394	---	5.51	---	1.87	3.74	1.90	3.79
Benzo(b)fluoranthene	0.230	0.459	0.186	0.371	1.87	3.74	1.87	3.74	1.90	3.79
Benzo(g,h,i)perylene	0.230	0.459	0.186	0.371	1.87	3.74	1.87	3.74	1.90	3.79
Benzo(k)fluoranthene	0.230	0.459	0.186	0.371	4.31	---	1.87	3.74	1.90	3.79
Chrysene	0.230	0.459	0.186	0.371	4.38	---	1.87	3.74	1.90	3.79
Dibenzo(a,h)anthracene	0.230	0.459	0.186	0.371	1.87	3.74	1.87	3.74	1.90	3.79
Dibenzofuran	0.230	0.459	0.186	0.371	1.87	3.74	1.87	3.74	1.90	3.79
Fluoranthene	0.230	0.459	0.186	0.371	7.98	---	1.87	3.74	1.90	3.79
Fluorene	0.230	0.459	0.186	0.371	1.87	3.74	1.87	3.74	1.90	3.79
Indeno(1,2,3-c,d)pyrene	0.230	0.459	0.186	0.371	1.87	3.74	1.87	3.74	1.90	3.79
Naphthalene	0.230	0.459	0.186	0.371	1.87	3.74	1.87	3.74	1.90	3.79
Phenanthrene	0.230	0.459	0.186	0.371	6.19	---	1.87	3.74	1.90	3.79
Pyrene	0.230	0.459	0.674	---	12.3	---	1.87	3.74	1.90	3.79
<b>Total PAH</b>	4.14		4.04		65.54		33.66		34.20	
<b>Total CPAH</b>	1.61		1.51		24.11		13.09		13.30	
<b>Total CPAH as BaP</b>	0.53		0.64		8.23		4.32		4.39	

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis Result column.

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Analytical results exceeding the SRG's are shown in Red

**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9270445012		9270445013		9271028003		921028004		921028005	
	BR-145		BR-146		SWR-147		SWR-148		SWR-149	
	Subsurface Soil		Subsurface Soil		Surface Soil		Surface Soil		Surface Soil	
	5/27/2010		5/27/2010		6/7/2010		6/7/2010		6/7/2010	
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Acenaphthene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Acenaphthylene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Anthracene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Benzo(a)anthracene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Benzo(a)pyrene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Benzo(b)fluoranthene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Benzo(g,h,i)perylene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Benzo(k)fluoranthene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Chrysene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Dibenzo(a,h)anthracene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Dibenzofuran	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Fluoranthene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	23.7	---
Fluorene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Indeno(1,2,3-c,d)pyrene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Naphthalene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Phenanthrene	2.06	4.12	0.209	0.417	2.00	4.00	1.90	3.79	9.85	19.7
Pyrene	2.06	4.12	0.209	0.417	2.00	4.00	4.67	---	51.4	---
<b>Total PAH</b>	37.08		3.76		36.00		36.97		232.70	
<b>Total CPAH</b>	14.42		1.46		14.00		13.30		68.95	
<b>Total CPAH as BaP</b>	4.76		0.48		4.62		4.39		22.76	

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis Result column.

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Analytical results exceeding the SRG's are shown in Red

**HICKORY MGP Site  
SVOC Analytical Results Summary**

Sample Id Sample Description Type Of Sample Collected Date	9271028006		9271028007		9271028008					
	SWR-150		BR-151		BR-152					
	Surface Soil		Subsurface Soil		Subsurface Soil		Soil		Soil	
	6/7/2010		6/7/2010		6/7/2010					
	Analysis Result (mg/kg)	Detection Limit (mg/kg)								
2-Methylnaphthalene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Acenaphthene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Acenaphthylene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Anthracene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Benzo(a)anthracene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Benzo(a)pyrene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Benzo(b)fluoranthene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Benzo(g,h,i)perylene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Benzo(k)fluoranthene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Chrysene	9.45	18.9	1.94	---	1.92	3.84		---		---
Dibenzo(a,h)anthracene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Dibenzofuran	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Fluoranthene	25.6	---	2.86	---	1.92	3.84		---		---
Fluorene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Indeno(1,2,3-c,d)pyrene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Naphthalene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Phenanthrene	9.45	18.9	0.960	1.92	1.92	3.84		---		---
Pyrene	42.9	---	5.45	---	1.92	3.84		---		---
<b>Total PAH</b>	219.70		24.65		34.56		0.00		0.00	
<b>Total CPAH</b>	66.15		7.70		13.44		0.00		0.00	
<b>Total CPAH as BaP</b>	21.84		2.22		4.44		#VALUE!		#VALUE!	

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis Result column.

A value in the Detection Limit column indicates the parameter was less than the value and 1/2 the detection is reported in the Analysis Result column.

Analytical results exceeding the SRG's are shown in Red

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9265989001		9265989002		9265989003		9265989004	
Sample Description	SWR-001		BR-002		BR-003		BR-004	
Type of Sample	Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	3/22/2010		3/22/2010		3/22/2010		3/22/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0025	0.0049	0.0023	0.0045	0.0021	0.0042	0.0022	0.0043
Ethylbenzene	0.0025	0.0049	0.0023	0.0045	0.0021	0.0042	0.0022	0.0043
Xylene	0.0049	0.0098	0.0023	0.0045	0.0042	0.0083	0.0043	0.0086
m-p-xylene	0.0049	0.0098	0.0045	0.0089	0.0042	0.0083	0.0043	0.0086
o-xylene	0.0025	0.0049	0.0	0.0089	0.0021	0.0042	0.0022	0.0043
Toluene	0.0025	0.0049	0.0023	0.0045	0.0021	0.0042	0.0022	0.0043
Total BTEX	0.0149		0.0159		0.0126		0.0131	
Naphthalene	0.0025	0.0049	0.0400	---	0.0649	---	0.0022	0.0043
Acetone	0.049	0.0979	0.0045	0.0890	0.0416	0.0832	0.0429	0.0858
n-Butylbenzene	0.0025	0.0049	0.0023	0.0045	0.0021	0.0042	0.0022	0.0043
sec-butylbenzene	0.0025	0.0049	0.0023	0.0045	0.0021	0.0042	0.0022	0.0043
Isopropylbenzene	0.0025	0.0049	0.0023	0.0045	0.0021	0.0042	0.0022	0.0043
p-Isopropyltoluene	0.0025	0.0049	0.0023	0.0045	0.0021	0.0042	0.0022	0.0043
methylene chloride	0.0215	---	0.0089	0.0178	0.0083	0.0166	0.0086	0.0172
n-Propylbenzene	0.0025	0.0049	0.0023	0.0045	0.0021	0.0042	0.0022	0.0043
Strene	0.0025	0.0049	0.0023	0.0045	0.0021	0.0042	0.0022	0.0043
1,2,4-trimethylbenzene	0.0025	0.0049	0.0023	0.0045	0.0021	0.0042	0.0022	0.0043
1,3,5 trimethylbenzene	0.0025	0.0049	0.0023	0.0045	0.0021	0.0042	0.0022	0.0043

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9265989005		9265989006		9265989007		9265989008	
Sample Description	BR-005		BR-006		BR-007		BR-008	
Type of Sample	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	3/23/2010		3/23/2010		3/23/2010		3/23/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
Ethylbenzene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
Xylene	0.0041	0.0082	0.0	0.0096	0.006	0.012	0.0052	0.0102
m-p-xylene	0.0041	0.0082	0.0	0.0096	0.006	0.012	0.0052	0.0102
o-xylene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
Toluene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
Total BTEX	0.0125		0.0144		0.018		0.0156	
Naphthalene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
Acetone	0.041	0.0810	0.0476	0.0950	0.060	0.120	0.051	0.102
n-Butylbenzene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
sec-butylbenzene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
Isopropylbenzene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
p-Isopropyltoluene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
methylene chloride	0.0082	0.0163	0.0096	0.0191	0.012	0.0239	0.0102	0.0204
n-Propylbenzene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
Styrene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
1,2,4-trimethylbenzene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051
1,3,5 trimethylbenzene	0.0021	0.0041	0.0024	0.0048	0.003	0.006	0.0026	0.0051

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9265989009		9265989010		9265989011		9265989012	
Sample Description	BR-009		BR-010		BR-011		BR-012	
Type of Sample	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	3/23/2010		3/23/2010		3/23/2010		3/23/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048
Ethylbenzene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048
Xylene	0.0045	0.0089	0.0056	0.0111	0.0058	0.0097	0.0048	0.0095
m-p-xylene	0.0045	0.0089	0.0056	0.0111	0.0058	0.0097	0.0048	0.0095
o-xylene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048
Toluene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048
Total BTEX	0.0137		0.0168		0.0154		0.0144	
Naphthalene	0.0023	0.0045		0.0055	0.0024	0.0048	0.0024	0.0048
Acetone	0.0448	0.0895	0.056	0.111	0.0485	0.0969	0.4760	0.9520
n-Butylbenzene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048
sec-butylbenzene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048
Isopropylbenzene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048
p-Isopropyltoluene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048
methylene chloride	0.0090	0.0179	0.0115	0.0221	0.0097	0.0194	0.0100	0.0190
n-Propylbenzene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048
Styrene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048
1,2,4-trimethylbenzene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048
1,3,5 trimethylbenzene	0.0023	0.0045	0.0028	0.0055	0.0024	0.0048	0.0024	0.0048

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9265989013		9265989014		9265989015		9265989016	
Sample Description	SWR-013		SWR-014		SWR-015		SWR-016	
Type of Sample	Surface Soil		Surface Soil		Surface Soil		Surface Soil	
Collection Date	3/23/2010		3/23/2010		3/23/2010		3/23/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046
Ethylbenzene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046
Xylene	0.0046	0.0092	0.0466	0.0093	0.0051	0.0102	0.0046	0.0093
m-p-xylene	0.0046	0.0092	0.0466	0.0093	0.0051	0.0102	0.0046	0.0093
o-xylene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046
Toluene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046
Total BTEX	0.0138		0.0562		0.0155		0.0138	
Naphthalene	0.0023	0.0046	0.0024	0.0047			0.0023	0.0046
Acetone	0.0461	0.0922	0.0466	0.0932	0.051	0.102	0.0470	0.0930
n-Butylbenzene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046
sec-butylbenzene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046
Isopropylbenzene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046
p-Isopropyltoluene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046
methylene chloride	0.0092	0.0184	0.0093	0.0186	0.0102	0.0203	0.0093	0.0186
n-Propylbenzene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046
Styrene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046
1,2,4-trimethylbenzene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046
1,3,5 trimethylbenzene	0.0023	0.0046	0.0024	0.0047	0.0026	0.0051	0.0023	0.0046

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9265989017		9265989018		9266437001		9266437002	
Sample Description	SWR-017		SWR-018		BR-019		BR-020	
Type of Sample	Surface Soil		Surface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	3/23/2010		3/23/2010		3/30/2010		3/30/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
Ethylbenzene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
Xylene	0.0045	0.009	0.0058	0.0116	0.0047	0.0093	0.0044	0.0088
m-p-xylene	0.0045	0.009	0.0058	0.0116	0.0047	0.0093	0.0044	0.0088
o-xylene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
Toluene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
Total BTEX	0.0137		0.0174		0.0143		0.0132	
Naphthalene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
Acetone	0.106	---	0.0580	0.1160	0.466	0.931	0.0438	0.0876
n-Butylbenzene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
sec-butylbenzene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
Isopropylbenzene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
p-Isopropyltoluene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
methylene chloride	0.009	0.018	0.0116	0.0231	0.0093	0.0186	0.0088	0.0175
n-Propylbenzene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
Styrene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
1,2,4-trimethylbenzene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044
1,3,5 trimethylbenzene	0.0023	0.0045	0.0029	0.0058	0.0024	0.0047	0.0022	0.0044

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9266437003		9266437004		9266437005		9266437006	
Sample Description	SWR-021		SWR-022		SWR-023		SWR-024	
Type of Sample	Surface Soil		Surface Soil		Surface Soil		Surface Soil	
Collection Date	3/30/2010		3/30/2010		3/30/2010		3/30/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044
Ethylbenzene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044
Xylene	0.0038	0.0075	0.0039	0.0077	0.0045	0.0089	0.044	0.088
m-p-xylene	0.0038	0.0075	0.0039	0.0077	0.0045	0.0089	0.044	0.088
o-xylene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044
Toluene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044
Total BTEX	0.0114		0.0115		0.0133		0.0528	
Naphthalene	0.0019	0.0038	0.0019	0.0038			0.0022	0.0044
Acetone	0.038	0.075	0.0383	0.0765	0.0445	0.0889	0.044	0.0881
n-Butylbenzene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044
sec-butylbenzene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044
Isopropylbenzene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044
p-Isopropyltoluene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044
methylene chloride	0.0075	0.015	0.0077	0.0153	0.0089	0.0178	0.0088	0.0176
n-Propylbenzene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044
Styrene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044
1,2,4-trimethylbenzene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044
1,3,5 trimethylbenzene	0.0019	0.0038	0.0019	0.0038	0.0022	0.0044	0.0022	0.0044

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9266582001		9266582002		9266582003		9266582004	
Sample Description	BR-025		BR026		BR-027		BR-028	
Type of Sample	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	4/1/2010		4/1/2010		4/1/2010		4/1/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
Ethylbenzene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
Xylene	0.004	0.008	0.0044	0.0087	0.0043	0.0086	0.0061	0.0121
m-p-xylene	0.004	0.008	0.0044	0.0087	0.0043	0.0086	0.0061	0.0121
o-xylene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
Toluene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
Total BTEX	0.012		0.0132		0.0131		0.0181	
Naphthalene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
Acetone	0.0401	0.0802	0.0435	0.0869	0.0432	0.0864	0.061	0.121
n-Butylbenzene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
sec-butylbenzene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
Isopropylbenzene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
p-Isopropyltoluene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
methylene chloride	0.008	0.016	0.0087	0.0174	0.0087	0.0173	0.0121	0.0242
n-Propylbenzene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
Styrene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
1,2,4-trimethylbenzene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006
1,3,5 trimethylbenzene	0.002	0.004	0.0022	0.0043	0.0022	0.0043	0.003	0.006

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9266582005		9266582006		9266582007		9266582008	
Sample Description	BR-029		SWR-030		SWR-031		SWR-032	
Type of Sample	Subsurface Soil		Surface Soil		Surface Soil		Surface Soil	
Collection Date	4/1/2010		4/1/2010		4/1/2010		4/1/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
Ethylbenzene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
Xylene	0.005	0.01	0.0046	0.0091	0.0048	0.0096	0.0048	0.0096
m-p-xylene	0.005	0.01	0.0046	0.0091	0.0048	0.0096	0.0048	0.0096
o-xylene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
Toluene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
Total BTEX	0.015		0.0138		0.0144		0.0144	
Naphthalene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
Acetone	0.0498	0.0995	0.0457	0.0913	0.00482	0.0964	0.0479	0.0958
n-Butylbenzene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
sec-butylbenzene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
Isopropylbenzene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
p-Isopropyltoluene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
methylene chloride	0.0100	0.0199	0.0092	0.0183	0.0097	0.0193	0.0096	0.0192
n-Propylbenzene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
Styrene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
1,2,4-trimethylbenzene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048
1,3,5 trimethylbenzene	0.0025	0.005	0.0023	0.0046	0.0024	0.0048	0.0024	0.0048

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9266582009		9266582010		9267003001		9267003002	
Sample Description	SWR-033		SWR-034		BR-035		SWR-036	
Type of Sample	Surface Soil		Surface Soil		Subsurface Soil		Surface Soil	
Collection Date	4/1/2010		4/1/2010		4/6/2010		4/6/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0023	0.0048	0.003	0.0059	0.115	0.229	0.0021	0.0042
Ethylbenzene	0.0023	0.0048	0.003	0.0059	0.256	---	0.0021	0.0042
Xylene	0.0048	0.0096	0.0059	0.0118	0.574	---	0.0047	0.0083
m-p-xylene	0.0048	0.0096	0.0059	0.0118	0.229	0.458	0.0047	0.0083
o-xylene	0.0023	0.0048	0.003	0.0059	0.23	---	0.0021	0.0042
Toluene	0.0023	0.0048	0.003	0.0059	0.115	0.229	0.0021	0.0042
Total BTEX	0.014		0.0179		0.945		0.0131	
Naphthalene	0.0023	0.0048	0.003	0.0059	68.5	---	0.0321	---
Acetone	0.00481	0.0962	0.059	0.118	2.29	4.580	0.0418	0.0835
n-Butylbenzene	0.0023	0.0048	0.003	0.0059	0.115	0.229	0.0021	0.0042
sec-butylbenzene	0.0023	0.0048	0.003	0.0059	0.426	---	0.0021	0.0042
Isopropylbenzene	0.0023	0.0048	0.003	0.0059	0.115	0.229	0.0021	0.0042
p-Isopropyltoluene	0.0023	0.0048	0.003	0.0059	0.115	0.229	0.0021	0.0042
methylene chloride	0.0096	0.0192	0.0118	0.0236	0.115	0.229	0.0084	0.0167
n-Propylbenzene	0.0023	0.0048	0.003	0.0059	0.115	0.229	0.0021	0.0042
Styrene	0.0023	0.0048	0.003	0.0059	0.46	---	0.0021	0.0042
1,2,4-trimethylbenzene	0.0023	0.0048	0.003	0.0059	0.581	---	0.0021	0.0042
1,3,5 trimethylbenzene	0.0023	0.0048	0.003	0.0059	0.115	0.229	0.0021	0.0042

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9265003003		9267003004		9267003005		9267003006	
Sample Description	SWR-037		BR-038		BR-039		SWR-040	
Type of Sample	Surface Soil		Subsurface Soil		Subsurface Soil		Surface Soil	
Collection Date	4/6/2010		4/6/2010		4/6/2010		4/6/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044
Ethylbenzene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044
Xylene	0.0022	0.0043	0.0530	0.1050	0.0047	0.0094	0.0045	0.0089
m-p-xylene	0.0022	0.0043	0.0530	0.1050	0.0047	0.0094	0.0045	0.0089
o-xylene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044
Toluene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044
Total BTEX	0.0066		0.0638		0.0163		0.0133	
Naphthalene	0.155	---	0.0664	---	0.0219	---	0.0054	---
Acetone	0.022	0.043	0.053	0.105	0.047	0.0944	0.0444	0.0887
n-Butylbenzene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044
sec-butylbenzene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044
Isopropylbenzene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044
p-Isopropyltoluene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044
methylene chloride	0.0043	0.0086	0.0206	0.0211	0.0095	0.0189	0.0089	0.0177
n-Propylbenzene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044
Styrene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044
1,2,4-trimethylbenzene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044
1,3,5 trimethylbenzene	0.0011	0.0021	0.0027	0.0053	0.0029	0.0047	0.0022	0.0044

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9267003007		9267003008		9267003009		9267003010	
Sample Description	SWR-041		SWR-042		SWR-043		SWR-044	
Type of Sample	Surface Soil		Surface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	4/6/2010		4/6/2010		4/6/2010			
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231
Ethylbenzene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231
Xylene	0.0049	0.0098	0.0046	0.0091	0.0044	0.0088	0.231	0.462
m-p-xylene	0.0049	0.0098	0.0046	0.0091	0.0044	0.0088	0.231	0.462
o-xylene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231
Toluene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231
Total BTEX	0.0149		0.0138		0.0132		0.695	
Naphthalene	0.0025	0.0049	0.1790	---	0.0743	---	17.7	---
Acetone	0.049	0.0979	0.0457	0.0914	0.0441	0.0882	2.31	4.62
n-Butylbenzene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231
sec-butylbenzene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231
Isopropylbenzene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231
p-Isopropyltoluene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231
methylene chloride	0.0098	0.0196	0.0092	0.0183	0.0088	0.0176	0.462	0.923
n-Propylbenzene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231
Styrene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231
1,2,4-trimethylbenzene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231
1,3,5 trimethylbenzene	0.0025	0.0049	0.0023	0.0046	0.0022	0.0044	0.116	0.231

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9267003011		9267003012		9267003013		9267003014	
Sample Description	SWR-045		SWR-046		SWR-047		SWR-048	
Type of Sample	Subsurface Soil		Subsurface Soil		Surface Soil		Surface Soil	
Collection Date	4/6/2010		4/6/2010		4/6/2010		4/6/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	1.05	2.10	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045
Ethylbenzene	1.05	2.10	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045
Xylene	21.9	---	0.0046	0.0091	0.0046	0.0091	0.0045	0.009
m-p-xylene	14.1	---	0.0046	0.0091	0.0046	0.0091	0.0045	0.009
o-xylene	7.74	---	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045
Toluene	7.92	---	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045
Total BTEX	31.86		0.0138		0.0158		0.0157	
Naphthalene	4110	---	0.0205	---	0.0659	---	0.0228	---
Acetone	21.4	42.1	0.0457	0.0914	0.0454	0.0908	0.047	0.093
n-Butylbenzene	1.05	2.10	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045
sec-butylbenzene	9.57	---	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045
Isopropylbenzene	2.16	---	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045
p-Isopropyltoluene	1.05	2.10	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045
methylene chloride	4.21	8.41	0.0092	0.0183	0.0091	0.0182	0.0091	0.0181
n-Propylbenzene	1.05	2.10	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045
Styrene	40.0	---	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045
1,2,4-trimethylbenzene	13.1	---	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045
1,3,5 trimethylbenzene	4.91	---	0.0023	0.0046	0.0028	0.0045	0.0028	0.0045

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9267093001		9267093002		9267093003		9267093004	
Sample Description	BR-049		SWR-050		SWR-051		SWR-052	
Type of Sample	Subsurface Soil		Surface Soil		Surface Soil		Surface Soil	
Collection Date	4/7/2010		4/7/2010		4/7/2010		4/7/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042
Ethylbenzene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042
Xylene	0.0053	0.0106	0.0044	0.0088	0.004	0.0079	0.0042	0.0084
m-p-xylene	0.0053	0.0106	0.0044	0.0088	0.004	0.0079	0.0042	0.0084
o-xylene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042
Toluene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042
Total BTEX	0.0161		0.0132		0.012		0.0126	
Naphthalene	0.727	---	0.0022	0.0044	0.004	---	0.0021	0.0042
Acetone	0.053	0.106	0.044	0.088	0.0393	0.0786	0.119	---
n-Butylbenzene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042
sec-butylbenzene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042
Isopropylbenzene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042
p-Isopropyltoluene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042
methylene chloride	0.0106	0.0212	0.0088	0.0176	0.0079	0.0157	0.0084	0.0168
n-Propylbenzene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042
Styrene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042
1,2,4-trimethylbenzene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042
1,3,5 trimethylbenzene	0.0027	0.0053	0.0022	0.0044	0.0020	0.0039	0.0021	0.0042

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9265093005		9265093006		9267093007		9267093008	
Sample Description	BR-053		BR-054		BR-055		BR-056	
Type of Sample	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	4/7/2010		4/7/2010		4/7/2010		4/7/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0024	0.0047
Ethylbenzene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0024	0.0047
Xylene	0.0043	0.0085	0.232	0.463	0.0047	0.0094	0.0047	0.0094
m-p-xylene	0.0043	0.0085	0.232	0.463	0.0047	0.0094	0.0047	0.0094
o-xylene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0024	0.0047
Toluene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0051	---
Total BTEX	0.0127		0.696		0.0143		0.017	
Naphthalene	0.0021	0.0042	47.6	---	0.205	---	0.0108	---
Acetone	0.0423	0.0846	2.32	4.63	0.0469	0.0937	0.0469	0.0937
n-Butylbenzene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0024	0.0047
sec-butylbenzene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0024	0.0047
Isopropylbenzene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0024	0.0047
p-Isopropyltoluene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0024	0.0047
methylene chloride	0.0085	0.0169	0.463	0.926	0.0094	0.0187	0.0094	0.0187
n-Propylbenzene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0024	0.0047
Styrene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0024	0.0047
1,2,4-trimethylbenzene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0024	0.0047
1,3,5 trimethylbenzene	0.0021	0.0042	0.116	0.231	0.0024	0.0047	0.0024	0.0047

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9267093009		9267093010		9267093011		9267093012	
Sample Description	BR-057		BR-058		BR-059		SWR-060	
Type of Sample	Subsurface Soil		Subsurface Soil		Subsurface Soil		Surface Soil	
Collection Date	4/7/2010		4/8/2010		4/8/2010		4/8/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0477	---	46.8	---	116.0	---	3.04	---
Ethylbenzene	0.0023	0.0045	12.9	---	12.5	---	28.9	---
Xylene	0.0206	---	153.0	---	248	---	65.6	---
m-p-xylene	0.0152	---	109.0	---	179	---	20.1	40.2
o-xylene	0.0054	---	44.2	---	69.5	---	27.9	---
Toluene	0.0603	---	146.0	---	275	---	22.4	---
Total BTEX	0.1309		358.9		652		102.34	
Naphthalene	0.378	---	2250.0	---	4320	---	4280	---
Acetone	0.0455	0.0909	5.05	10.1	4.68	9.35	4.02	8.04
n-Butylbenzene	0.0023	0.0045	0.252	0.504	0.234	0.467	0.201	0.402
sec-butylbenzene	0.0023	0.0045	0.252	0.504	0.234	0.467	0.201	0.402
Isopropylbenzene	0.0023	0.0045	0.51	---	0.234	0.467	0.713	---
p-Isopropyltoluene	0.0023	0.0045	0.252	0.504	0.234	0.467	0.201	0.402
methylene chloride	0.0091	0.0182	1.01	2.02	0.94	1.87	0.805	1.61
n-Propylbenzene	0.0023	0.0045	2.70	---	2.40	---	0.875	---
Styrene	0.0333	---	63.8	---	233	---	25.5	---
1,2,4-trimethylbenzene	0.0023	0.0045	43.7	---	66.0	---	27.5	---
1,3,5 trimethylbenzene	0.0023	0.0045	22.8	---	24.3	---	17.5	---

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.  
Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9267093013		9267333001		9267333002		9267333003	
Sample Description	SWR-061		SWR-062		SWR-063		BR-064	
Type of Sample	Subsurface Soil		Surface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	4/8/2010		4/12/2010		4/12/2010		4/12/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	64.8	---	0.124	---	96.8	---	91.6	---
Ethylbenzene	11.6	---	0.004	---	10.1	---	5.8	11.6
Xylene	125	---	0.048	---	152	---	153	---
m-p-xylene	89.6	---	0.331	---	109	---	109	---
o-xylene	35.6	---	0.151	---	43.5	---	44	---
Toluene	137	---	0.107	---	166	---	174	---
Total BTEX	338.6		0.7172		425.4		424.4	
Naphthalene	6340	---	0.238	---	4960	---	7850	---
Acetone	4.70	9.39	0.0418	0.0836	24.4	48.8	117	233
n-Butylbenzene	0.235	0.469	0.0021	0.0042	1.22	2.44	5.8	11.6
sec-butylbenzene	0.235	0.469	0.0021	0.0042	1.22	2.44	5.8	11.6
Isopropylbenzene	0.235	0.469	0.0021	0.0042	1.22	2.44	5.8	11.6
p-Isopropyltoluene	0.235	0.469	0.0021	0.0042	1.22	2.44	5.8	11.6
methylene chloride	0.94	1.88	0.0084	0.0167	4.88	9.76	23.3	46.5
n-Propylbenzene	1.93	---	0.0021	0.0042	1.22	2.44	5.8	11.6
Styrene	222	---	0.0095	---	191	---	155	---
1,2,4-trimethylbenzene	38.1	---	0.0063	---	43.2	---	36.1	---
1,3,5 trimethylbenzene	24.7	---	0.0021	0.0042	16.9	---	14.7	---

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.  
Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9267333004		9267333005		9267333006		9267333007	
Sample Description	BR-065		SWR-066		SWR-067		SWR-068	
Type of Sample	Subsurface Soil		Surface Soil		Subsurface Soil		Surface Soil	
Collection Date	4/12/2010		4/12/2010		4/12/2010		4/13/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	41.4	---	10.3	20.5	11.3	22.5	0.105	0.209
Ethylbenzene	10.05	20.1	10.3	20.5	11.3	22.5	0.105	0.209
Xylene	109	---	20.5	41.0	22.6	45.1	0.209	0.418
m-p-xylene	76.8	---	20.5	41.0	22.6	45.1	0.209	0.418
o-xylene	31.9	---	10.3	20.5	11.3	22.5	0.105	0.209
Toluene	114	---	10.3	20.5	25.6	---	0.105	0.209
Total BTEX	274.15		61.7		82.1		0.629	
Naphthalene	4680	---	846.0	---	2180	---	7.25	---
Acetone	201	402	205	410	226	451	2.09	4.18
n-Butylbenzene	10.05	20.1	10.3	20.5	11.3	22.5	0.105	0.209
sec-butylbenzene	10.05	20.1	10.3	20.5	11.3	22.5	0.105	0.209
Isopropylbenzene	10.05	20.1	10.3	20.5	11.3	22.5	0.105	0.209
p-Isopropyltoluene	10.05	20.1	10.3	20.5	11.3	22.5	0.105	0.209
methylene chloride	40.2	80.3	4.11	82.1	45.1	90.1	0.418	0.836
n-Propylbenzene	10.05	20.1	10.3	20.5	11.3	22.5	0.105	0.209
Styrene	68.7	---	10.3	20.5	35	---	0.105	0.209
1,2,4-trimethylbenzene	28.6	---	10.3	20.5	11.3	22.5	0.105	0.209
1,3,5 trimethylbenzene	10.05	20.1	10.3	20.5	11.3	22.5	0.105	0.209

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9267333008		9267333009		9267333010		9267333011	
Sample Description	SWR-069		BR-070		BR-071		BR-072	
Type of Sample	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	4/13/2010		4/13/2010		4/13/2010		4/13/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	2.37	4.74	0.56	1.12	1.07	2.13	5.30	10.6
Ethylbenzene	2.37	4.74	0.56	1.12	1.07	2.13	5.30	10.6
Xylene	4.75	9.49	1.12	2.23	2.13	4.26	10.6	21.1
m-p-xylene	4.75	9.49	0.56	1.12	2.13	4.26	10.6	21.1
o-xylene	2.37	4.74	0.56	1.12	1.07	2.13	5.30	10.6
Toluene	2.37	4.74	1.12	---	1.07	2.13	5.30	10.6
Total BTEX	14.23		3.36		6.41		31.8	
Naphthalene	43.4	---	19.3	---	1.07	2.13	353	---
Acetone	47.5	94.9	11.2	22.3	21.3	42.6	106	211
n-Butylbenzene	2.37	4.74	0.56	1.12	1.07	2.13	5.30	10.6
sec-butylbenzene	2.37	4.74	0.56	1.12	1.07	2.13	5.30	10.6
Isopropylbenzene	2.37	4.74	0.56	1.12	1.07	2.13	5.30	10.6
p-Isopropyltoluene	2.37	4.74	0.56	1.12	1.07	2.13	5.30	10.6
methylene chloride	9.50	19.0	2.23	4.46	4.26	8.52	21.1	42.2
n-Propylbenzene	2.37	4.74	0.56	1.12	1.07	2.13	5.30	10.6
Styrene	2.37	4.74	0.56	1.12	1.07	2.13	5.30	10.6
1,2,4-trimethylbenzene	2.37	4.74	0.56	1.12	1.07	2.13	5.30	10.6
1,3,5 trimethylbenzene	2.37	4.74	0.56	1.12	1.07	2.13	5.30	10.6

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.  
Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9267333012		9267565001		9267565002		9267830001	
Sample Description	BR-073		BR-074		BR-075		BR-076	
Type of Sample	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	4/13/2010		4/14/2010		4/14/2010		4/19/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	45.3	---	2.73	5.45	12.0	24.0	0.0025	0.0049
Ethylbenzene	2.8	5.59	2.73	5.45	12.0	24.0	0.0025	0.0049
Xylene	64.9	---	5.45	10.9	58.5	---	0.0169	---
m-p-xylene	45.7	---	5.45	10.9	24.0	48.0	0.0128	---
o-xylene	19.3	---	2.73	5.45	12.0	24.0	0.0025	0.0049
Toluene	71.3	---	5.8	---	41.8	---	0.0128	---
Total BTEX	184.4		19.43		101.8		0.0331	
Naphthalene	3100	---	1110.0	---	2320	---	0.117	---
Acetone	56.0	112	54.5	109	240	480	0.050	0.099
n-Butylbenzene	2.8	5.59	2.73	5.45	12.0	24.0	0.0025	0.0049
sec-butylbenzene	2.8	5.59	2.73	5.45	12.0	24.0	0.0025	0.0049
Isopropylbenzene	2.8	5.59	2.73	5.45	12.0	24.0	0.0025	0.0049
p-Isopropyltoluene	2.8	5.59	2.73	5.45	12.0	24.0	0.0025	0.0049
methylene chloride	11.2	22.4	10.9	21.8	48.0	96.0	0.0099	0.0198
n-Propylbenzene	2.8	5.59	2.73	5.45	12.0	24.0	0.0025	0.0049
Styrene	67.8	---	7.76	---	12.0	24.0	0.0077	---
1,2,4-trimethylbenzene	17.2	---	2.73	5.45	12.0	24.0	0.0025	0.0049
1,3,5 trimethylbenzene	7.03	---	2.73	5.45	12.0	24.0	0.0025	0.0049

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	926783002		9267830003		9267830004		9267830005	
Sample Description	SWR-077		SWR-078		BR-079		BR-080	
Type of Sample	Surface Sample		Subsurface Sample		Subsurface Sample		Subsurface Sample	
Collection Date	4/19/2010		4/19/2010		4/19/2010		4/19/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0064	---	0.131	0.261	0.52	1.04	0.61	1.22
Ethylbenzene	0.0021	0.0041	0.131	0.261	0.52	1.04	0.61	1.22
Xylene	0.0126	---	0.261	0.521	1.05	2.09	1.22	2.44
m-p-xylene	0.009	---	0.261	0.521	1.05	2.09	1.22	2.44
o-xylene	0.0021	0.0041	0.131	0.261	0.52	1.04	0.61	1.22
Toluene	0.0135	---	0.131	0.261	0.52	1.04	0.61	1.22
Total BTEX	0.0331		0.785		3.13		3.66	
Naphthalene	0.962	---	1.30	---	26.0	---	24.5	---
Acetone	0.0409	0.0818	2.61	5.21	10.5	20.9	12.2	24.4
n-Butylbenzene	0.0021	0.0041	0.131	0.261	0.52	1.04	0.61	1.22
sec-butylbenzene	0.0021	0.0041	0.131	0.261	0.52	1.04	0.61	1.22
Isopropylbenzene	0.0021	0.0041	0.131	0.261	0.52	1.04	0.61	1.22
p-Isopropyltoluene	0.0021	0.0041	0.131	0.261	0.52	1.04	0.61	1.22
methylene chloride	0.0082	0.0164	0.52	1.04	2.09	4.18	2.44	4.87
n-Propylbenzene	0.0021	0.0041	0.131	0.261	0.52	1.04	0.61	1.22
Styrene	0.014	---	0.131	0.261	0.52	1.04	0.61	1.22
1,2,4-trimethylbenzene	0.0021	0.0041	0.131	0.261	0.52	1.04	0.61	1.22
1,3,5 trimethylbenzene	0.0021	0.0041	0.131	0.261	0.52	1.04	0.61	1.22

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.  
Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9268070001		9268070002		9268070003		9268070004	
Sample Description	SWR-081		BR-082		BR-083		BR-084	
Type of Sample	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	4/21/2010		4/21/2010		4/21/2010		4/22/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	2.28	4.55	5.02	---	0.61	1.22	0.0020	0.0039
Ethylbenzene	10.5	---	4.93	---	0.61	1.22	0.0020	0.0039
Xylene	20.4	---	20.1	---	2.59	---	0.0040	0.0079
m-p-xylene	14.0	---	14.2	---	1.22	2.43	0.0040	0.0079
o-xylene	6.37	---	5.88	---	0.61	1.22	0.0020	0.0039
Toluene	2.28	4.55	16.1	---	1.53	---	0.0020	0.0039
Total BTEX	35.43		46.13		4.58		0.012	
Naphthalene	1620	---	989	---	179.0	---	0.0475	---
Acetone	45.5	91.0	12.1	24.1	12.2	24.3	0.0393	0.0786
n-Butylbenzene	2.28	4.55	0.06	1.20	0.61	1.22	0.0020	0.0039
sec-butylbenzene	2.28	4.55	0.06	1.20	0.61	1.22	0.0020	0.0039
Isopropylbenzene	2.28	4.55	0.06	1.20	0.61	1.22	0.0020	0.0039
p-Isopropyltoluene	2.28	4.55	1.21	---	0.61	1.22	0.0020	0.0039
methylene chloride	9.10	18.2	2.41	4.81	2.44	4.87	0.0079	0.0157
n-Propylbenzene	2.28	4.55	0.06	1.20	0.61	1.22	0.0020	0.0039
Styrene	19.5	---	7.46	---	1.88	---	0.0020	0.0039
1,2,4-trimethylbenzene	14.2	---	7.50	---	0.61	1.22	0.0020	0.0039
1,3,5 trimethylbenzene	5.64	---	2.83	---	0.61	1.22	0.0020	0.0039

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9268070005		9268070006		9268262001		9268262002	
Sample Description	SWR-085		SWR-086		BR-087		BR-088	
Type of Sample	Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	4/22/2010		4/22/2010		4/26/2010		4/26/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442
Ethylbenzene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442
Xylene	0.0047	0.0093	0.005	0.0089	12.5	23.0	0.442	0.884
m-p-xylene	0.0047	0.0093	0.005	0.0089	12.5	23.0	0.442	0.884
o-xylene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442
Toluene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442
Total BTEX	0.0139		0.0157		35.5		1.326	
Naphthalene	0.0087	---	0.0167	---	191.0	---	4.70	---
Acetone	0.0465	0.0929	0.0446	0.0892	115	230	4.42	8.84
n-Butylbenzene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442
sec-butylbenzene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442
Isopropylbenzene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442
p-Isopropyltoluene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442
methylene chloride	0.0093	0.0186	0.0089	0.0178	23.0	45.9	0.885	1.77
n-Propylbenzene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442
Styrene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442
1,2,4-trimethylbenzene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442
1,3,5 trimethylbenzene	0.0023	0.0046	0.0028	0.0045	5.75	11.5	0.221	0.442

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9268262003		9268262004		9268262005		9268262006	
Sample Description	SWR-089		SWR-090		SWR-091		SWR-092	
Type of Sample	Surface Soil		Subsurface Soil		surface Soil		Subsurface Soil	
Collection Date	4/27/2010		4/27/2010		4/27/2010		4/27/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234
Ethylbenzene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234
Xylene	0.055	0.109	0.005	0.010	0.431	0.861	0.234	0.468
m-p-xylene	0.055	0.109	0.005	0.010	0.431	0.861	0.234	0.468
o-xylene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234
Toluene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234
Total BTEX	0.0658		0.015		1.295		0.702	
Naphthalene	0.0063	---	0.0531	---	5.63	---	1.37	---
Acetone	0.055	0.109	0.499	0.997	4.31	8.61	2.34	4.68
n-Butylbenzene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234
sec-butylbenzene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234
Isopropylbenzene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234
p-Isopropyltoluene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234
methylene chloride	0.109	0.218	0.010	0.0199	0.86	1.72	0.469	0.937
n-Propylbenzene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234
Styrene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234
1,2,4-trimethylbenzene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234
1,3,5 trimethylbenzene	0.0027	0.0054	0.0025	0.005	0.216	0.431	0.117	0.234

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9268262007		9268262008		9268451001		9268451002	
Sample Description	BR-093		BR-094		BR-095		BR-096	
Type of Sample	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	4/27/2010		4/27/2010		4/28/2010		4/29/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259
Ethylbenzene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259
Xylene	0.247	0.493	0.005	0.0103	2.52	5.04	0.259	0.518
m-p-xylene	0.247	0.493	0.005	0.0103	2.52	5.04	0.259	0.518
o-xylene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259
Toluene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259
Total BTEX	0.743		0.0156		7.56		0.779	
Naphthalene	4.52	---	0.111	---	137.0	---	6.40	---
Acetone	2.47	4.93	0.052	0.103	25.2	50.4	2.59	5.18
n-Butylbenzene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259
sec-butylbenzene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259
Isopropylbenzene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259
p-Isopropyltoluene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259
methylene chloride	0.493	0.986	0.0103	0.0205	5.05	10.1	0.52	1.04
n-Propylbenzene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259
Styrene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259
1,2,4-trimethylbenzene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259
1,3,5 trimethylbenzene	0.124	0.247	0.0026	0.0051	1.26	2.52	0.130	0.259

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analysis Results (EPA Method 8260)

Sample ID	9268451003		9268451004		9268451005		9268451007	
Sample Description	BR-097		SWR-098		SWR-099		BR-100	
Type of Sample	Subsurface Soil		Surface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	4/29/2010		4/29/2010		4/29/2010		4/29/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.172	---	0.0022	0.0044	0.62	1.24	0.0213	---
Ethylbenzene	0.323	---	0.0022	0.0044	0.62	1.24	0.0026	0.0051
Xylene	1.96	---	0.0044	0.0087	10.8	---	0.0051	0.0102
m-p-xylene	1.46	---	0.0044	0.0087	8.03	---	0.0051	0.0102
o-xylene	0.500	---	0.0022	0.0044	2.74	---	0.0026	0.0051
Toluene	0.578	---	0.0022	0.0044	0.62	1.24	0.0026	0.0051
Total BTEX	3.033		0.0132		12.63		0.0342	
Naphthalene	7.96	---	0.0508	---	106.0	---	0.145	---
Acetone	0.0463	0.0925	0.0437	0.0874	12.4	24.8	0.51	0.102
n-Butylbenzene	0.0023	0.0046	0.0022	0.0044	0.62	1.24	0.0026	0.0051
sec-butylbenzene	0.0023	0.0046	0.0022	0.0044	0.62	1.24	0.0026	0.0051
Isopropylbenzene	0.0023	0.0046	0.0022	0.0044	0.62	1.24	0.0026	0.0051
p-Isopropyltoluene	0.0023	0.0046	0.0022	0.0044	0.62	1.24	0.0026	0.0051
methylene chloride	0.093	0.185	0.0088	0.0175	2.98	4.95	0.0102	0.0203
n-Propylbenzene	0.0023	0.0046	0.0022	0.0044	0.62	1.24	0.0026	0.0051
Styrene	0.0023	0.0046	0.0022	0.0044	0.62	1.24	0.0026	0.0051
1,2,4-trimethylbenzene	0.0722	---	0.0022	0.0044	4.34	---	0.0026	0.0051
1,3,5 trimethylbenzene	0.0326	---	0.0022	0.0044	2.12	---	0.0026	0.0051

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9269219002		9269219003		9269219004		9269219005	
Sample Description	BR-101		BR-102		BR-103		SWE-104	
Type of Sample	Subsurface Soil		Subsurface Soil		Subsurface Soil		Surface Soil	
Collection Date	5/5/2010		5/10/2010		5/10/2010		5/10/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071
Ethylbenzene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071
Xylene	0.0053	0.0105	0.0051	0.0101	0.007	0.013	0.0071	0.0142
m-p-xylene	0.0053	0.0105	0.0051	0.0101	0.007	0.013	0.0071	0.0142
o-xylene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071
Toluene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071
Total BTEX	0.0161		0.0155		0.0202		0.0215	
Naphthalene	0.0995	---	0.0607	---	0.0033	0.0065	0.0737	---
Acetone	0.053	0.105	0.051	0.101	0.07	0.13	0.071	0.142
n-Butylbenzene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071
sec-butylbenzene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071
Isopropylbenzene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071
p-Isopropyltoluene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071
methylene chloride	0.0106	0.0211	0.0102	0.0203	0.0130	0.0259	0.0143	0.0285
n-Propylbenzene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071
Styrene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071
1,2,4-trimethylbenzene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071
1,3,5 trimethylbenzene	0.0027	0.0053	0.0026	0.0051	0.0033	0.0065	0.0036	0.0071

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9269219006		9269219007		2969219008		9269430001	
Sample Description	SWE-105		SWE-106		BR-107		BR-108	
Type of Sample	Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	5/10/2010		5/11/2010		5/11/2010		5/12/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0348	0.0695	0.0024	0.0048	0.56	1.12	8.72	---
Ethylbenzene	0.0348	0.0695	0.0024	0.0048	0.56	1.12	15.1	---
Xylene	0.695	1.39	0.024	0.048	7.57	---	221	---
m-p-xylene	0.695	1.39	0.024	0.048	5.67	---	154	---
o-xylene	0.0348	0.0695	0.0024	0.0048	1.90	---	67.5	---
Toluene	0.0348	0.0695	0.0024	0.0048	0.56	1.12	82.9	---
Total BTEX	0.8342		0.0336		9.25		328.22	
Naphthalene	16.0	---	0.0024	0.0048	310.0	---	5940	---
Acetone	6.95	13.9	0.0478	0.0956	11.2	22.4	48.9	97.7
n-Butylbenzene	0.0348	0.0695	0.0024	0.0048	0.56	1.12	2.45	4.89
sec-butylbenzene	0.0348	0.0695	0.0024	0.0048	0.56	1.12	2.45	4.89
Isopropylbenzene	0.0348	0.0695	0.0024	0.0048	0.56	1.12	2.45	4.89
p-Isopropyltoluene	0.0348	0.0695	0.0024	0.0048	0.56	1.12	2.45	4.89
methylene chloride	1.39	2.78	0.0096	0.0191	2.25	4.49	9.75	19.5
n-Propylbenzene	0.0348	0.0695	0.0024	0.0048	0.56	1.12	2.45	4.89
Styrene	0.0348	0.0695	0.0024	0.0048	0.56	1.12	75.1	---
1,2,4-trimethylbenzene	0.0348	0.0695	0.0024	0.0048	10.6	---	79.0	---
1,3,5 trimethylbenzene	0.0348	0.0695	0.0024	0.0048	4.11	---	29.1	---

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.  
Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9269430992		9269430003		9269430004		9269430005	
Sample Description	BR-109		SWR-110		SWR-111		HA-112	
Type of Sample	Subsurface Soil		Subsurface Soil		Surface Soil		Surface Soil	
Collection Date	5/12/2010		5/12/2010		5/12/2010		5/12/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0078	---	0.0115	---	0.0210	---	3.24	---
Ethylbenzene	0.0025	0.0049	0.0024	0.0048	0.0021	0.0042	2.96	---
Xylene	0.0245	---	0.0578	---	0.0708	---	20.3	---
m-p-xylene	0.0168	---	0.0407	---	0.0523	---	14.0	---
o-xylene	0.0077	---	0.0171	---	0.0185	---	6.23	---
Toluene	0.0266	---	0.0489	---	0.078	---	9.56	---
Total BTEX	0.0614		0.1206		0.1719		35.99	
Naphthalene	0.226	---	0.385	---	0.155	---	3920	---
Acetone	0.99	0.98	0.0484	0.0968	0.0424	0.0848	29.05	58.1
n-Butylbenzene	0.0025	0.0049	0.0024	0.0048	0.0021	0.0042	1.46	2.91
sec-butylbenzene	0.0025	0.0049	0.0024	0.0048	0.0021	0.0042	1.46	2.91
Isopropylbenzene	0.0025	0.0049	0.0024	0.0048	0.0021	0.0042	1.46	2.91
p-Isopropyltoluene	0.0025	0.0049	0.0024	0.0048	0.0021	0.0042	1.46	2.91
methylene chloride	0.0098	0.0196	0.0097	0.0194	0.0085	0.017	5.80	11.6
n-Propylbenzene	0.0025	0.0049	0.0024	0.0048	0.0021	0.0042	1.46	2.91
Styrene	0.0025	0.0049	0.0247	---	0.268	---	20.2	---
1,2,4-trimethylbenzene	0.0025	0.0049	0.0093	---	0.0078	---	16.0	---
1,3,5 trimethylbenzene	0.0025	0.0049	0.0024	0.0048	0.0021	0.0042	6.69	---

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9269430006		9269430007		9269430008		9269430009	
Sample Description	HA-113		BR-114		SWR-115		SWR-116	
Type of Sample	Surface Soil		Subsurface Soil		Subsurface Soil		Surface Soil	
Collection Date	5/12/2010		5/13/2010		5/13/2010		5/13/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0482	---	0.0023	0.0045	2.33	4.65	0.686	---
Ethylbenzene	0.0434	---	0.0023	0.0045	2.33	4.65	0.117	0.233
Xylene	1.06	2.11	0.0170	---	4.7	9.30	0.628	---
m-p-xylene	1.06	2.11	0.0139	---	4.7	9.30	0.476	---
o-xylene	0.165	---	0.0023	0.0045	2.33	4.65	0.117	0.233
Toluene	0.0021	0.0042	0.022	---	2.33	4.65	1.03	---
Total BTEX	1.3187		0.0428		14.02		2.426	
Naphthalene	12.60	---	0.0429	---	166.0	---	5.34	---
Acetone	0.138	---	0.0452	0.0903	46.5	93.0	2.34	4.67
n-Butylbenzene	0.0021	0.0042	0.0023	0.0045	2.33	4.65	0.117	0.233
sec-butylbenzene	0.0021	0.0042	0.0023	0.0045	2.33	4.65	0.117	0.233
Isopropylbenzene	0.0021	0.0042	0.0023	0.0045	2.33	4.65	0.117	0.233
p-Isopropyltoluene	0.0021	0.0042	0.0023	0.0045	2.33	4.65	0.117	0.233
methylene chloride	0.0084	0.0168	0.0091	0.0181	9.30	18.6	0.467	0.934
n-Propylbenzene	0.0077	---	0.0023	0.0045	2.33	4.65	0.117	0.233
Styrene	0.251	---	0.0023	0.0045	2.33	4.65	0.406	---
1,2,4-trimethylbenzene	0.167	---	0.0023	0.0045	2.33	4.65	0.236	---
1,3,5 trimethylbenzene	0.0496	---	0.0023	0.0045	2.33	4.65	0.117	0.233

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9269430010		9269995001		9269995002		9269995003	
Sample Description	BR-117		BR-118		BR-119		SWR-120	
Type of Sample	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	5/13/2010		5/14/2010		5/14/2010		5/14/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14
Ethylbenzene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14
Xylene	1.12	2.23	2.13	4.25	11.3	22.6	1.145	2.290
m-p-xylene	1.12	2.23	2.13	4.25	11.3	22.6	1.145	2.290
o-xylene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14
Toluene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14
Total BTEX	3.34		6.37		33.9		3.425	
Naphthalene	15.5	---	44.60	---	275.0	---	136	---
Acetone	11.2	22.3	21.3	42.5	113	226	12.5	22.9
n-Butylbenzene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14
sec-butylbenzene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14
Isopropylbenzene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14
p-Isopropyltoluene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14
methylene chloride	2.23	4.45	4.25	8.50	22.7	45.3	2.29	4.58
n-Propylbenzene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14
Styrene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14
1,2,4-trimethylbenzene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14
1,3,5 trimethylbenzene	0.555	1.11	1.06	2.12	5.65	11.3	0.57	1.14

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9269995004		9269995005		9269995006		9269995007	
Sample Description	SWR-121		BR-122		BR-123		SWR-124	
Type of Sample	Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	5/14/2010		5/20/2010		5/20/2010		5/20/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0068	---	2.79	5.57	11.45	22.9	13.0	26.0
Ethylbenzene	0.0148	---	2.79	5.57	11.45	22.9	13.0	26.0
Xylene	0.184	---	5.550	11.10	22.9	45.8	26.0	51.9
m-p-xylene	0.131	---	5.550	11.10	22.9	45.8	26.0	51.9
o-xylene	0.0529	---	2.79	5.57	11.45	22.9	13.0	26.0
Toluene	0.0827	---	2.79	5.57	11.45	22.9	13.0	26.0
Total BTEX	0.2882		16.71		68.7		78	
Naphthalene	21.3	---	107.0	---	797.0	---	3120	---
Acetone	0.058	0.115	55.5	111	229	458	260	519
n-Butylbenzene	0.0029	0.0058	2.79	5.57	11.45	22.9	13.0	26.0
sec-butylbenzene	0.0029	0.0058	2.79	5.57	11.45	22.9	13.0	26.0
Isopropylbenzene	0.0029	0.0058	2.79	5.57	11.45	22.9	13.0	26.0
p-Isopropyltoluene	0.0029	0.0058	2.79	5.57	11.45	22.9	13.0	26.0
methylene chloride	0.0116	0.0231	11.2	22.3	45.9	91.7	52.0	104
n-Propylbenzene	0.0029	0.0058	2.79	5.57	11.45	22.9	13.0	26.0
Styrene	0.683	---	2.79	5.57	11.45	22.9	48.3	---
1,2,4-trimethylbenzene	0.0938	---	2.79	5.57	11.45	22.9	13.0	26.0
1,3,5 trimethylbenzene	0.0309	---	2.79	5.57	11.45	22.9	13.0	26.0

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9269995008		9270204002		9270204003		9270204004	
Sample Description	SWR-125		BR-126		BR-127		SWR-128	
Type of Sample	Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	5/20/2010		5/21/2010		5/21/2010		5/21/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0024	0.0047	11.6	23.1	0.741	---	1.24	---
Ethylbenzene	0.0024	0.0047	11.6	23.1	0.232	0.461	0.56	1.12
Xylene	0.0216	---	51.50	---	2.54	---	3.96	---
m-p-xylene	0.017	---	23.30	46.30	1.89	---	3.01	---
o-xylene	0.0024	0.0047	11.6	23.1	0.649	---	0.56	1.12
Toluene	0.0119	---	47.5	---	2.62	---	4.26	---
Total BTEX	0.0361		105.6		6.132		9.63	
Naphthalene	0.0266	---	3830	---	14.5	---	18.1	---
Acetone	0.047	0.0939	232	463	4.62	9.23	11.2	22.3
n-Butylbenzene	0.0024	0.0047	11.6	23.1	0.232	0.461	0.56	1.12
sec-butylbenzene	0.0024	0.0047	11.6	23.1	0.232	0.461	0.56	1.12
Isopropylbenzene	0.0024	0.0047	11.6	23.1	0.232	0.461	0.56	1.12
p-Isopropyltoluene	0.0024	0.0047	11.6	23.1	0.232	0.461	0.56	1.12
methylene chloride	0.0094	0.0188	46.3	92.5	0.93	1.85	2.23	4.46
n-Propylbenzene	0.0024	0.0047	11.6	23.1	0.232	0.461	0.56	1.12
Styrene	0.0135	---	64.7	---	2.63	---	4.29	---
1,2,4-trimethylbenzene	0.0024	0.0047	11.6	23.1	1.25	---	0.56	1.12
1,3,5 trimethylbenzene	0.0024	0.0047	11.6	23.1	0.232	0.461	0.56	1.12

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9270204005		9270204006		9270204007		9270204008	
Sample Description	SWR-129		BR-130		BR-131		SWR-132	
Type of Sample	Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	5/21/2010		5/25/2010		5/25/2010		5/25/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.539	---	0.220	0.439	1.30	2.60	15.2	---
Ethylbenzene	0.108	0.215	0.479		1.30	2.60	0.0025	0.0049
Xylene	0.604	---	2.190	---	6.40	---	0.0171	---
m-p-xylene	0.44	---	1.030	---	26.1	5.21	0.0139	---
o-xylene	0.108	0.215	1.16	---	1.30	2.60	0.0025	0.0049
Toluene	0.96	---	0.647	---	3.85	---	0.0341	---
Total BTEX	2.155		3.536		33.85		15.253	
Naphthalene	15.0	---	14.40	---	109.0	---	0.108	---
Acetone	2.15	4.30	4.39	8.78	26.1	52.1	0.0495	0.0989
n-Butylbenzene	0.108	0.215	1.030	---	1.30	2.60	0.0054	---
sec-butylbenzene	0.108	0.215	0.220	0.439	1.30	2.60	0.0025	0.0049
Isopropylbenzene	0.108	0.215	0.220	0.439	1.30	2.60	0.0025	0.0049
p-Isopropyltoluene	0.108	0.215	1.11	---	1.30	2.60	0.0073	---
methylene chloride	0.431	0.861	0.220	0.439	5.20	10.40	0.0099	0.0198
n-Propylbenzene	0.108	0.215	0.535	---	1.30	2.60	0.0025	0.0049
Styrene	1.27	---	0.637	---	1.30	2.60	0.0207	---
1,2,4-trimethylbenzene	0.108	0.215	5.62	---	5.47	---	0.0189	---
1,3,5 trimethylbenzene	0.108	0.215	1.98	---	1.30	2.60	0.0061	---

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9270204009		9270445001		9270445002		9270445003	
Sample Description	SWR-133		BR-134		SWR-135		SWR-136	
Type of Sample	Surface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	5/25/2010		5/27/2010		5/27/2010		5/27/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0089	---	11.55	23.1	2.96	5.91	0.0021	0.0041
Ethylbenzene	0.0022	0.0044	11.55	23.1	2.96	5.91	0.0021	0.0041
Xylene	0.0044	0.0088	23.00	46.30	5.90	11.8	0.0100	---
m-p-xylene	0.0044	0.0088	23.00	46.30	5.90	11.8	0.0041	0.0082
o-xylene	0.0022	0.0044	11.55	23.1	2.96	5.91	0.0021	0.0041
Toluene	0.013	---	11.55	23.1	2.96	5.91	0.009	---
Total BTEX	0.0307		69.2		17.74		0.0194	
Naphthalene	0.0937	---	2620.00	---	479.0	---	0.269	---
Acetone	0.0442	0.0883	232	463	59.0	118	0.041	0.082
n-Butylbenzene	0.0022	0.0044	11.55	23.1	2.96	5.91	0.0021	0.0041
sec-butylbenzene	0.0022	0.0044	11.55	23.1	2.96	5.91	0.0021	0.0041
Isopropylbenzene	0.0022	0.0044	11.55	23.1	2.96	5.91	0.0021	0.0041
p-Isopropyltoluene	0.0022	0.0044	11.55	23.1	2.96	5.91	0.0021	0.0041
methylene chloride	0.0089	0.0177	46.3	92.5	11.8	23.6	0.0082	0.0164
n-Propylbenzene	0.0022	0.0044	11.55	23.1	2.96	5.91	0.0021	0.0041
Styrene	0.0022	0.0044	11.55	23.1	2.96	5.91	0.0071	---
1,2,4-trimethylbenzene	0.0022	0.0044	11.55	23.1	2.96	5.91	0.0021	0.0041
1,3,5 trimethylbenzene	0.0022	0.0044	11.55	23.1	2.96	5.91	0.0021	0.0041

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9270445004		9270445005		9270445006		9270445007	
Sample Description	SWR-137		SWR-138		SWR-139		SWR-140	
Type of Sample	Surface Soil		Surface Soil		Surface Soil		Subsurface Soil	
Collection Date	5/27/2010		5/27/2010		5/27/2010		5/27/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0021	0.0042	0.0024	0.0047	0.0020	0.0040	0.0028	0.0056
Ethylbenzene	0.0021	0.0042	0.0024	0.0047	0.0020	0.0040	0.0028	0.0056
Xylene	0.0043	0.0085	0.0047	0.0094	0.0040	0.0079	0.0057	0.0113
m-p-xylene	0.0043	0.0085	0.0047	0.0094	0.0040	0.0079	0.0057	0.0113
o-xylene	0.0021	0.0042	0.0024	0.0047	0.0020	0.0040	0.0028	0.0056
Toluene	0.0055	---	0.0024	0.0047	0.0020	0.0040	0.007	---
Total BTEX	0.0161		0.0143		0.012		0.0211	
Naphthalene	0.0175	---	0.0049	---	0.0020	0.0040	0.148	---
Acetone	0.0423	0.0846	0.0472	0.0943	0.0397	0.0794	0.057	0.113
n-Butylbenzene	0.0021	0.0042	0.0024	0.0047	0.0020	0.0040	0.0028	0.0056
sec-butylbenzene	0.0021	0.0042	0.0024	0.0047	0.0020	0.0040	0.0028	0.0056
Isopropylbenzene	0.0021	0.0042	0.0024	0.0047	0.0020	0.0040	0.0028	0.0056
p-Isopropyltoluene	0.0021	0.0042	0.0024	0.0047	0.0020	0.0040	0.0028	0.0056
methylene chloride	0.0085	0.0169	0.0095	0.0189	0.0080	0.0159	0.0113	0.0226
n-Propylbenzene	0.0021	0.0042	0.0024	0.0047	0.0020	0.0040	0.0028	0.0056
Styrene	0.0021	0.0042	0.0024	0.0047	0.0020	0.0040	0.0028	0.0056
1,2,4-trimethylbenzene	0.0021	0.0042	0.0024	0.0047	0.0020	0.0040	0.0028	0.0056
1,3,5 trimethylbenzene	0.0021	0.0042	0.0024	0.0047	0.0020	0.0040	0.0028	0.0056

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9270445008		9270445009		9270445010		9270445011	
Sample Description	SWR-141		SWR-142		SWR-143		SWR-144	
Type of Sample	Surface Soil		Surface Soil		Surface Soil		Surface Soil	
Collection Date	5/27/2010		5/27/2010		5/27/2010		5/27/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
Ethylbenzene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
Xylene	0.0042	0.0083	0.0048	0.0095	0.0045	0.0089	0.0046	0.0091
m-p-xylene	0.0042	0.0083	0.0048	0.0095	0.0045	0.0089	0.0046	0.0091
o-xylene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
Toluene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
Total BTEX	0.0126		0.0144		0.0137		0.0138	
Naphthalene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
Acetone	0.420	0.830	0.135	---	0.171	---	0.127	---
n-Butylbenzene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
sec-butylbenzene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
Isopropylbenzene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
p-Isopropyltoluene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
methylene chloride	0.0083	0.0166	0.0095	0.0189	0.0089	0.0178	0.0091	0.0181
n-Propylbenzene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
Styrene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
1,2,4-trimethylbenzene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045
1,3,5 trimethylbenzene	0.0021	0.0041	0.0024	0.0047	0.0023	0.0045	0.0023	0.0045

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9270445012		9270445013		9271028003		9271028004	
Sample Description	BR-145		BR-146		SWR-147		SWR-148	
Type of Sample	Subsurface Soil		Subsurface Soil		Surface Soil		Surface Soil	
Collection Date	5/27/2010		5/27/2010		6/7/2010		6/7/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
Ethylbenzene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
Xylene	0.0046	0.0091	0.0053	0.0105	0.0051	0.0101	0.0049	0.0098
m-p-xylene	0.0046	0.0091	0.0053	0.0105	0.0051	0.0101	0.0049	0.0098
o-xylene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
Toluene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
Total BTEX	0.0138		0.0161		0.0155		0.0149	
Naphthalene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
Acetone	0.046	0.091	0.053	0.105	0.051	0.101	0.0497	0.0984
n-Butylbenzene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
sec-butylbenzene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
Isopropylbenzene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
p-Isopropyltoluene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
methylene chloride	0.0091	0.0182	0.0105	0.021	0.0102	0.0203	0.0098	0.0197
n-Propylbenzene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
Styrene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
1,2,4-trimethylbenzene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049
1,3,5 trimethylbenzene	0.0023	0.0046	0.0027	0.0053	0.0026	0.0051	0.0025	0.0049

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	9271028005		9271028006		9271028007		9271028	
Sample Description	SWR-149		SWR-150		BR-151		BR-152	
Type of Sample	Surface Soil		Surface Soil		Subsurface Soil		Subsurface Soil	
Collection Date	6/7/2010		6/7/2010		6/7/2010		6/7/2010	
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
Ethylbenzene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
Xylene	0.0051	0.0101	0.0045	0.0090	0.0049	0.0098	0.0042	0.0084
m-p-xylene	0.0051	0.0101	0.0045	0.0090	0.0049	0.0098	0.0042	0.0084
o-xylene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
Toluene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
Total BTEX	0.0155		0.0137		0.0149		0.0126	
Naphthalene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
Acetone	0.051	0.101	0.0451	0.0901	0.0491	0.0981	0.0420	0.0839
n-Butylbenzene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
sec-butylbenzene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
Isopropylbenzene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
p-Isopropyltoluene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
methylene chloride	0.0101	0.0202	0.009	0.018	0.0098	0.0196	0.0084	0.0168
n-Propylbenzene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
Styrene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
1,2,4-trimethylbenzene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042
1,3,5 trimethylbenzene	0.0026	0.0051	0.0023	0.0045	0.0025	0.0049	0.0021	0.0042

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.

Non-detect concentrations are shown as one-half of the detection limit

Analytical results exceeding SRG's are shown in red.

Table 3  
HICKORY MGP SITE  
VOC Analytical Results Summary

Sample ID	SRG		SRG					
Sample Description	Surface Soil		Subsurface Soil					
Type of Sample								
Collection Date								
	Analysis Results (mg/kg)	Detection Limit (mg/kg)						
Benzene	2.2		25					
Ethylbenzene	12,645		6,119					
Xylene	1,608		17855.000					
m-p-xylene								
o-xylene								
Toluene								
Total BTEX	#VALUE!		#VALUE!		#VALUE!		#VALUE!	
Naphthalene								
Acetone	340,156		206,581					
n-Butylbenzene	9,436		4,513					
sec-butylbenzene	7,394		3,472					
Isopropylbenzene	7,237		3,393					
p-Isopropyltoluene	53,760		57,358					
methylene chloride								
n-Propylbenzene	8,122		3,839					
Styrene	30,681		43,061					
1,2,4-trimethylbenzene	173		76					
1,3,5 trimethylbenzene	122		539					

Note: "---" in the Detection Limit column indicates that an actual detected value is reported in the Analysis column.  
Non-detect concentrations are shown as one-half of the detection limit

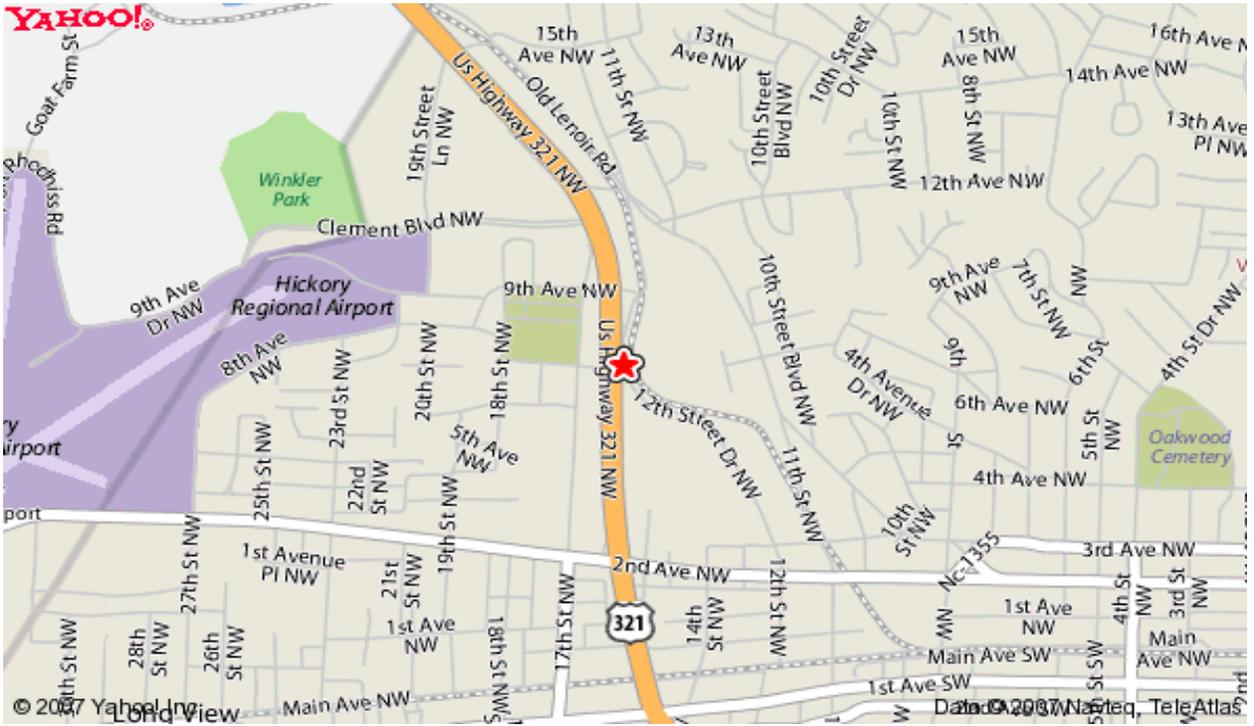
Analytical results exceeding SRG's are shown in red.

**Table 4 Summary of Analytical Results - Groundwater Samples**

Hickory MGP Site  
625 12th Street Drive NW  
Hickory, North Carolina  
Shield Job No. 1070285

Analytical Method(s) ----->		EPA Method 8270								EPA Method 8260/6200B										EPA 2320B	EPA 353.2	EPA 351.2	40 CFR 503	EPA 300	4500 CNE	Field DO	EPA 6010			VPH			
Constituent of Concern ----->		Acenaphthene	Acenaphthylene	Anthracene	Dibenzofuran	Fluorene	1-Methyl naphthalene	2-Methyl naphthalene	Phenanthrene	Naphthalene	Naphthalene	Benzene	n-Butylbenzene	IPE (diiso propylether)	Ethylbenzene	Isopropylbenzene	n-Propylbenzene	Methyl Tert Butyl Ether	1,3,5-Trimethylbenzene	Total Xylenes	Alkalinity	Nitrate	Nitrogen (TKN)	Nitrogen	Sulfate	Cyanide	Dissolved Oxygen (field)	Lead	Iron	Manganese	Aliphatic (C09-C08)	Aliphatic (C09-C12)	Aromatic (C09-C10)
Well ID	Date Collected	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
15A NCAC 2L.0202 Standard ----->		80	200	2000	28	280	NE	14	210	6	6	1	70	70	600	70	70	20	350	500	NE	NE	NE	NE	NE	70	NE	15	NE	NE	420	4,200	210
15A NCAC 2L.0115 Gross Contaminant Level ----->		2,120	1,965	2,100	28,000	950	NE	12,500	410	15,000	15,000	5,000	6,900	70,000	84,500	25,000	30,000	20,000	25,000	87,500	NE	NE	NE	NE	NE	NE	15,000	NE	NE	NE	NE	NE	
MW-1	1/23/2008	ND	ND	ND	ND	ND	760	1,000	ND	3,220	94,500	2730	17,700	ND	64,800	25,300	89,500	NA	36,500	338,200	50.6	ND	1	NA	ND	NA	NM	NA	51,400	6,360	NA	NA	NA
	4/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,110	265	ND	ND	5,040	121	362	ND	958	29,390	41.3	0.67	1.4	1.4	ND	NA	0.14	11.7	16,300	4,820	47,600	191,000	14,300
MW-2	4/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	408	1.9	ND	0.54	1,420	71.3	186	ND	828	3,700	90.0	ND	ND	ND	NA	0.80	ND	23,800	6,160	2,310	33,500	3,520	
MW-3	4/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.7	1.3	ND	NA	ND	NA	5.16	NA	209	10.6	ND	ND	ND
MW-4	4/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	473	674	ND	336	1,340	36.7	90.8	11.4	371	6,330	85.8	ND	0.77	0.77	ND	NA	0.13	ND	43,400	7,360	6,320	47,300	44,800
MW-5	4/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5	13.6	ND	11.7	ND	2.9	0.90	ND	ND	ND	8.9	ND	ND	ND	NA	0.14	ND	13,200	2,970	112	551	138	
MW-6	1/23/2008	ND	ND	ND	ND	ND	ND	14,500	ND	19,500	1,160	544	ND	320	4,500	ND	568	NA	1,170	16,870	88.8	ND	3.9	NA	ND	NA	NM	NA	147,000	16,000	NA	NA	NA
	4/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	690	279	ND	129	2,070	72.6	276	ND	867	6,060	102	ND	0.76	0.76	ND	NA	0.16	6.5	47,000	22,900	6,060	68,100	9,890
MW-8	4/15/2011	ND	ND	ND	ND	ND	ND	ND	ND	20.3	50.6	ND	NA	ND	ND	NA	NA	ND	NA	ND	26.5	2.9	ND	ND	29	0.0073	0.16	NA	188	1,810	NA	NA	NA
MW-9	4/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	ND	NA	6.58	ND	12,800	459	NA	NA	NA
MW-10 (formerly W-1)	1/23/2008	15.5	96.1	13.1	21.5	76.9	365	339	84.1	1,480	3,550	567	ND	ND	ND	ND	ND	NA	ND	172.5	7.8	2.5	2.1	NA	5.6	NA	NM	NA	16,300	3,860	ND	ND	ND
	4/15/2011	16.2	115	ND	28.9	90.4	338	353	101	1,520	5,480	196	NA	ND	ND	NA	NA	ND	NA	ND	6.4	2.0	ND	ND	7.2	ND	0.17	NA	57	4,100	NA	NA	NA
MW-11 (formerly W-2)	1/23/2008	ND	29.2	ND	16	43.8	296	358	17.6	1,170	5,530	1,380	ND	ND	ND	ND	ND	NA	61.5	395	9.3	0.28	0.99	NA	ND	NA	NM	NA	1,550	1,110	ND	ND	ND
	4/15/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.5	35.3	NA	ND	ND	NA	NA	ND	NA	3.7	8.5	0.84	ND	ND	ND	ND	8.28	NA	ND	291	NA	NA	NA
MW-12	4/15/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	ND	NA	ND	35.0	ND	ND	ND	9.5	ND	2.02	NA	2,080	53	NA	NA	NA
MW-13	4/15/2011	ND	97.2	ND	16.4	52.8	191	317	58.9	1,660	5,240	3,980	NA	ND	ND	NA	NA	ND	NA	469	8.5	0.72	ND	ND	7.0	0.016	4.68	NA	156	780	NA	NA	NA
MW-14	4/15/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	ND	NA	ND	5.3	1.6	ND	ND	6.8	ND	7.4	NA	2,120	484	NA	NA	NA
MW-15	4/15/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA	ND	ND	NA	NA	ND	NA	ND	ND	1.6	ND	1.6	ND	1.6	9.05	NA	3,480	283	NA	NA	NA
MW-16	4/15/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	NA	ND	NA	ND	ND	3.8	ND	ND	23.1	ND	3.68	NA	3,900	721	NA	NA	NA
MW-17	4/15/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	5.9	1.8	ND	ND	ND	ND	6.38	NA	2,450	804	NA	NA	NA

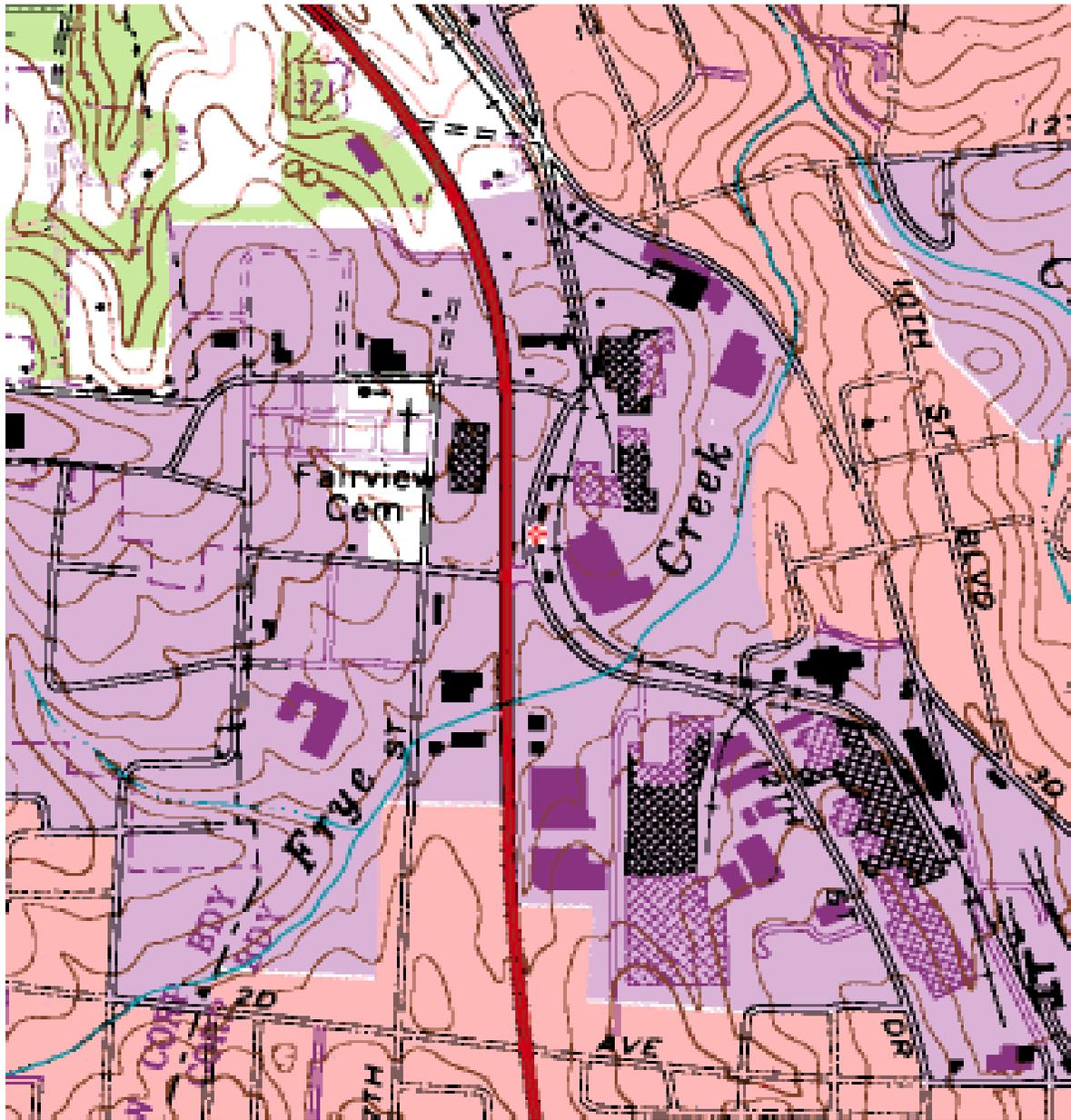
Notes:  
 ug/l = Micrograms per liter.  
 ND = Not detected at or above the method detection limit specified in the laboratory report.  
 NA = Not Analyzed  
 NE = Not Established. For 2L Standards, if constituent detected it is considered over the 2L.  
 Gross Contaminant Level as presented in the NCDENR "Guidelines for Assessment and Corrective Action" Rev. 02/01/08.  
**BOLD** = Above 15A NCAC 2L .0202 Standard or Interim Maximum Allowable Concentration.  
 Shaded Cell = indicates GCL exceeded.  
 15A NCAC 2L.0202 = NCDENR Standard Statute for non-risked based maximum allowable contaminant concentration in groundwater.  
 All other data can be seen in the attached laboratory report.  
 Well MW-7 destroyed



Piedmont Natural Gas  
Hickory MGP Site

Figure 1

**Site Location**



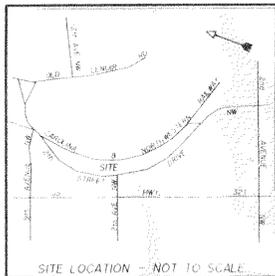
0 0.1 0.2 0.3 0.4 0.5 km  
 0 0.09 0.18 0.27 0.36 0.48 mi

35.7426°N, 81.3657°W (NAD27)  
 USGS Hickory (NC) Quadrangle  
 Projection is UTM Zone 17 NAD83 Datum

M=-6.842  
 G=-0.214

Piedmont Natural Gas  
 Hickory MGP Site  
 Figure 2  
 Topographic Map

**FIGURE 3**  
**SITE SURVEY**



- NOTES
1. AREA BY COORDINATE METHOD.
  2. WATER BY CITY OF HICKORY.
  3. SEWER BY CITY OF HICKORY.
  4. THIS PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS, RIGHTS OF WAY, COVENANTS, RESTRICTIONS, CONDITIONS & RESERVATIONS OF RECORD AFFECTING SUBJECT PROPERTY.
  5. LEGEND:
    - OVERHEAD UTILITY LINES
    - CHAIN LINK FENCE
    - GAS VALVE
    - GAS METER
    - UNDERGROUND GAS MARKER
    - MONITORING WELL
    - WATER METER
    - WATER VALVE
    - UTILITY POLE
    - LIGHT POLE
    - PROPANE TANK

MONITORING WELLS

MONITORING WELL #11	TOP CASING - 1064.14	TOP PLATE - 1064.73
MONITORING WELL #2	TOP CASING - 1065.99	TOP PLATE - 1066.17
MONITORING WELL #3	TOP CASING - 1063.19	TOP PLATE - 1063.54
MONITORING WELL #4	TOP CASING - 1062.00	TOP PLATE - 1062.24
MONITORING WELL #5	TOP CASING - 1062.28	TOP PLATE - 1062.49
MONITORING WELL #6	TOP CASING - 1059.58	TOP PLATE - 1059.83
MONITORING WELL #7	DESTROYED	
MONITORING WELL #8	TOP CASING - 1058.95	TOP PLATE - 1059.61
MONITORING WELL #9	TOP CASING - 1063.33	TOP PLATE - 1063.64
MONITORING WELL #10	TOP CASING - 1057.20	TOP PLATE - 1057.68
MONITORING WELL #11	TOP CASING - 1052.15	TOP PLATE - 1052.55
MONITORING WELL #12	TOP CAP - 1051.55	TOP PLATE - 1051.78
MONITORING WELL #13	TOP CAP - 1052.70	TOP PLATE - 1053.16
MONITORING WELL #14	TOP CAP - 1044.26	TOP PLATE - 1044.54
MONITORING WELL #15	TOP CAP - 1063.50	TOP PLATE - 1064.01
MONITORING WELL #16	TOP CAP - 1043.31	TOP PLATE - 1043.52
MONITORING WELL #17	TOP CAP - 1043.19	TOP PLATE - 1043.43

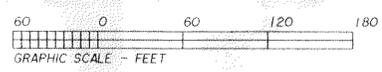
COURSE	BEARING	DISTANCE
L1	S 59°03'36"W	35.71'
L2	S 06°34'36"W	43.62'
L3	S 13°08'53"W	29.46'
L4	S 17°41'09"E	52.02'
L5	S 29°42'45"E	64.20'
L6	S 60°32'24"E	88.50'

REVISED: MAY 6th, 2011:  
MONITORING WELLS 12 thru 17 ELEVATIONS.

REVISED: MARCH 4th, 2008:  
MONITORING WELLS ELEVATIONS.

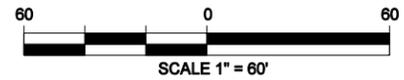
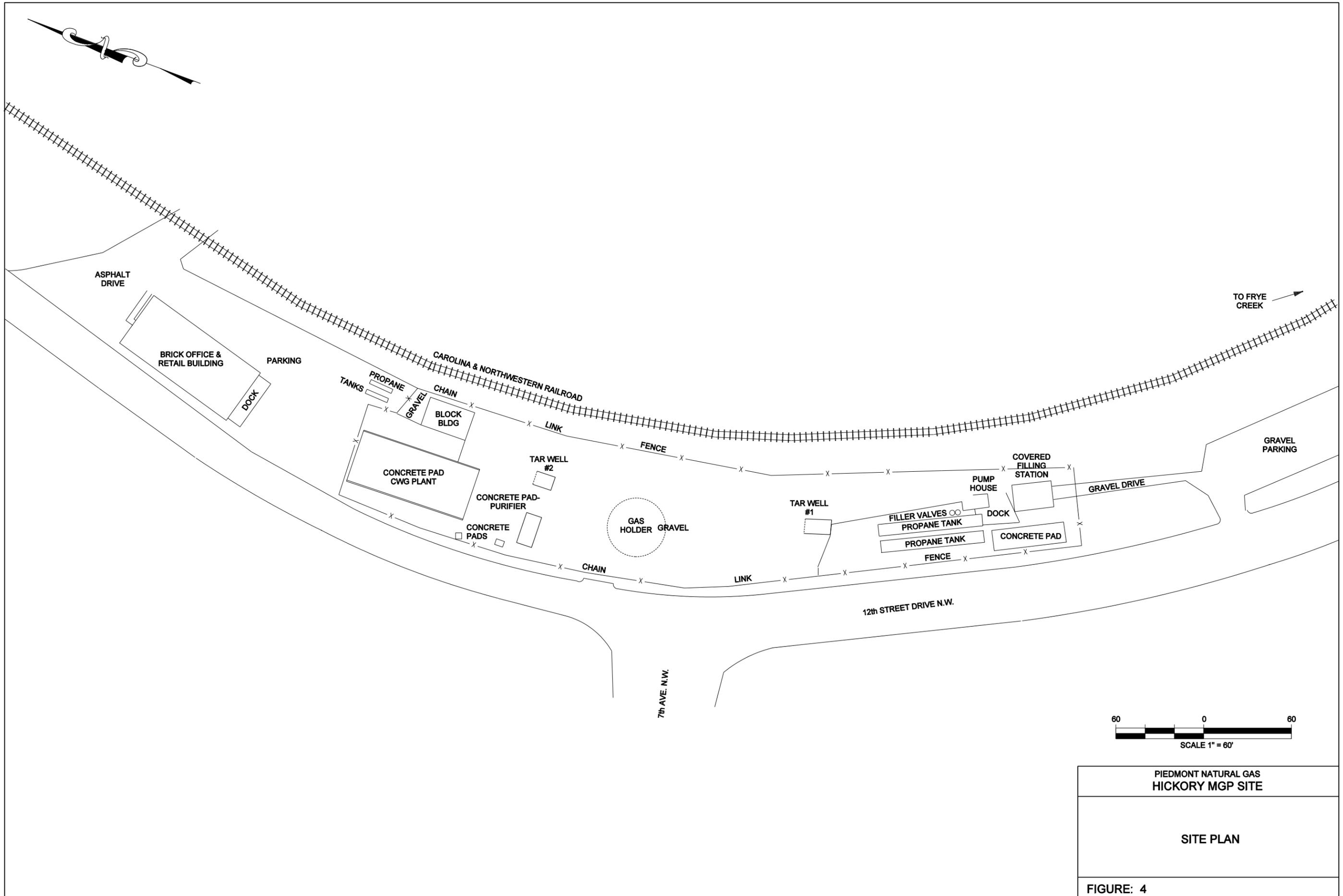
REVISED: SEPTEMBER 24th, 2007:  
TOPOGRAPHICAL SURVEY.

I, JAMES M. BRADSHAW, CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 2220, PAGE 111); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN DEED BOOK \_\_\_\_\_, PAGE \_\_\_\_\_; THAT THE RATIO OF PRECISION AS CALCULATED IS 1:34,069; THAT THE RATIO OF PRECISION AS WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL, THIS 2nd DAY OF AUGUST, A.D., 2007.



4.5327 Acres  
DEED BOOK 2220, PAGE 111

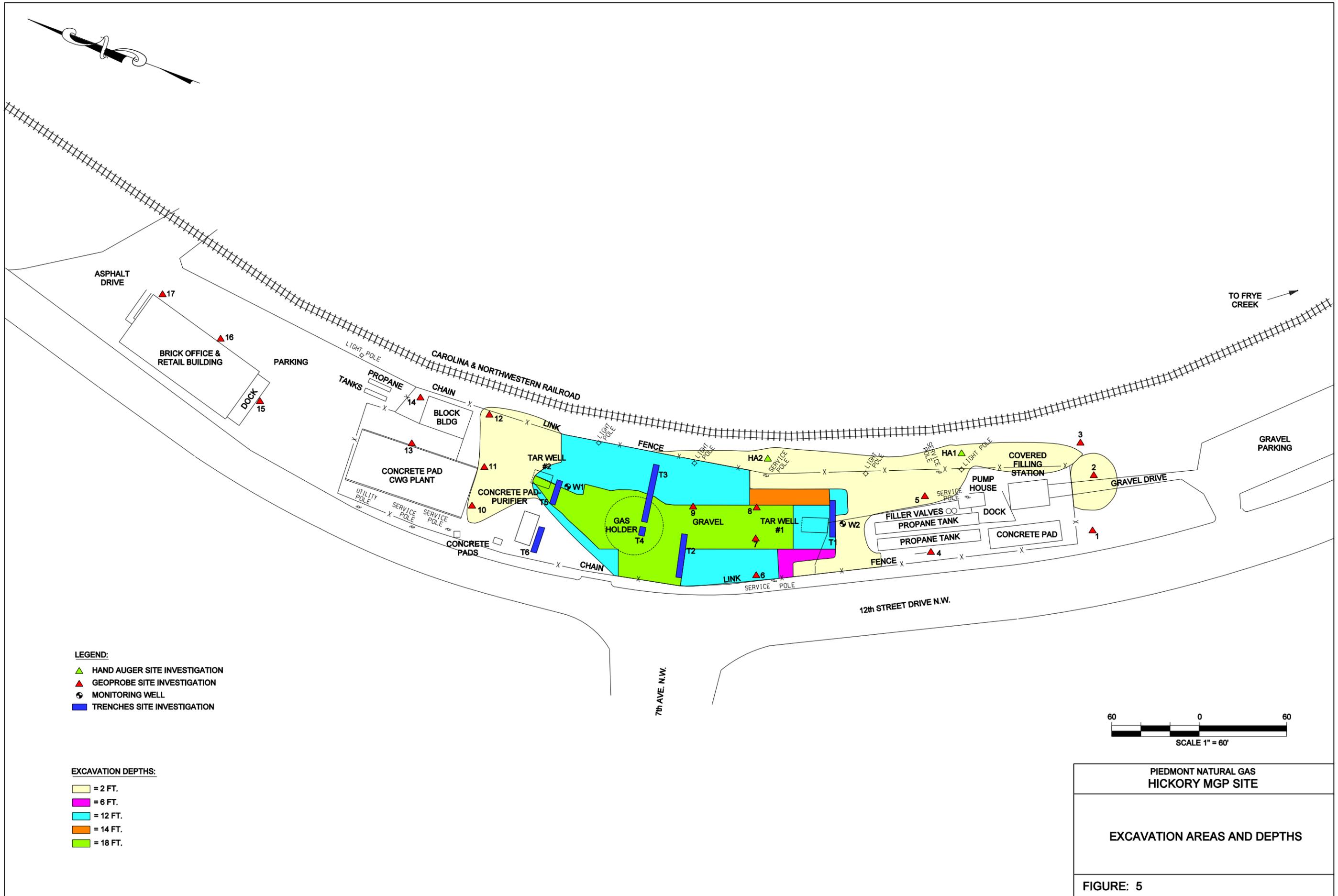
PROPERTY OF: <b>RETAIL PROPANE COMPANY, LLC</b> 725 12th STREET DRIVE N.W., HICKORY, 28601 HICKORY TOWNSHIP, CATAWBA COUNTY, NORTH CAROLINA			
DATE: 8-2-07	FIELD CREW: JB & KJW	FIELD BOOK: 222	
SCALE: 1" = 60'	CAD: 2k1	APPROVED BY: JMB	
PIN: 2793-16-83-1473		TAX CODE: 49H-2-15	
DEED BK. 2220, PG. 111		FOUND IRON: ○	
PLAT BK. _____, PG. _____		SET IRON: ○	
SURVEYED BY: <b>BRADSHAW SURVEYING COMPANY</b> P. O. BOX 2861, HICKORY, N.C. 28603 PH: 828-322-7445, FAX: 322-6160, EMAIL: bradshawsurv@vwi.net			
DATA FILE:	934	MAP FILE:	934

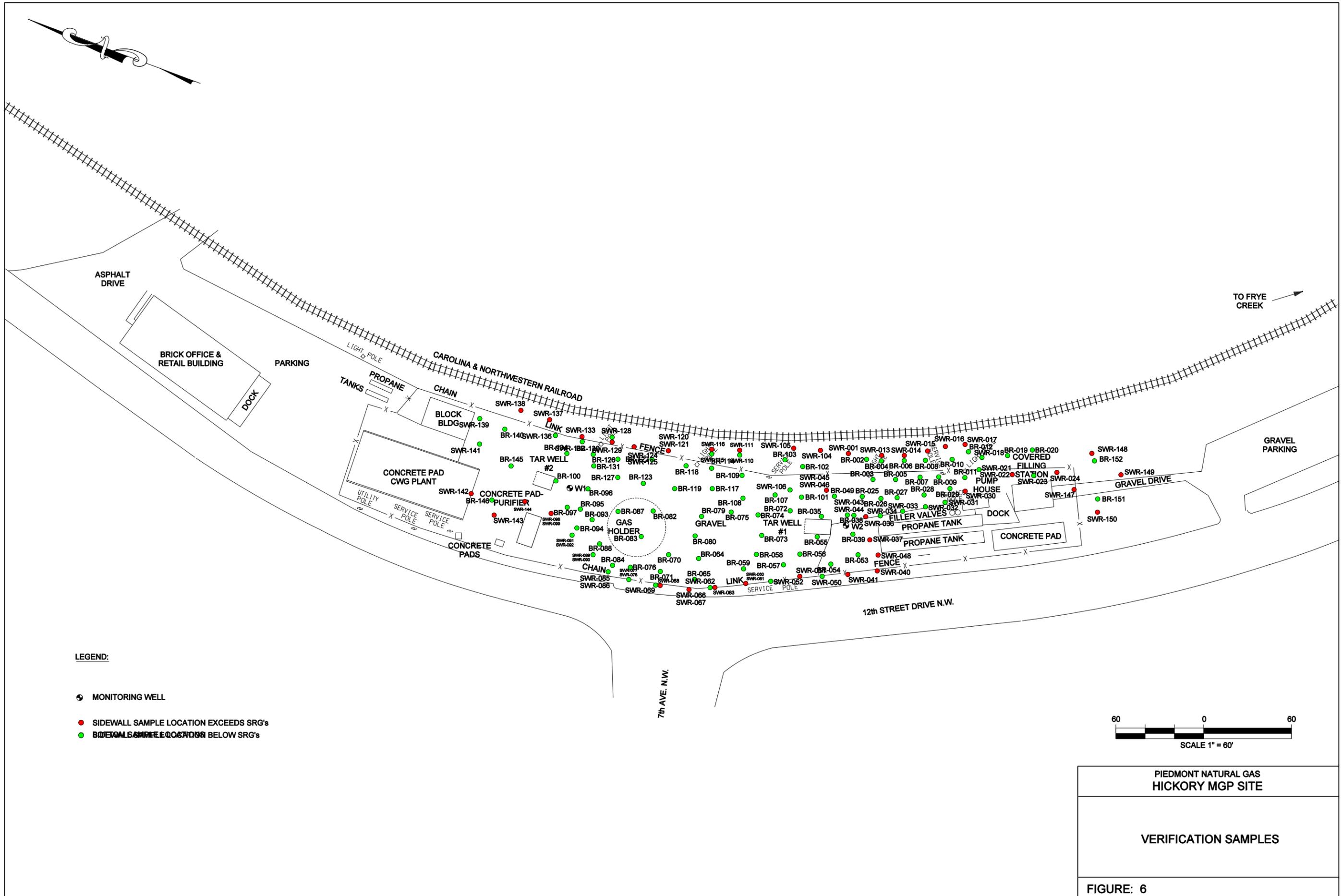


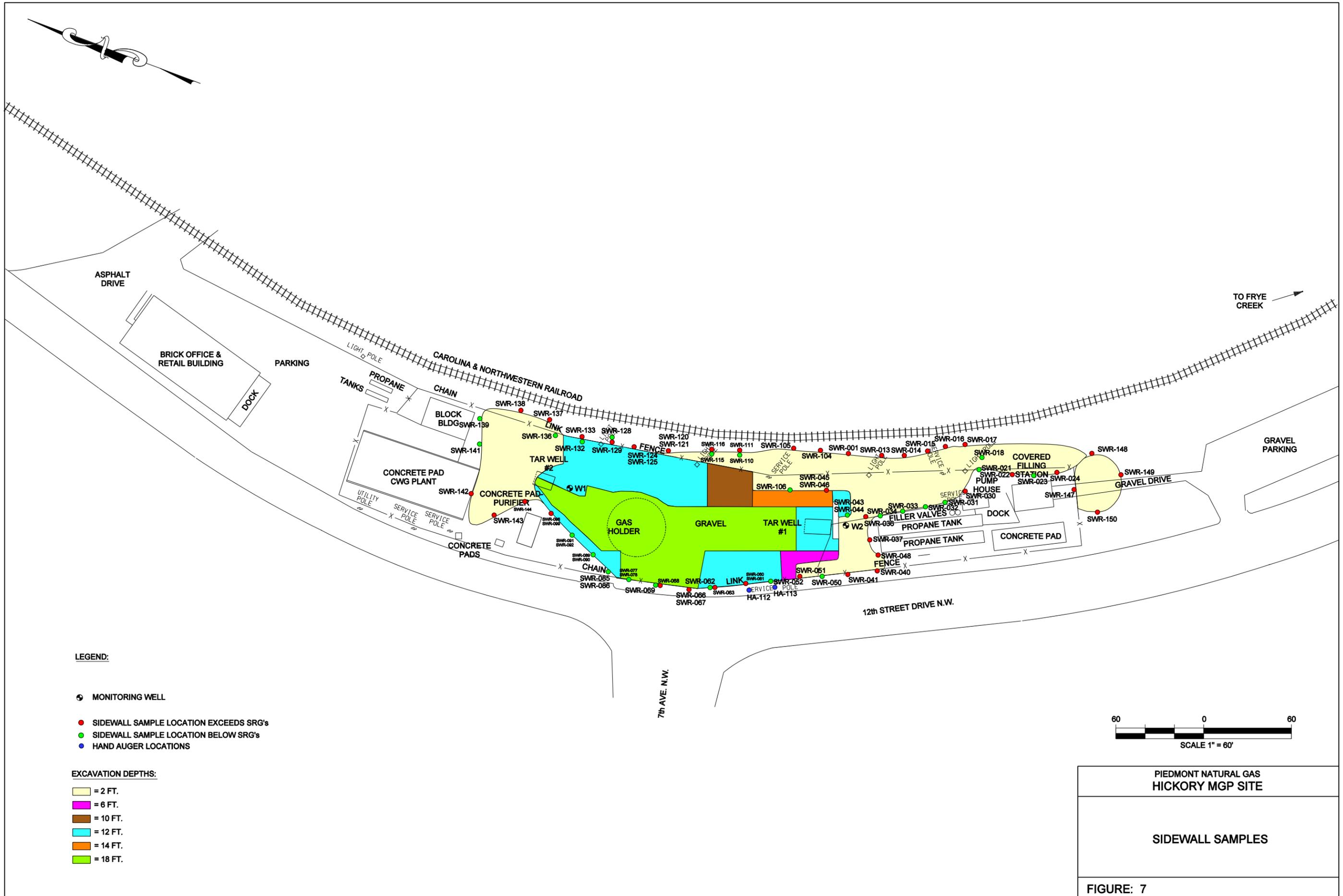
PIEDMONT NATURAL GAS  
 HICKORY MGP SITE

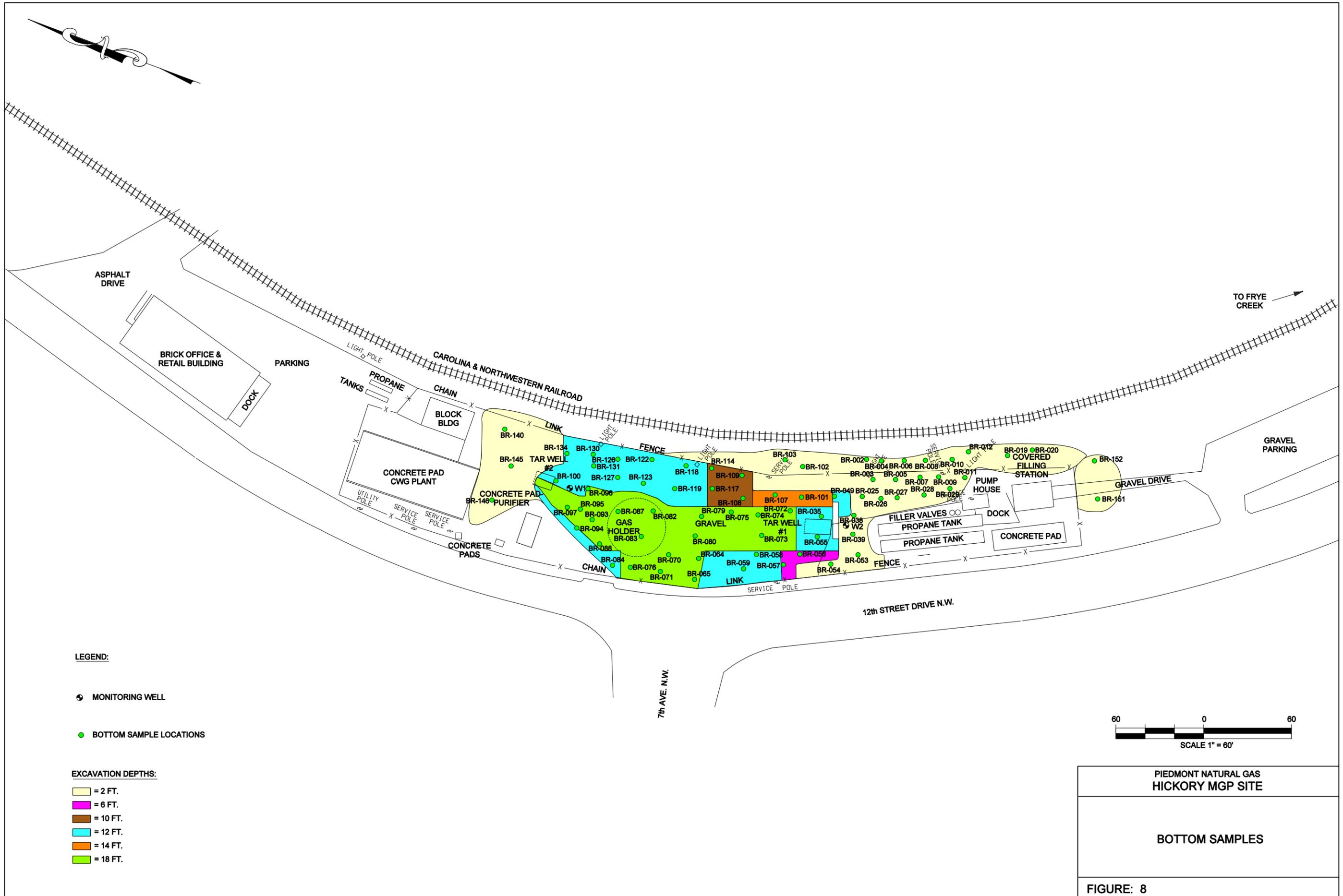
SITE PLAN

FIGURE: 4

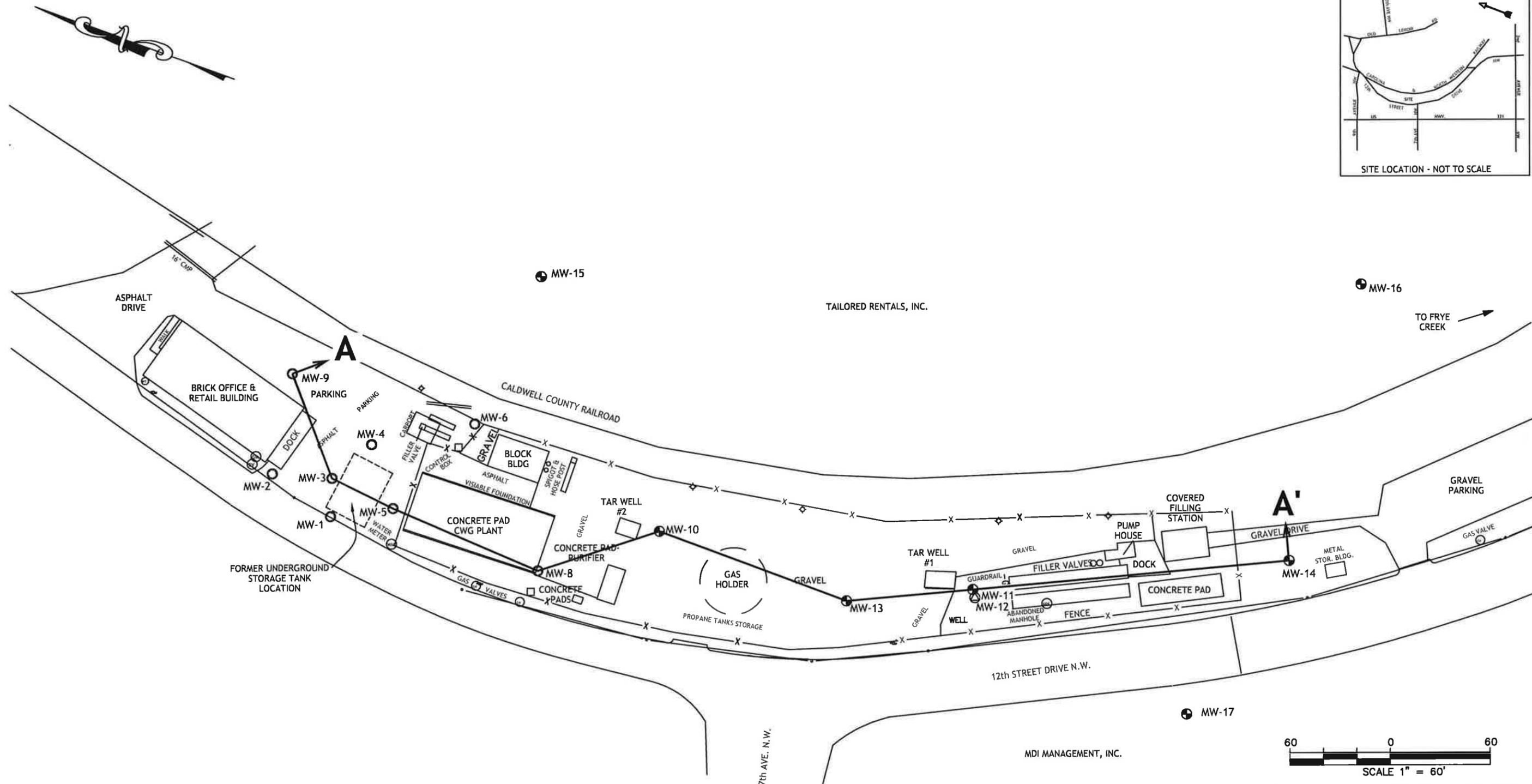
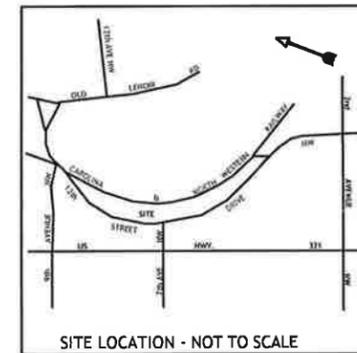








H:\Projects\2007\1070285-01 Piedmont-Hickory MGP\Figures\SITE MAP AUG 2011 PHASE 2 REPORT.dwg

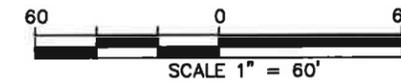


**LEGEND**

- ⊕ MONITORING WELLS INSTALLED FOR MGP INVESTIGATION
- MONITORING WELLS INSTALLED FOR PREVIOUS UST ASSESSMENT
- ⊗ DEEP MONITORING WELL

**A—A'** SUBSURFACE PROFILE LINE see Figure 13

**NOTES:**  
 1. SITE SURVEY PROVIDED BY BRADSHAW SURVEYING.  
 2. MGP FEATURES PROVIDED BY R.C. ROBERTS CONSULTING.

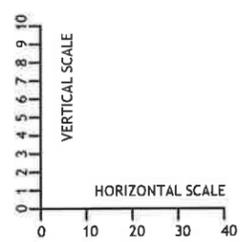
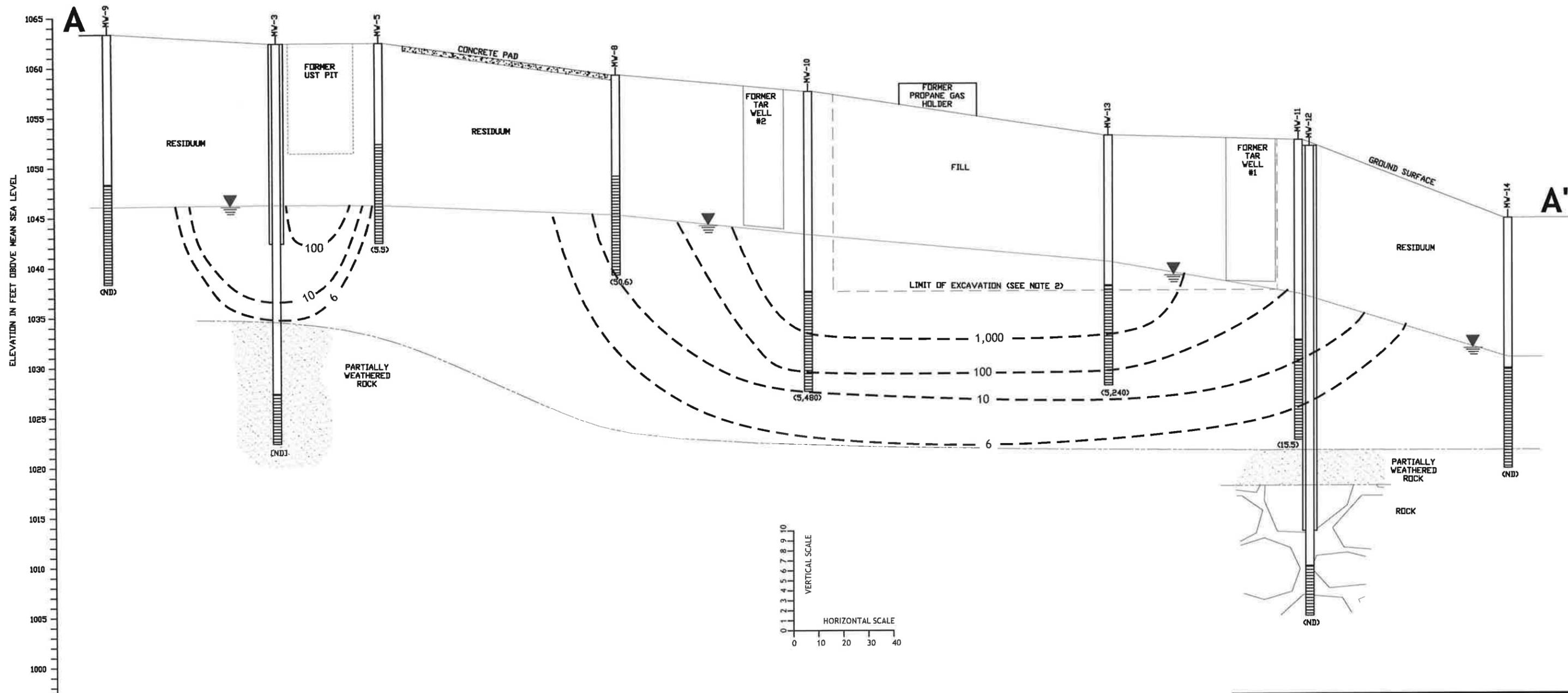


		4301 TAGGART CREEK ROAD CHARLOTTE, NC 28208 704-394-6913 704-394-6968 fax www.shieldengineering.com	
		<b>WELL LOCATIONS</b> <b>HICKORY MGP SITE</b> 625 12TH STREET DRIVE NW HICKORY, NORTH CAROLINA SHIELD #1070285-02	
DATE :	08/17/11	DRAWN BY :	RBS
SCALE :	AS SHOWN	FIGURE :	9









**LEGEND**

- (ug/L) MICROGRAMS PER LITER
- (5,240) NAPHTHALENE CONCENTRATION (ug/L)
- [ND] NAPHTHALENE CONCENTRATION (ug/L) NOT USED IN CONTOURING
- - - - - NAPHTHALENE ISOCONCENTRATION LINE (ug/L)
- (ND) NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT SPECIFIED IN THE LABORATORY REPORT
- - - - - APPROXIMATE TRANSITION OF RESIDUUM TO PARTIALLY WEATHERED ROCK
- ▼ GROUNDWATER ELEVATION
- WELL CASING
- WELL RISER
- WELL SCREEN

- NOTES:**
1. GROUNDWATER SAMPLES COLLECTED ON 4/15/11.
  2. MGP SOURCE AREAS EXCAVATED TO A DEPTH OF APPROXIMATELY 15 FEET BELOW GROUND SURFACE IN 2010.

	4301 TAGGART CREEK ROAD CHARLOTTE, NC 28208 704-394-8913 704-394-8968 fax www.shieldengineering.com
<b>CROSS-SECTION A-A'</b>	
<b>HICKORY MGP SITE</b> 625 12TH STREET DRIVE NW HICKORY, NORTH CAROLINA SHIELD #1070285-01	
DATE : 08/17/11	DRAWN BY : RBS
SCALE : AS SHOWN	FIGURE : 13