**Groundwater & Environmental Services, Inc.**

2142 Priest Bridge Court • Suite 1 • Crofton, MD 21114 • (410) 721-0047 • Fax (410) 721-3733

March 31, 2006

Mr. Forest Arnold
Maryland Department of the Environment
Oil Control Program
1800 Washington Boulevard
Baltimore, Maryland 21230-1719

Re: **Corrective Action Plan Addendum**
Shell Service Station #100558
11800 Parklawn Drive
Rockville, Maryland
MDE Case #2006-0124-MO1

Dear Mr. Arnold:

Groundwater and Environmental Services, Inc. (GES), on behalf of Motiva Enterprises LLC (Motiva), is submitting the attached Corrective Action Plan Addendum.

Should you have any questions or require additional information, please feel free to contact the undersigned at (410) 721-0047, extension 222.

Sincerely,

A. Ashley Bell
Project Manager

Carianne M. King, PE
Project Manager/Engineer

Enclosure

c: Doug Weimer, Motiva
Yolande Norman, MDE (two copies on CD)
Marc Fleischaker, WRIT
Ken Maderais, Montgomery County Department of Environmental Protection
Jay Beatty, Montgomery County Health Department
File, GES

# CORRECTIVE ACTION PLAN ADDENDUM

**SHELL SERVICE STATION #100558**
**MDE CASE #2006-0124-MO1**
11800 PARKLAWN DRIVE
ROCKVILLE, MARYLAND

*Prepared for:*

**Motiva Enterprises LLC**
4094 Majestic Lane, PMB 224
Fairfax, Virginia

*Prepared by:*

**GROUNDWATER & ENVIRONMENTAL SERVICES, INC.**
2142 Priest Bridge Ct, Suite 1
Crofton, Maryland

March 2006

# CORRECTIVE ACTION PLAN ADDENDUM

Shell Service Station
#100558
11800 Parklawn Drive
Rockville, Maryland 20852

*Prepared for:*

Motiva Enterprises LLC
4094 Majestic Lane
PMB 224
Fairfax, Virginia 22033

March 2006


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Project Manager

Christopher Mulry, PG
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*Reviewed by:*

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## 1.0 INTRODUCTION

Groundwater & Environmental Services, Inc. (GES), on behalf of Motiva Enterprises, LLC (Motiva), is pleased to submit a Corrective Action Plan Addendum (CAPA) for the Shell Service Station #100558 located at 11800 Parklawn Drive in Rockville, Maryland (site). A site location map is included as **Figure 1**. A Site Characterization Report and Corrective Action Plan (SCR/CAP) were submitted to the Maryland Department of the Environment (MDE) in December 2005. The SCR/CAP was approved by the MDE in a letter dated February 10, 2006 with modifications as follows:

- Additional on-site monitoring wells must be installed to evaluate the effectiveness of the recovery operations;
- The MDE reserves the right to require additional activities be conducted off-site and other remedial technologies based on additional data that may be presented regarding extent of capture from the remediation system and the effect on future off-site impacts;
- Information regarding extent of capture by the remediation system must be collected and provided to the MDE as a substitute for a pilot testing report. The information will also be used to assess the future success of the remediation system;
- Contact the Washington Suburban Sanitary Commission (WSSC) regarding future plans for line upgrades and repairs in the vicinity of the site;
- Address additional detailed comments based on review of the December 2005 CAP; and
- Completion of this report.

A copy of the February 2006 letter from the MDE is included in **Appendix A**.

## 2.0 BACKGROUND

### 2.1 Site Location

The site is located at 11800 Parklawn Drive, Rockville, Montgomery County, Maryland. Access to the site is via two entrances on the eastern side of the site. Based on parcel information provided by the Maryland Department of Assessments and Taxation, the site is assessed to be 19,727 square feet with one enclosed area (building) of 1,770 square feet. The legal identifier for the site is Map HQ22, Parcel N491. The site is situated at an elevation approximately 260 feet above mean sea level and the topography slopes from the southwest to the northeast.

### 2.2 Current Features

The building is a single story concrete block structure on a poured concrete slab. The building includes a three bay garage, office, restrooms and retail space. There are currently six underground storage tanks (USTs) located at the Service station. Three 10,000-gallon gasoline USTs and one 10,000 diesel UST were installed in 1988. There are four gasoline dispensers located along the east side of the site; the diesel dispenser is located within the area of the four gasoline dispensers. The existing underground storage tank (UST) system is monitored by a Veeder-Root tank monitoring system located in the retail space. In addition, one 550-gallon used oil and one 1,000-gallon heating oil UST are also located on the west side of the site

building. One 275-gallon motor oil aboveground storage tank (AST) was identified on the south side of the site building. **Figure 2** identifies the location of the current site features.

## 2.3 Previous Environmental Investigations

In 1988, a limited site assessment was conducted at the site. The findings indicate that adsorbed and dissolved phase impacts were detected. Based on low dissolved levels, no light non-aqueous phase liquid (LNAPL), and the lack of sensitive receptors, closure was requested.

Impacts were identified in September 1999 during line upgrades. Three monitoring wells were installed in October 1999 and a SCR was prepared and submitted to the MDE in February 2000. The MDE opened case #2000-0522-MO1. Two additional monitoring wells were installed in June 2000 and quarterly sampling and reporting was conducted until March 2002 when the monitoring wells were abandoned and the case was closed.

In August 2005, during a periodic annual inspection of the UST system and a review of inventory records, a potential gasoline release was identified. The records indicate that the petroleum release may have been occurring since approximately June 2005. Inventory reconciliation by Motiva (confirmed by the MDE) indicated that approximately 29,000 gallons of gasoline may have been released to the subsurface. Subsequent inspection of the UST system indicated that a faulty element (regular gasoline UST) on the submersible turbine pump was found to be leaking. A subsurface investigation was initiated on August 12, 2005. The following outlines activities conducted to date:

- A total of 19 monitoring wells and four soil gas monitoring points have been installed at the site and off-site in the down gradient (northeast) direction.
- LNAPL was detected during the installation of monitoring wells MW-1, MW-3 and MW-4, at apparent thicknesses of up to six feet. Interim remedial activities included vacuum truck and groundwater pumping activities. Groundwater recovery consisted of groundwater recovery pumps in up to six wells on site.
- Interim remedial action measures also included operation of a soil vapor extraction (SVE) blower to address vapors and control vapor migration in the storm sewer system.
- Vapor monitoring of the storm and sanitary sewer lines.
- Storm sewer investigation activities were implemented to investigate the integrity of the storm sewer. A camera was directed into each of two manholes and the storm sewers were visually observed for evidence of damage (i.e., joints, cracks) and any evidence of petroleum product.
- Indoor and outdoor air monitoring was conducted at the school and commercial properties adjacent to the site. Soil gas samples were also collected from four soil gas monitoring points (VP-1 through VP-4). An evaluation of the data indicated that the background (exterior upwind) analytical data was similar to the concentrations detected in the air samples inside the building.
- Based on the detection of a sheen on the surface water at the headwaters of an unnamed tributary of Rock Creek (storm water outfall), stream sampling was initiated and continues on a quarterly basis. Overall, an evaluation of the data indicates decreasing concentrations from the initial sampling.
- A combined SCR/CAP was submitted in December 2005.
- CAP implementation activities were initiated in November 2005 consisting of trenching and piping for installation of a permanent groundwater recovery and soil vapor extraction system.

Section 4.0 of this report provides a more detailed summary of activities completed since November 2005.

## 3.0 RESPONSE TO MDE COMMENTS

**GENERAL COMMENTS:**

(1) Of the eleven (11) on-site wells, nine (9) are proposed for conversion to recovery wells. It does not appear that there are adequate wells to judge the effectiveness of the recovery system. Additional monitoring wells must be installed to evaluate the effectiveness of recovery operations. Please provide the Department with a Work Plan to propose additional well locations.

***Response:*** *To date, the groundwater remediation system is not completely optimized. Based on the emergency nature of the project, the system was operational prior to the final electrical connections for a new power drop. The system is currently operating utilizing power from the station building, however, the available power cannot support the operation of a catalytic oxidizer needed to treat off-gas from the soil vapor extraction (SVE) system. For this reason, the SVE system is operating with vapor-phase granular activated carbon for treatment, however, dilution air is necessary to maintain concentrations below permit levels. In addition, the pump and treat system is also not optimized. The groundwater table will eventually be lowered to address saturated zone impacts, however, until the remaining LNAPL is addressed, lowering of the groundwater table is not recommended. Finally, GES is also awaiting updates to the current Water Appropriation permit to allow for additional groundwater extraction.*

*Therefore, until the remediation system is running optimally, the necessity and/or location of additional on-site monitoring wells cannot be adequately evaluated. Once the system is operating optimally, this evaluation will be conducted.*

*However, GES does recommend installation of two additional off-site monitoring wells to delineate impacts along the storm sewer line. The proposed monitoring wells will be installed by first utilizing direct push methods to evaluate soil quality and lithology. After the soil borings are advanced, two-inch diameter monitoring wells will be installed. Proposed monitoring well locations are depicted in* ***Figure 3****.*

(2) It is unclear at this time the extent of capture from the permanent system and its future effect on off-site contamination. Based on the effectiveness of the system, the Department reserves the right to require additional activities be conducted off-site and possibly other remedial technologies.

***Response:*** *See comment number 1. As discussed above, GES recommends the installation of additional monitoring wells off-site for delineation of dissolved-phase impacts along the storm sewer. However, we also understand that some additional remedial activities may be required to address off-site impacts.*

(3) Due to the rapid response to the emergency situation at this site, formal pilot testing was not possible. Information on static levels after shutdown of the temporary system has been collected. However, during startup of the permanent system, information must be collected on the area of influence from pumping and vacuum at each well. Please summarize information on the extent of

capture by the permanent system and submit to the Oil Control Program as a substitute for a pilot testing report. This information will be important in assessing the future success of the permanent system.

***Response:*** *The current remediation system is not operating at optimum conditions because the power drop is not currently in place. Once the final electrical connections are made and the catalytic oxidizer is delivered to the site, GES plans to conduct pilot testing activities. GES proposes to conduct a pump test on recovery well RW-11 to evaluate hydraulic conductivity and aquifer characteristics and a vapor-enhanced groundwater extraction test to evaluate aquifer characteristics under vacuum conditions. Similar testing will be conducted utilizing the extraction points connected to the remediation system. The data will be used to conduct an evaluation of hydraulic control of the remediation system. Upon data collection and evaluation, the data will be submitted to the MDE along with appropriate recommendations.*

(4) The Department understands that the Washington Suburban Sanitary Commission (WSSC) has future plans for line upgrades and repairs in the vicinity of this station, which may impact the long-term effectiveness of the recovery system. It will be the responsibility of Shell Oil Products to contact WSSC concerning these activities. Please keep us apprised of these actions and the likely effects on future remediation activities at this site.

***Response:*** *GES will be in contact with WSSC regarding potential upgrades or repairs to the sewer system.*

**DETAILED COMMENTS:**

(5) **Section 3.2**: Based on additional field activities, expand the site-specific geology to include the thickness of saprolite and the depths to bedrock and utilities. Describe how this will affect local groundwater flow in the formation and preferential flow paths around the utility corridor.

***Response:*** *The thickness of the saprolite ranges from 15 to 27 feet in the monitoring wells installed on- and off-site. Competent bedrock was observed to begin at 16 to 28 feet below ground surface. Groundwater flow is controlled by weakly foliated schist and has a general orientation of approximately N50°E (strike) and a regional dip towards the southeast. The conceptual model suggests that LNAPL, floating on the water table, and dissolved-phase impacts travel along flow lines through permeable sections of the highly weathered schist. Groundwater movement is dictated by relic structures and anisotropic conditions within the schist. Where the flow lines intersect with discontinuous impermeable lithology, groundwater will flow in the direction of maximum hydraulic gradient.*

*In addition, as detected by the sewer investigation, the utilities on site are located approximately five to seven feet above the water table, however, the off-site storm sewers intersect the water table in several areas. The areas include Parklawn Drive and the 72-inch diameter lines (Manhole A and B) as indicated on* ***Figure 4****. The denoted areas (****Figure 4****) have been found to intersect the water table and may create preferential migration pathways. The sewer investigation showed areas where groundwater was infiltrating the storm sewer via joints and cracks in the existing sewer line. This infiltration was observed during periods of minimal rainfall.*

(6) **Section 5.4.2**: Quarterly air sampling must be conducted on the soil vapor points and at the White Flint Children's House at 11810 Parklawn Drive. Please draft a Plan no later than March 3, 2006 for a

long-term indoor air monitoring program. This Plan must include at a minimum subsurface slab sampling (i.e., using summa canisters for lab analysis). The sewer line blower and carbon treatment system must remain online until it has been demonstrated that the permanent system is capable of performing the same function.

***Response:*** *GES has submitted a soil gas sampling plan for MDE approval. The plan includes the installation of three sub-slab soil gas sampling points and the collection of soil gas samples from the existing on-site soil gas monitoring points. A copy of the Plan is included in* ***Appendix B.***

*GES has collected PID readings from up to nine storm sewer manholes during this investigation. GES currently monitors seven manholes during recovery system operations and maintenance. The manhole monitoring data, presented in* ***Table 1****, indicates that minimal readings above background levels have been detected. The sewer line blower will remain in place until the SVE system is fully functional.*

(7) **Section 6.2**: Less than half of the estimated amount of product released has been recovered at this time. There is residual product in the pea gravel of the tank field and in the formation under the tank field. Please perform surfactant flushing events as needed for the tank field and underlying formation. This activity should be performed early in the remedial process and will improve capture of residual product adsorbed to the subsurface material.

***Response:*** *Mobile hydrocarbons have been addressed with the initial emergency response and pumping system. This is demonstrated in the fact that several system shutdowns for carbon changes, equilibration, and conversion to the permanent systems have occurred, and LNAPL has not been detected in monitoring wells where it had previously been detected, proving in most areas, mobile LNAPL has been recovered. GES agrees that immobile hydrocarbons (hydrocarbons trapped in the pore spaces of the soils and bonded through capillary forces to the soil particles) still exist, however GES does not agree that surfactant flushing is the best option at this time. The optimal use of the SVE system (negative vacuum on formation) may mobilize residual LNAPL to the recovery wells and allow some of the immobile hydrocarbons to be collected or remove via volatilization. The SVE system is meant to address anything from the UST inverts to the top of the water table (approximately 4.5 feet). Once the final electrical connections are made and the catalytic oxidizer is connected to the SVE system, then the system can run as intended. Another reason that we do not agree with the Department's requirement for surfactant flushing events, is that a surfactant/water mixture may coat soil particles and/or fill matrix interstices and make soil vapor extraction ineffective. Surfactant flushing may be considered at a later stage in the remediation process.*

(8) **Section 5.4**: The remedial endpoints proposed by your consultant are site-specific and will depend on the performance of the system. The Department does not concur with the proposed remedial endpoints. At this phase of the remediation, the Department is focusing on the removal of liquid phase hydrocarbons (LPH) to the maximum extent practicable and to control, reduce, and contain high dissolved petroleum concentrations. Please note that once the current remediation system has maximized its optimal capacity, the Department reserves the right to require other remedial technologies to further address groundwater contamination.

***Response:*** *Historical gauging data are summarized in* ***Table 2****. It is acknowledged that the remedial endpoints will be amended based on the effectiveness of the remediation system and subsequent remedial action.*

(9) **Section 6.2.1**: Operational Schedule and Section 6.2.2. – System Monitoring. Provide more detail on the anticipated system's servicing and monitoring schedule. Provide information on anticipated amounts of remaining contamination that will be recovered.

***Response:*** *Weekly operation and maintenance (O&M) visits will be conducted during the first quarter of permanent system operation to ensure proper system operation is achieved. Visits will be reduced to bi-weekly once the catalytic oxidizer is connected to the SVE system, and is operating effectively. The following tasks will be conducted during each visit:*

- *Compound inspected and debris removed;*
- *Air compressor – check for leaks, drain receiver tank (if needed), check oil level and belt guards; change oil as recommended;*
- *Pneumatic pumps – check hoses and regulators, clean as necessary (minimum monthly)*
- *Oil/water separator – check integrity and check for leaks, clean level controls as needed (minimum monthly) and separator cleaning will be scheduled as appropriate;*
- *Air stripper and blower – check gaskets, check oil level in blower, check pressures and check for leaks, clean trays and sump as needed, clean floats as needed (minimum monthly);*
- *Product drum – check for leaks;*
- *Filter units – check gaskets, pressures and check for leaks, and change filters as necessary;*
- *Liquid granular activated carbon units– check for leaks, back flush as necessary and schedule change outs as appropriate;*
- *Vapor granular activated carbon units– check for leaks and change outs will be scheduled as appropriate;*
- *SVE Blower– check for leaks, check oil level and belt guards;*
- *SVE moisture separator – check for leaks, drain as necessary;*
- *Catalytic oxidizer – check for leaks, record operating temperature;*
- *Transfer pumps – check for leaks, adjust flow as necessary; clean as necessary (minimum monthly); and*
- *Record totalizer(s), flow rates and operating pressures for all equipment; collect PID readings from air effluent for air permit compliance, collect monthly system water samples for efficiency calculations (performance) and water permit compliance.*

*From September 1, 2005 through December 27, 2005, the temporary treatment system processed approximately 1,054,655 gallons of water. In addition, the permanent system has treated approximately 275,091 gallons through March 1, 2006. To date, approximately 11,466 gallons of LNAPL have been recovered by groundwater pumping. To date (March 1, 2006), approximately 17,951.21 pounds of vapor phase hydrocarbons (2,991 gallons of equivalent LNAPL) have been removed. Therefore, to date (March 1, 2006) approximately 14,457 gallons of liquid and vapor phase LNAPL have been removed from the site.*

*Based on the information presented above, the SVE system should continue to recover hydrocarbons, however, it is difficult to estimate based on the fact that the catalytic oxidizer is not operational at this time and maximum vacuum is not being applied to the recovery wells.*

(10) **Section 7.1**: The stream sampling network was detailed and appropriate for rapid response activities, but should be streamlined for long-term assessment. Please describe in a Work Plan how stream sampling will be streamlined in the future.

***Response:*** *Stream samples will be collected on a quarterly basis beginning in March 2006. Stream samples will be collected from Manholes A and B, outfall of storm sewer A and B, and at points located 500 and 1,000 feet from the outfall location (total of six locations). The stream samples will be analyzed for full-suite VOCs in accordance with EPA Method 8260, including five oxygenates and ten tentatively identified compounds (TICs).*

*Stream samples were collected in December 2005 and are included in* ***Table*** *3 and are depicted on* ***Figure*** *5.*

(11) **Section 7.1**: Please include a brief discussion of testing and sequencing for air treatment technology to transition move from the initial CATOX system to GAC.

***Response:*** *The data from the catalytic oxidizer will be reviewed as collected. As a general guideline when the influent concentrations stabilize at approximately ten pounds per day or less, the catalytic oxidizer will be replaced with vapor phase granular activated carbon. The evaluation will also include a cost analysis for electric usage versus carbon replacement activities.*

(12) **Section 7.0**: When submitting documentation to the Department, please provide two hard copies and one copy on a compact disc (CD) for updating the Oil Control Program's "Remediation Sites" list in the Internet. Copies must also be provided to the Montgomery County Department of Environmental Protection and representatives of the immediately adjacent property (WRIT – property owner, White Flint Children's House).

***Response:*** *We will provide documentation as requested.*

(13) **Figure 13**: is somewhat confusing. There are no connections shown between the air stripper and the blower and between three bag filters and the oil/water separator. Please correct.

***Response:*** *Figure 13 was intended as a top view of the equipment layout, and not intended to be a process and instrumentation diagram. The process and instrumentation diagrams for the remediation system are included in the original SCR/CAP as Figures 14 and 15. The process piping has been removed from Figure 13, the revised figure is included as* ***Figure*** *6.*

## 4.0 RECENT FIELD ACTIVITIES

### 4.1 Stream Sampling

During initial storm sewer investigation activities, sheen was observed on the surface water at the headwaters of an unnamed tributary of Rock Creek (storm water outfall). The storm water outfall consists of two 72-inch diameter reinforced concrete pipes. The southern-most pipe is referred to as Outfall A and the northern-most pipe is referred to as Outfall B. The manholes located directly upgradient of Outfall A and Outfall B were subsequently named Manhole A and Manhole B. On December 2, 2005, stream samples were collected and submitted to Test America for VOC analysis by EPA Method 8260 (full suite) plus five oxygenates. Stream sampling analytical data are attached in **Appendix C**, summarized on **Table 4**, and stream sampling locations are depicted in **Figure 5**.

## 4.2 Groundwater Sampling

Depth to groundwater ranges from approximately nine feet to 23 feet below ground surface (bgs). Liquid level data are summarized in **Table 3**. Three well volumes were removed from each monitoring well prior to using a clean dedicated bailer to collect a groundwater sample. Groundwater samples were collected from monitoring and recovery wells that did not have detectable levels of LNAPL on December 29, 2005. Groundwater samples were submitted to Test America of Nashville, Tennessee, for analysis of volatile organic compounds (VOCs) including oxygenates and TICs in accordance with EPA Method 8260B and TPH-GRO and TPH-DRO in accordance with EPA Method 8015M. The complete laboratory reports and chain of custody documentation are attached in **Appendix C**. Historical groundwater analytical results are summarized in **Table 3**. **Figure 7** shows the analytical results of the groundwater sampling conducted December 29, 2005.

## 4.3 Remediation System Operation – Temporary Treatment System

Total Fluids Extraction

GES installed a total of eight pneumatic submersible pumps in nine monitoring wells MW-1, MW-3, MW-4, MW-6, MW-7, MW-8, MW-10, MW-11, and H-1. The pumps were occasionally moved based on LNAPL thicknesses. Total fluids from the groundwater pumping system were directed to a 21,000-gallon frac tank located on site. Groundwater from the frac tank was directed through two sediment filters in series and two 3,000-pound liquid-phase granular activated carbon (LGAC) units in series. In addition, a third 2,000-pound LGAC unit was added to the system. The system operated from September 1, 2005 through December 27, 2005 and treated approximately 1,054,655 gallons of water. Approximately 11,466 gallons of LNAPL have been recovered to date by groundwater pumping.

Soil Vapor Extraction

One blower installed was on the storm drain in front of the station (Manhole 2) and has operated since August 18, 2005 and is still operating today.

As part of interim remedial measures, one internal combustion engine (ICE) unit was connected to monitoring wells MW-1, MW-4, MW-6, MW-10 and MW-11. The monitoring wells were adjusted between the unit for maximized mass removal to assist in unit optimization. The unit operated from August 22, 2005 through January 12, 2006 and removed approximately 17,108.32 pounds of hydrocarbons (2,851.39 gallons of LNAPL).

## 4.4 Permanent System Installation

Vacuum Enhanced Groundwater Extraction (VEGE) System

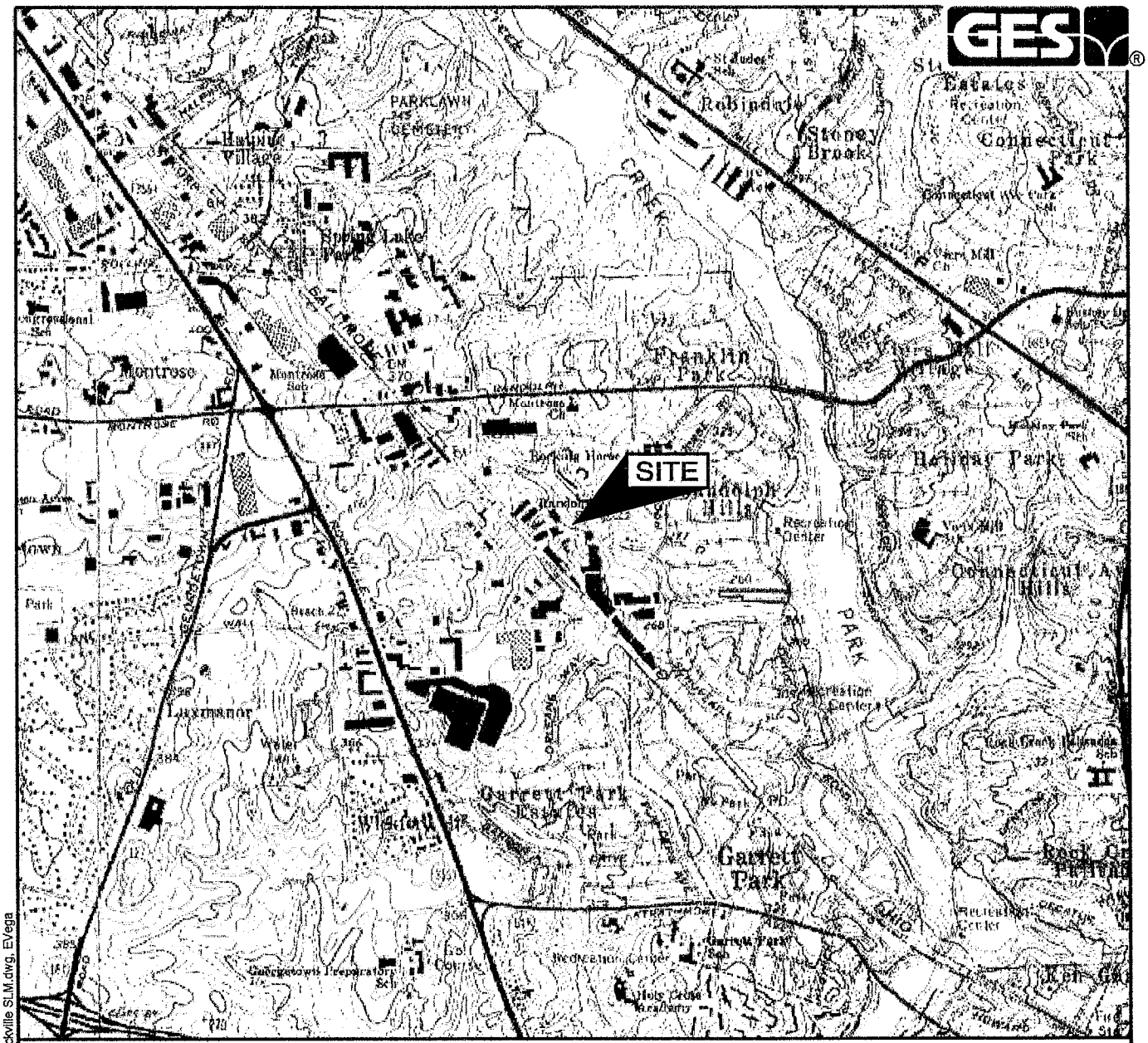
As proposed in the December 2005 SCR/CAP, GES activated a VEGE remediation system. Below grade piping installation was completed in November 2005, final connection to the recovery wells was completed in December 2005, the remediation system equipment was delivered in November 2005 and the final connections to the remediation equipment building were completed in January 2006. The VEGE system was started on January 13, 2006 and was connected to recovery wells RW-1, RW-4, RW-6, RW-7, RW-8, RW-9, RW-10 and RW-11. However, at this time, no groundwater or soil vapor extraction is occurring from recovery well RW-9, based on the low concentrations and the capacity of the system.

To date (March 1, 2006) approximately 14,457 gallons of liquid and vapor phase LNAPL have been removed from the site. GES is still waiting for PEPCO to complete final electrical connections. In the meantime, the current SVE system is running with carbon treatment with power from the service station. There is not enough amperage on the service station power to connect the catalytic oxidizer at this time. The VEGE system was installed as per the December 2005 CAP with the exception of the catalytic oxidizer.

### 4.5 Permanent System Installation Upgrade

Trenching and the addition of below grade remediation system piping was conducted in February 2006 to add recovery well RW-2 to the remediation system. Recovery well RW-2 is not currently operating pending results of the March 2006 groundwater sampling event.

# FIGURES

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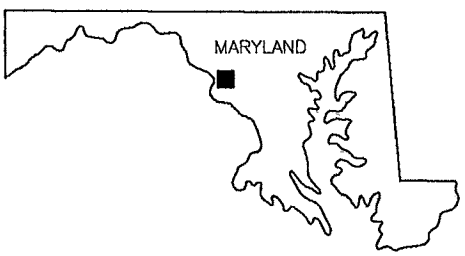


QUADRANGLE LOCATION

| | |
|---|---|
| DRAFTED BY: E.V. (N.J.) | SITE LOCATION MAP |
| CHECKED BY: | SHELL OIL PRODUCTS #100558<br>11800 PARKLAWN DRIVE<br>ROCKVILLE, MARYLAND |
| REVIEWED BY: | Groundwater & Environmental Services, Inc.<br>2142 PRIEST BRIDGE COURT, SUITE 1, CROFTON, MD 21114 |
| NORTH | SCALE IN FEET: 0 – 2000 / DATE: 9-1-05 / FIGURE: 1 |

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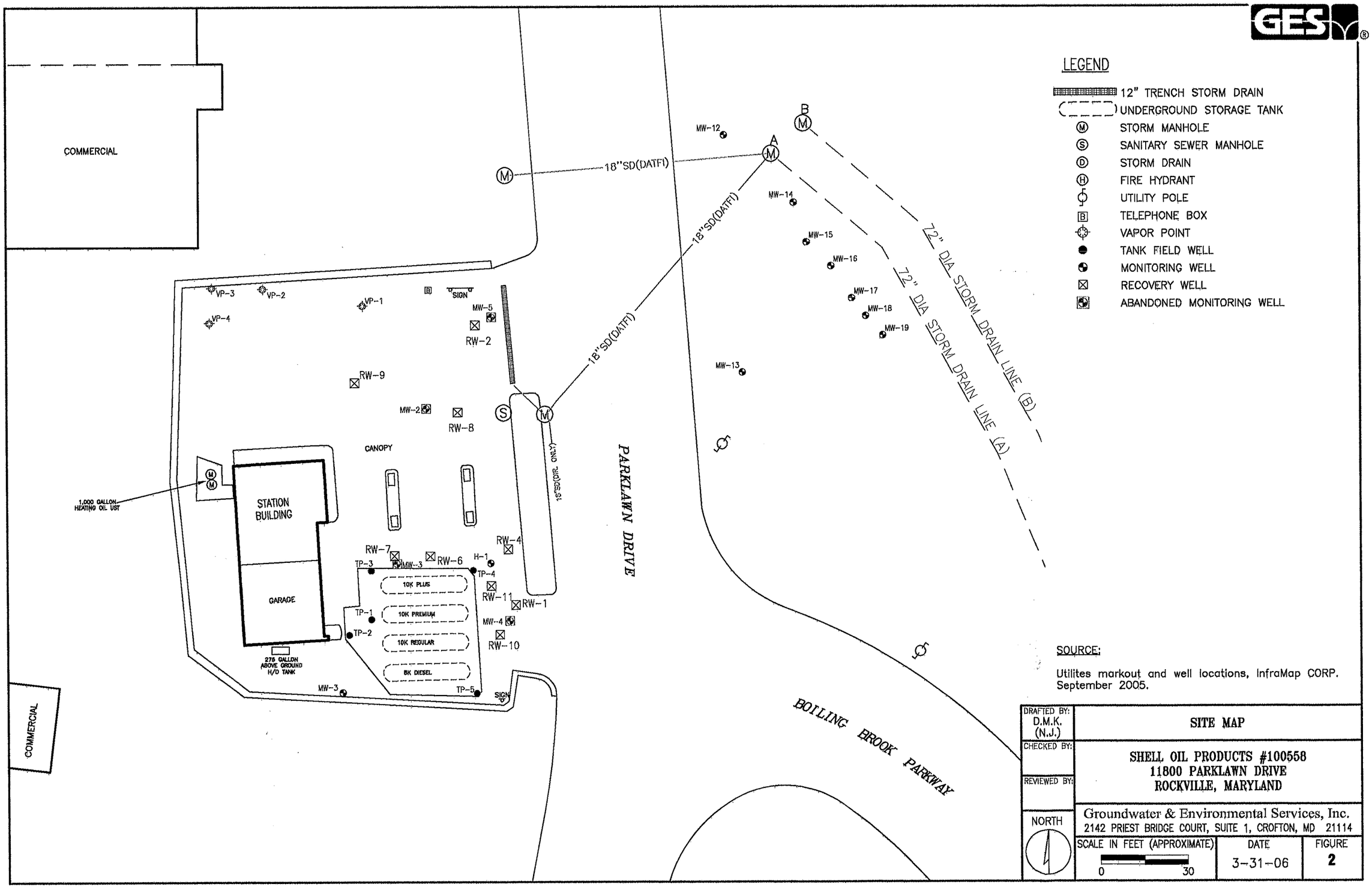


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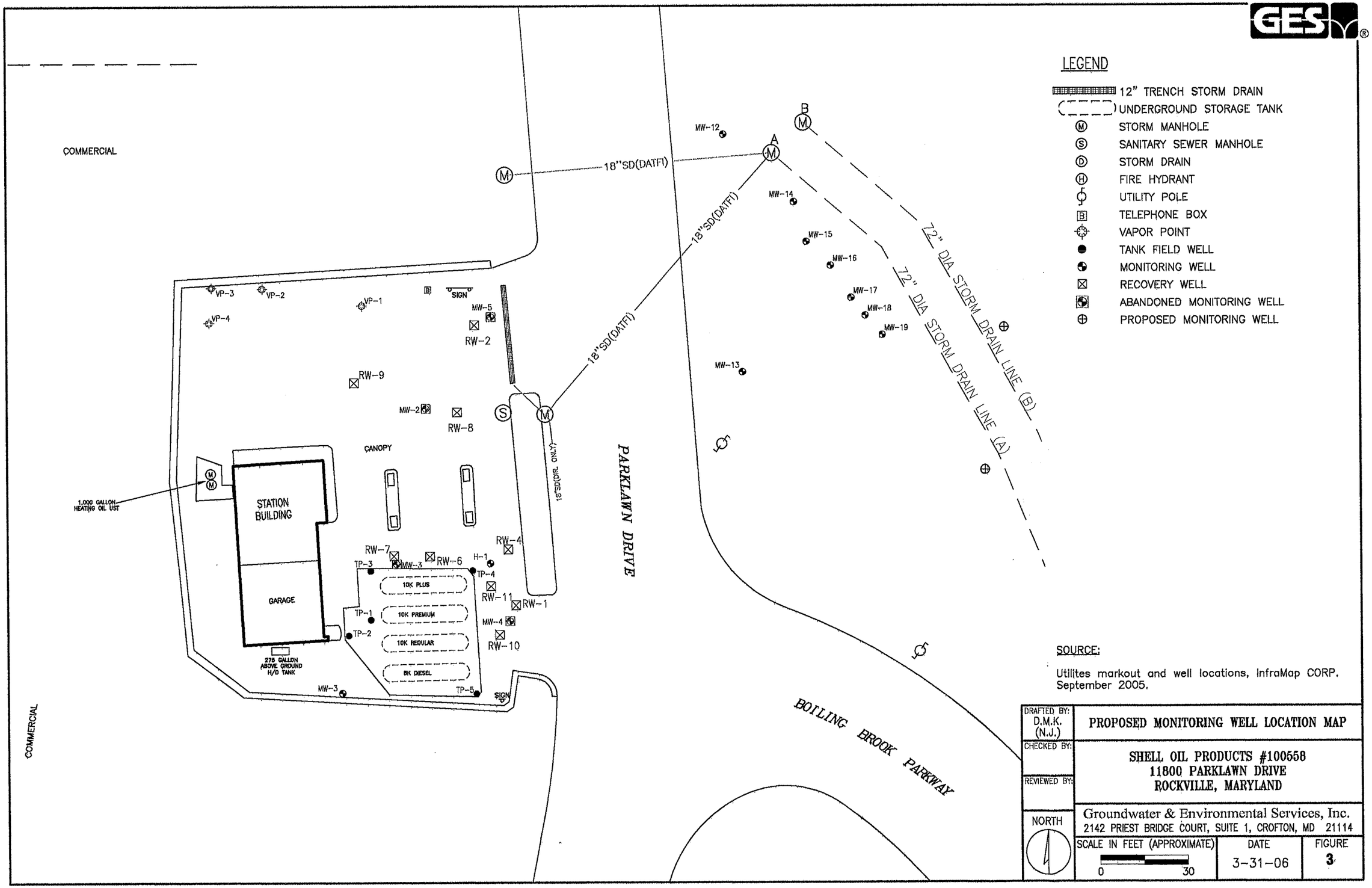


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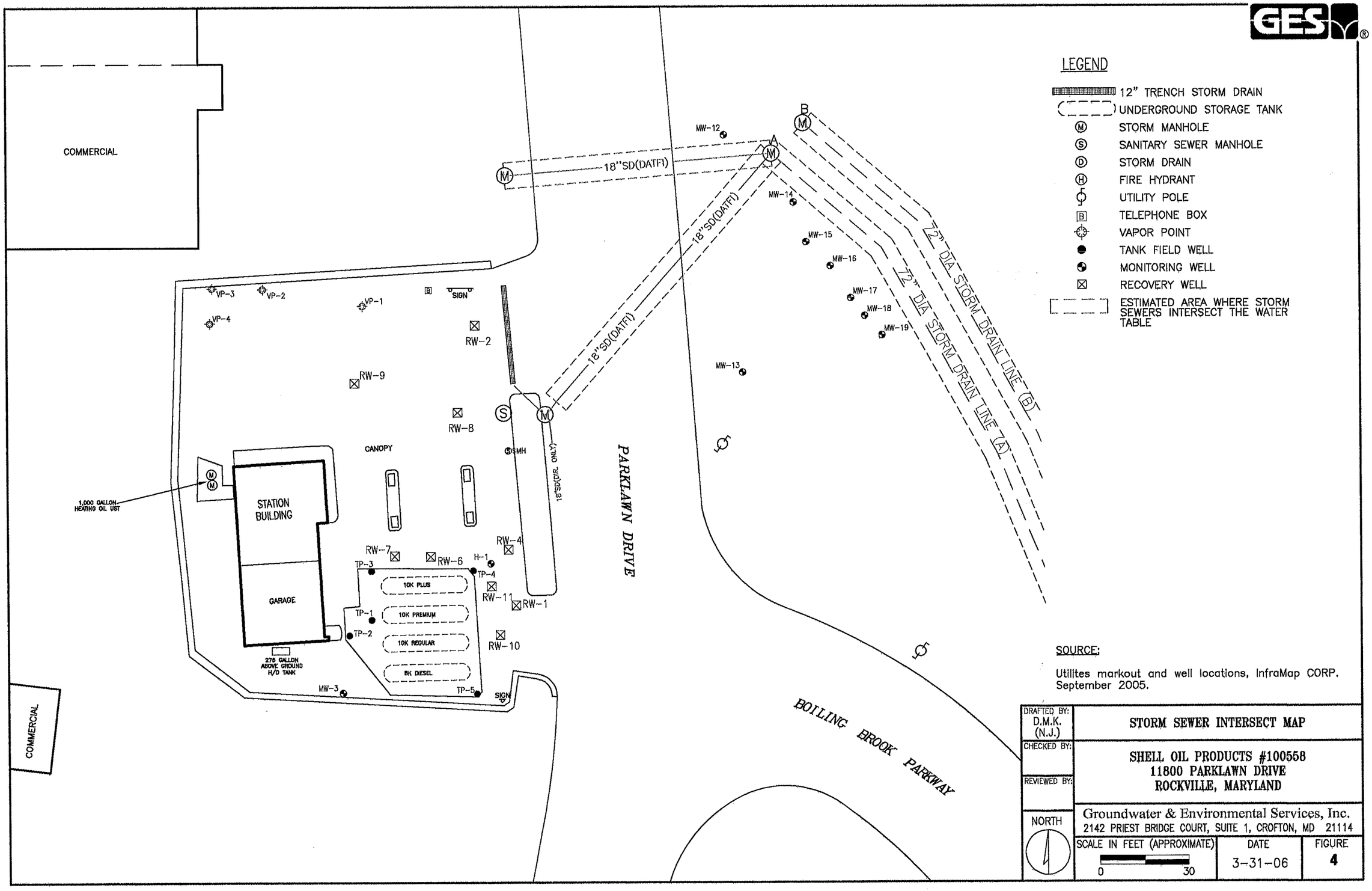


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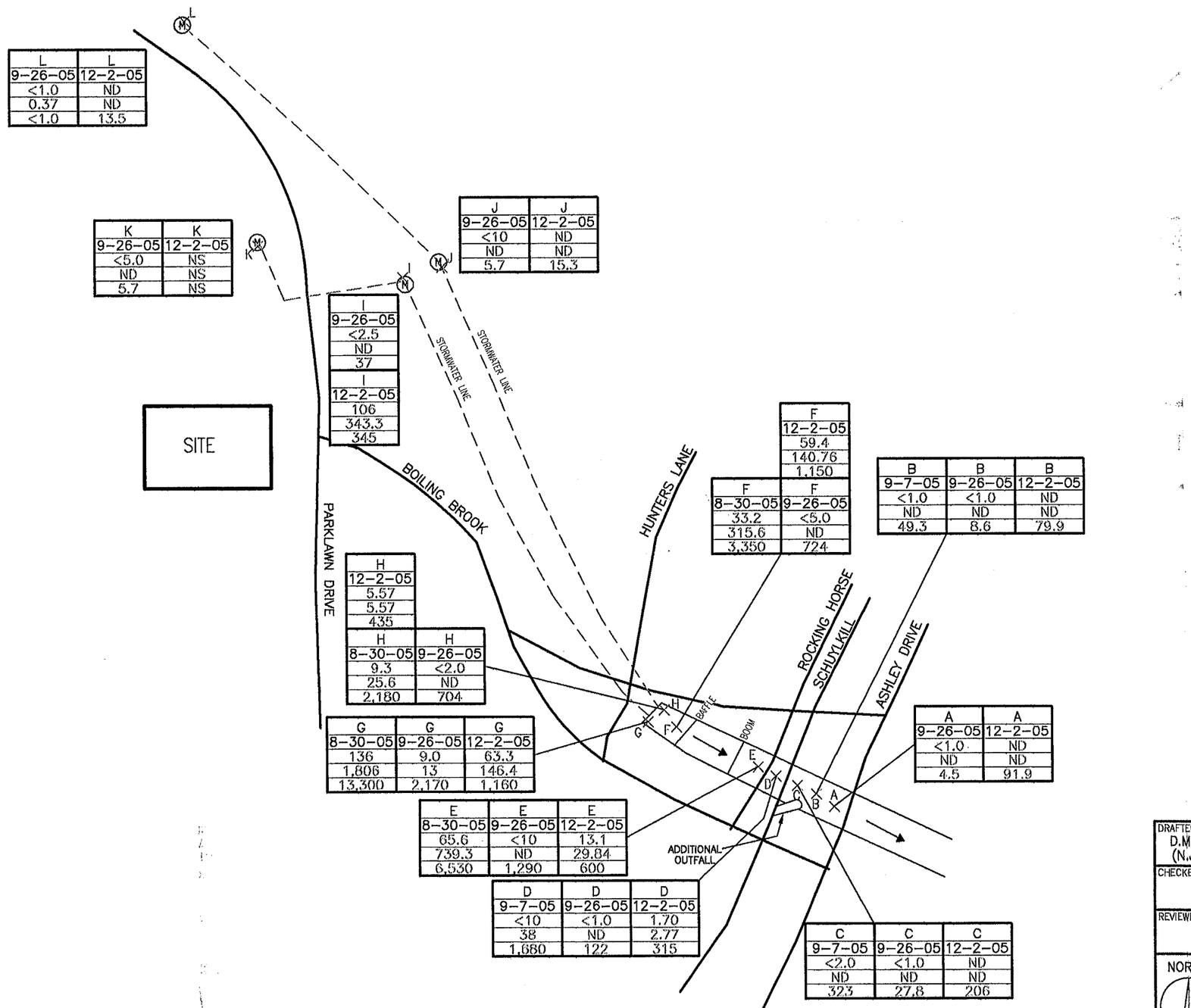


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| 0.37 | ND |
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| <5.0 | NS |
| ND | NS |
| 5.7 | NS |

| J | J |
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| I |
|---|
| 12-2-05 |
| 106 |
| 343.3 |
| 345 |

| F |
|---|
| 12-2-05 |
| 59.4 |
| 140.76 |
| 1.150 |

| F | F |
|---|---|
| 8-30-05 | 9-26-05 |
| 33.2 | <5.0 |
| 315.6 | ND |
| 3,350 | 724 |

| B | B | B |
|---|---|---|
| 9-7-05 | 9-26-05 | 12-2-05 |
| <1.0 | <1.0 | ND |
| ND | ND | ND |
| 49.3 | 8.6 | 79.9 |

| H |
|---|
| 12-2-05 |
| 5.57 |
| 5.57 |
| 435 |

| H | H |
|---|---|
| 8-30-05 | 9-26-05 |
| 9.3 | <2.0 |
| 25.6 | ND |
| 2,180 | 704 |

| G | G | G |
|---|---|---|
| 8-30-05 | 9-26-05 | 12-2-05 |
| 136 | 9.0 | 63.3 |
| 1,806 | 13 | 146.4 |
| 13,300 | 2,170 | 1,160 |

| A | A |
|---|---|
| 9-26-05 | 12-2-05 |
| <1.0 | ND |
| ND | ND |
| 4.5 | 91.9 |

| E | E | E |
|---|---|---|
| 8-30-05 | 9-26-05 | 12-2-05 |
| 65.6 | <10 | 13.1 |
| 739.3 | ND | 29.84 |
| 6,530 | 1,290 | 600 |

| D | D | D |
|---|---|---|
| 9-7-05 | 9-26-05 | 12-2-05 |
| <10 | <1.0 | 1.70 |
| 38 | ND | 2.77 |
| 1,680 | 122 | 315 |

| C | C | C |
|---|---|---|
| 9-7-05 | 9-26-05 | 12-2-05 |
| <2.0 | <1.0 | ND |
| ND | ND | ND |
| 32.3 | 27.8 | 206 |

## LEGEND

| | |
|---|---|
| (M) | MANHOLE |
| X | STREAM SAMPLE |
| J / 12-2-05 / ND / ND / 15.3 | WELL IDENTIFICATION<br>SAMPLE DATE<br>BENZENE CONCENTRATION (ug/L)<br>BTEX CONCENTRATION (ug/L)<br>MTBE CONCENTRATION (ug/L) |
| ug/L | MICROGRAMS PER LITER |
| BTEX | BENZENE, TOLUENE, ETHYLBENZENE, XYLENES |
| MTBE | METHYL *tert*-BUTYL ETHER |
| <# | WHERE AN ANALYTE IS NOT DETECTED, A METHOD DETECTION LIMIT IS GIVEN |
| ND | NOT DETECTED |
| NS | NOT SAMPLED |

NORTH

DRAFTED BY: D.M.K. (N.J.)

CHECKED BY:

REVIEWED BY:

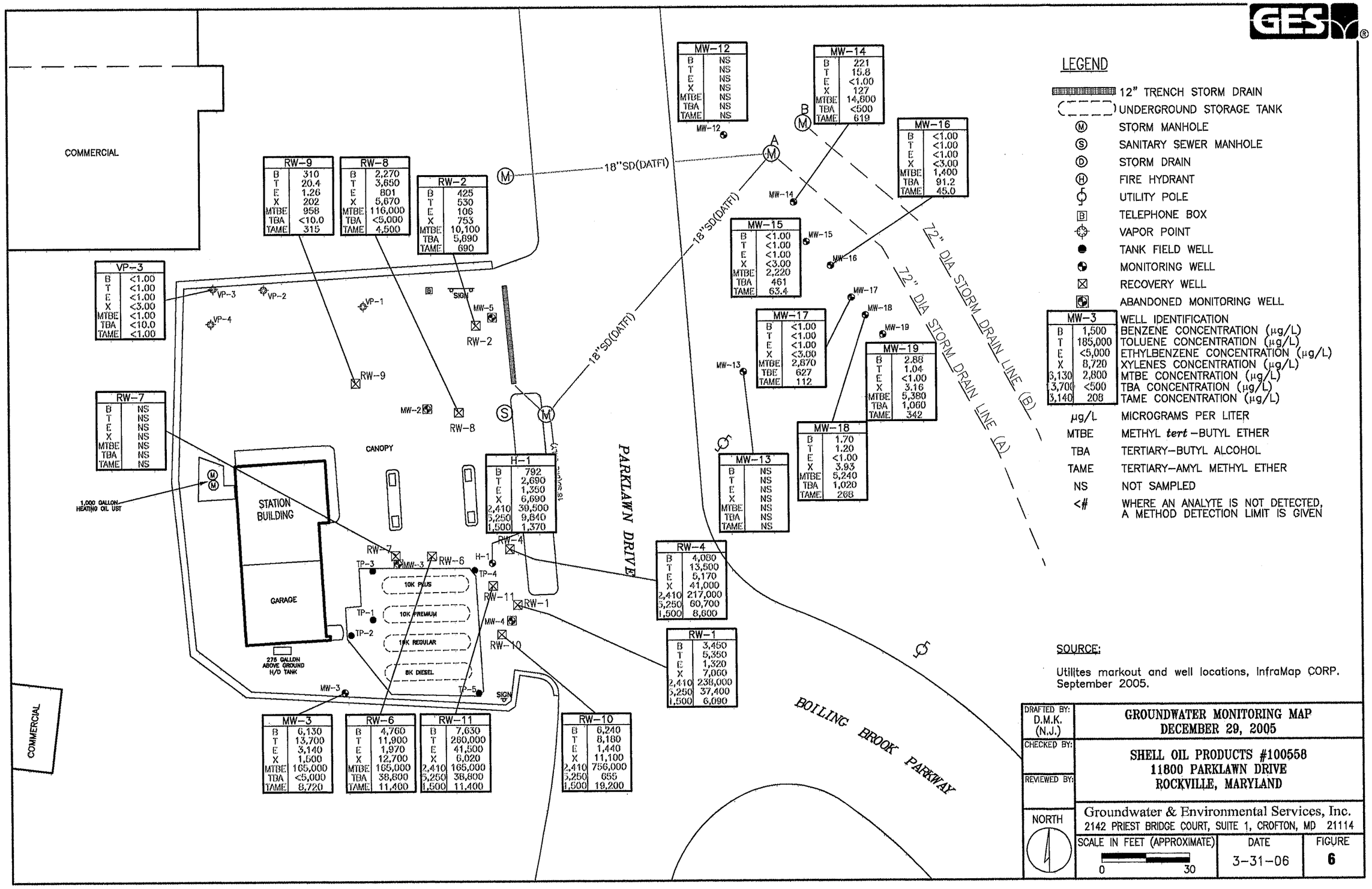
**STREAM SAMPLING MONITORING MAP**

**SHELL OIL PRODUCTS #100558**
**11800 PARKLAWN DRIVE**
**ROCKVILLE, MARYLAND**

Groundwater & Environmental Services, Inc.
2142 PRIEST BRIDGE COURT, SUITE 1, CROFTON, MD 21114

NOT TO SCALE | DATE 3-22-06 | FIGURE 5

M:\Graphics\0400-Crofton\Shell OR\100558 Rockville\100558 Rockville STREAM.dwg, 3/22/2006 10:40:28 AM, DKessler




| RW-9 | |
|---|---|
| B | 310 |
| T | 20.4 |
| E | 1.26 |
| X | 202 |
| MTBE | 958 |
| TBA | <10.0 |
| TAME | 315 |

| RW-8 | |
|---|---|
| B | 2,270 |
| T | 3,650 |
| E | 801 |
| X | 5,670 |
| MTBE | 116,000 |
| TBA | <5,000 |
| TAME | 4,500 |

| RW-2 | |
|---|---|
| B | 425 |
| T | 530 |
| E | 106 |
| X | 753 |
| MTBE | 10,100 |
| TBA | 5,890 |
| TAME | 690 |

| VP-3 | |
|---|---|
| B | <1.00 |
| T | <1.00 |
| E | <1.00 |
| X | <3.00 |
| MTBE | <1.00 |
| TBA | <10.0 |
| TAME | <1.00 |

| RW-7 | |
|---|---|
| B | NS |
| T | NS |
| E | NS |
| X | NS |
| MTBE | NS |
| TBA | NS |
| TAME | NS |

| H-1 | |
|---|---|
| B | 792 |
| T | 2,690 |
| E | 1,350 |
| X | 6,690 |
| 2,410 | 30,500 |
| 5,250 | 9,840 |
| 1,500 | 1,370 |

| MW-12 | |
|---|---|
| B | NS |
| T | NS |
| E | NS |
| X | NS |
| MTBE | NS |
| TBA | NS |
| TAME | NS |

| MW-14 | |
|---|---|
| B | 221 |
| T | 15.8 |
| E | <1.00 |
| X | 127 |
| MTBE | 14,800 |
| TBA | <500 |
| TAME | 619 |

| MW-16 | |
|---|---|
| B | <1.00 |
| T | <1.00 |
| E | <1.00 |
| X | <3.00 |
| MTBE | 1,400 |
| TBA | 91.2 |
| TAME | 45.0 |

| MW-15 | |
|---|---|
| B | <1.00 |
| T | <1.00 |
| E | <1.00 |
| X | <3.00 |
| MTBE | 2,220 |
| TBA | 461 |
| TAME | 63.4 |

| MW-17 | |
|---|---|
| B | <1.00 |
| T | <1.00 |
| E | <1.00 |
| X | <3.00 |
| MTBE | 2,870 |
| TBE | 627 |
| TAME | 112 |

| MW-19 | |
|---|---|
| B | 2.88 |
| T | 1.04 |
| E | <1.00 |
| X | 3.16 |
| MTBE | 5,380 |
| TBA | 1,060 |
| TAME | 342 |

| MW-18 | |
|---|---|
| B | 1.70 |
| T | 1.20 |
| E | <1.00 |
| X | 3.93 |
| MTBE | 5,240 |
| TBA | 1,020 |
| TAME | 268 |

| MW-13 | |
|---|---|
| B | NS |
| T | NS |
| E | NS |
| X | NS |
| MTBE | NS |
| TBA | NS |
| TAME | NS |

| RW-4 | |
|---|---|
| B | 4,080 |
| T | 13,500 |
| E | 5,170 |
| X | 41,000 |
| 2,410 | 217,000 |
| 5,250 | 60,700 |
| 1,500 | 8,600 |

| RW-1 | |
|---|---|
| B | 3,450 |
| T | 5,350 |
| E | 1,320 |
| X | 7,060 |
| 2,410 | 238,000 |
| 5,250 | 37,400 |
| 1,500 | 6,090 |

| MW-3 | |
|---|---|
| B | 6,130 |
| T | 13,700 |
| E | 3,140 |
| X | 1,500 |
| MTBE | 165,000 |
| TBA | <5,000 |
| TAME | 8,720 |

| RW-6 | |
|---|---|
| B | 4,760 |
| T | 11,900 |
| E | 1,970 |
| X | 12,700 |
| MTBE | 165,000 |
| TBA | 38,800 |
| TAME | 11,400 |

| RW-11 | |
|---|---|
| B | 7,630 |
| T | 260,000 |
| E | 41,500 |
| X | 6,020 |
| 2,410 | 165,000 |
| 5,250 | 38,800 |
| 1,500 | 11,400 |

| RW-10 | |
|---|---|
| B | 6,240 |
| T | 8,180 |
| E | 1,440 |
| X | 11,100 |
| 2,410 | 756,000 |
| 5,250 | 655 |
| 1,500 | 19,200 |

## LEGEND

- 12" TRENCH STORM DRAIN
- UNDERGROUND STORAGE TANK
- STORM MANHOLE
- SANITARY SEWER MANHOLE
- STORM DRAIN
- FIRE HYDRANT
- UTILITY POLE
- TELEPHONE BOX
- VAPOR POINT
- TANK FIELD WELL
- MONITORING WELL
- RECOVERY WELL
- ABANDONED MONITORING WELL

| MW-3 | |
|---|---|
| | WELL IDENTIFICATION |
| B | 1,500 BENZENE CONCENTRATION (µg/L) |
| T | 185,000 TOLUENE CONCENTRATION (µg/L) |
| E | <5,000 ETHYLBENZENE CONCENTRATION (µg/L) |
| X | 8,720 XYLENES CONCENTRATION (µg/L) |
| 6,130 | 2,800 MTBE CONCENTRATION (µg/L) |
| 3,700 | <500 TBA CONCENTRATION (µg/L) |
| 3,140 | 208 TAME CONCENTRATION (µg/L) |

µg/L MICROGRAMS PER LITER

MTBE METHYL *tert* –BUTYL ETHER

TBA TERTIARY–BUTYL ALCOHOL

TAME TERTIARY–AMYL METHYL ETHER

NS NOT SAMPLED

<# WHERE AN ANALYTE IS NOT DETECTED, A METHOD DETECTION LIMIT IS GIVEN

SOURCE:

Utilites markout and well locations, InfraMap CORP. September 2005.

DRAFTED BY: D.M.K. (N.J.)

CHECKED BY:

REVIEWED BY:

NORTH

**GROUNDWATER MONITORING MAP**
**DECEMBER 29, 2005**

**SHELL OIL PRODUCTS #100558**
**11800 PARKLAWN DRIVE**
**ROCKVILLE, MARYLAND**

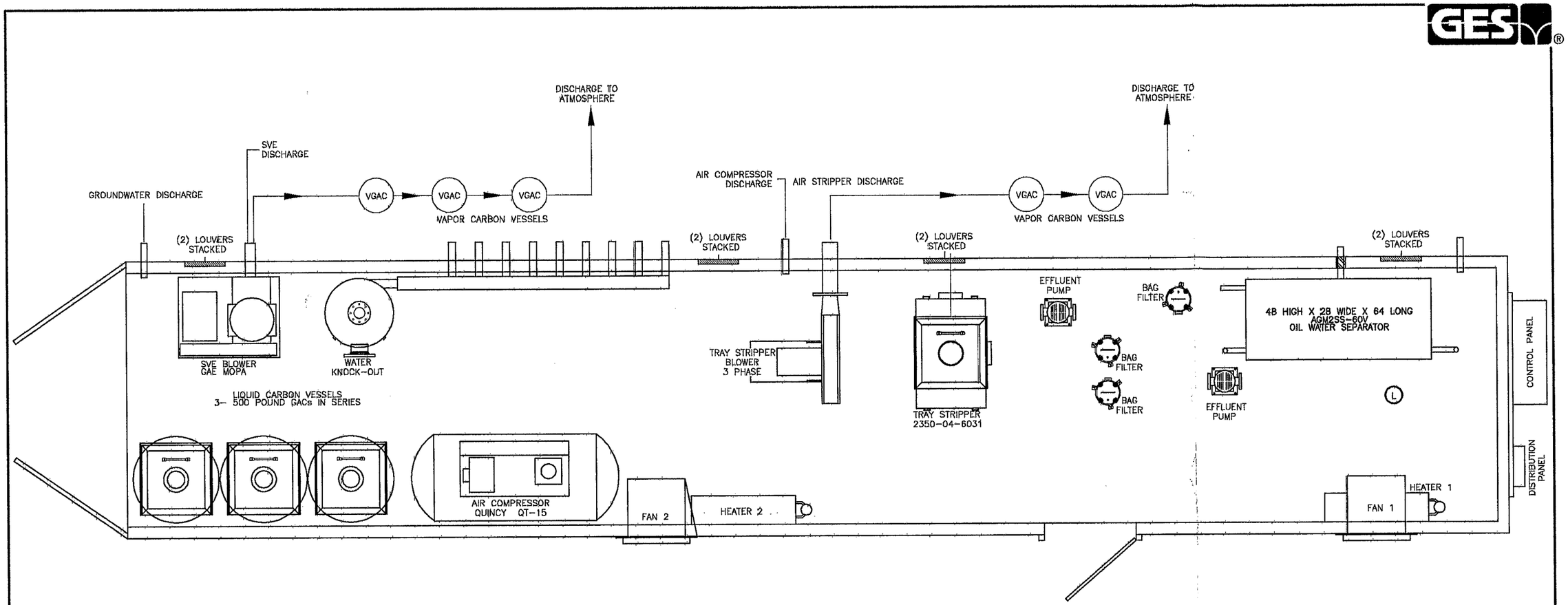
Groundwater & Environmental Services, Inc.
2142 PRIEST BRIDGE COURT, SUITE 1, CROFTON, MD 21114

SCALE IN FEET (APPROXIMATE) 0 30

DATE 3-31-06

FIGURE 6

M:\Graphics\0400-Crofton\Shell OR\100558 Rockville\100558 Rockville SM.dwg, 3/31/2006 9:40:14 AM, DKessler




| | |
|---|---|
| DRAFTED BY: D.M.K. (N.J.) | REMEDIATION SYSTEM EQUIPMENT LAYOUT |
| CHECKED BY: | SHELL OIL PRODUCTS #100558<br>11800 PARKLAWN DRIVE<br>ROCKVILLE, MARYLAND |
| REVIEWED BY: | Groundwater & Environmental Services, Inc.<br>2142 PRIEST BRIDGE COURT, SUITE 1, CROFTON, MD 21114 |

| NOT TO SCALE | DATE 3-22-06 | FIGURE 7 |
|---|---|---|

M:\Graphics\04F00-Crofton\Shell OR\100558 Rockville\ENG\100588 Rockville REM trailer.dwg, 3/22/2006 10:38:33 AM, DKessler

# TABLES

*Table 1*

## MANHOLE MONITORING SUMMARY

Shell Station #100558
11800 Parklawn Drive
Rockville, Maryland

| Date/Time | Manhole 1 | | Manhole 2 | | Manhole 3 | | Manhole 4 | | Manhole 5 | | Manhole 6 | | Manhole 7 | | Manhole 8 | | Manhole 9 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL |
| 12/1/05 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/1/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/1/05 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/1/05 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/01/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/01/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/2/05 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/2/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/2/05 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/2/05 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/02/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/02/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/3/05 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/3/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/3/05 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/3/05 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/03/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/03/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/4/05 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/4/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/4/05 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/4/05 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/04/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/04/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/5/05 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/5/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/5/05 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/5/05 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/05/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/05/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/6/05 12:00 AM | 0.1 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 4.4 | - | 3.5 | - | 0.0 | - | 0.0 | - |
| 12/6/05 4:00 AM | 0.3 | - | 0.0 | - | 0.0 | - | - | - | - | - | 1.2 | - | 5.4 | - | 0.0 | - | 0.0 | - |
| 12/6/05 8:00 AM | 0.0 | - | 0.5 | - | 0.0 | - | 0.0 | - | 0.0 | - | 3.1 | - | 0.7 | - | 0.0 | - | 0.0 | - |
| 12/6/05 12:00 PM | 0.0 | - | 1.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 4.5 | - | 8.7 | - | 0.0 | - | 0.0 | - |
| 12/06/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/06/2005 20:00 PM | 0.0 | - | 0.1 | - | 0.0 | - | 0.0 | - | 0.0 | - | 3.2 | - | 4.8 | - | 0.0 | - | 0.0 | - |
| 12/7/05 12:00 AM | 0.0 | - | 0.3 | - | 0.0 | - | 0.0 | - | 0.0 | - | 1.9 | - | 0.0 | - | 1.7 | - | 0.0 | - |
| 12/7/05 4:00 AM | 0.0 | - | 0.1 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.1 | - | 0.0 | - | 0.0 | - |
| 12/7/05 8:00 AM | 0.0 | - | 0.4 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.4 | - | 3.6 | - | 1.3 | - | 0.0 | - |
| 12/7/05 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 5.6 | - | 1.2 | - | 0.0 | - |
| 12/07/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.8 | - | 2.4 | - | 0.0 | - | 0.0 | - |
| 12/07/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 1.7 | - | 0.0 | - | 0.0 | - |
| 112/8/05 12:00:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/8/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/8/05 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/8/05 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/8/05 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/8/05 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/9/05 12:00:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/9/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/9/05 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |



"An Equal Opportunity Employer"

*Table 1*

## MANHOLE MONITORING SUMMARY

Shell Station #100558
11800 Parklawn Drive
Rockville, Maryland

| Date/Time | Manhole 1 | | Manhole 2 | | Manhole 3 | | Manhole 4 | | Manhole 5 | | Manhole 6 | | Manhole 7 | | Manhole 8 | | Manhole 9 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL |
| 12/9/05 12:00:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/9/05 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/9/05 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/10/05 12:00:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/10/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/10/05 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/10/05 12:00:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/10/05 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/10/05 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/11/05 12:00:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/11/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/11/05 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/11/05 12:00:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/11/05 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/11/05 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/12/05 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/12/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/12/05 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/12/2005 12:00:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/12/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/12/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 2.8 | - | 0.0 | - | 0.0 | - |
| 12/13/2005 12:00:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/13/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/13/05 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/13/2005 12:00:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/13/2005 16:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 12/13/2005 20:00 PM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 12/14/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/14/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/15/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/15/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/16/05 4:00 AM | 0.0 | - | 2.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/16/2005 12:00 PM | 0.0 | - | 2.1 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/17/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/17/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/18/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/18/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/19/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/19/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/20/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/20/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/21/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/21/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/22/05 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - |
| 12/22/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/23/2005 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/23/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/23/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/23/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/24/2005 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/24/2005 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |



"An Equal Opportunity Employer"

*Table 1*

## MANHOLE MONITORING SUMMARY

Shell Station #100558
11800 Parklawn Drive
Rockville, Maryland

| Date/Time | Manhole 1 | | Manhole 2 | | Manhole 3 | | Manhole 4 | | Manhole 5 | | Manhole 6 | | Manhole 7 | | Manhole 8 | | Manhole 9 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL |
| 12/24/2005 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/24/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/24/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/24/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/25/2005 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/25/2005 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/25/2005 14:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/26/2005 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/26/2005 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/26/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/26/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/26/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/27/2005 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/27/2005 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/27/2005 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/27/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/27/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/27/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/28/2005 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 9.4 | - | - | - | - | - |
| 12/28/2005 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 7.5 | - | - | - | - | - |
| 12/28/2005 8:00 AM | 0.0 | - | 0.0 | - | 0.5 | - | 0.0 | - | 0.0 | - | 5.2 | - | 11.0 | - | - | - | - | - |
| 12/28/2005 12:00 PM | 0.0 | - | 0.0 | - | 88+ | - | 0.0 | - | 0.1 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/28/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/28/2005 20:00 PM | 0.0 | - | 0.0 | - | 2.3 | - | 0.0 | - | 0.0 | - | 0.0 | - | 4.2 | - | - | - | - | - |
| 12/29/2005 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/29/2005 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/29/2005 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/29/2005 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/29/2005 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/29/2005 20:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/30/2005 12:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 2.7 | - | 8.6 | - | 28.7 | - | - | - | - | - |
| 12/30/2005 4:00 AM | 0.0 | - | 7.5 | - | 0.0 | - | 0.0 | - | 5.7 | - | 18.5 | - | 20.7 | - | - | - | - | - |
| 12/30/2005 8:00 AM | 0.0 | - | 39.5 | - | 0.0 | - | 0.0 | - | 0.0 | - | 2.7 | - | 0.0 | - | - | - | - | - |
| 12/30/2005 12:00 PM | 0.0 | - | 20.5 | - | 0.0 | - | 0.0 | - | 0.0 | | 20.1 | - | 25.2 | - | - | - | - | - |
| 12/30/2005 16:00 PM | 0.0 | - | 7.2 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 14.6 | - | - | - | - | - |
| 12/30/2005 20:00 PM | 0.0 | - | 0.8 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 10.7 | - | - | - | - | - |
| 12/31/2005 12:00 AM | 0.0 | - | 1.7 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 1.1 | - | - | - | - | - |
| 12/31/2005 4:00 AM | 0.0 | - | 1.1 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/31/2005 8:00 AM | 0.0 | - | 3.5 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/31/2005 12:00 PM | 0.0 | - | 5.2 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/31/2005 13:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/31/2005 16:00 PM | 0.0 | - | 2.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 12/31/2005 20:00 PM | 0.0 | - | 0.6 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/1/2006 12:00 AM | 0.0 | - | 10.7 | - | 42.7 | - | 0.0 | - | 0.0 | - | 23.8 | - | 27.6 | - | - | - | - | - |
| 1/1/2006 4:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 11.7 | - | 28.9 | - | - | - | - | - |
| 1/1/2006 8:00 AM | 0.0 | - | 3.2 | - | 0.0 | - | 0.0 | - | 0.0 | - | 7.8 | - | 25.8 | - | - | - | - | - |
| 1/1/2006 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 6.8 | - | - | - | - | - |
| 1/1/2006 13:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/1/2006 16:00 PM | 0.0 | - | 3.2 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/1/2006 20:00 PM | 0.0 | - | 3.7 | - | 0.0 | - | 0.0 | - | 0.0 | - | 7.2 | - | 17.7 | - | - | - | - | - |
| 1/2/2006 12:00 AM | 0.0 | - | 1.4 | - | 0.0 | - | 0.0 | - | 0.0 | - | 7.3 | - | 16.6 | - | - | - | - | - |



"An Equal Opportunity Employer"

*Table 1*

## MANHOLE MONITORING SUMMARY

Shell Station #100558
11800 Parklawn Drive
Rockville, Maryland

| Date/Time | Manhole 1 | | Manhole 2 | | Manhole 3 | | Manhole 4 | | Manhole 5 | | Manhole 6 | | Manhole 7 | | Manhole 8 | | Manhole 9 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL | PID | LEL |
| 1/2/2006 4:00 AM | 0.0 | - | 2.4 | - | 0.0 | - | 0.0 | - | 0.0 | - | 9.7 | - | 22.6 | - | - | - | - | - |
| 1/2/2006 8:00 AM | 0.0 | - | 3.6 | - | 0.0 | - | 0.0 | - | 0.0 | - | 4.0 | - | 16.8 | - | - | - | - | - |
| 1/2/2006 12:00 PM | 0.0 | - | 2.4 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/2/2006 13:00 PM | 0.0 | - | 5.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 3.8 | - | 0.0 | - | - | - | - | - |
| 1/2/2006 16:00 PM | 0.0 | - | 3.2 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/3/2006 8:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/3/2006 12:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/3/2006 16:00 PM | 0.0 | - | 2.2 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/4/2006 8:00 AM | 0.0 | - | 5.2 | - | 0.0 | - | 0.0 | - | 0.0 | - | 10.7 | - | 0.0 | - | - | - | - | - |
| 1/4/2006 12:00 PM | 0.0 | - | 2.6 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/4/2006 16:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/5/2006 8:00 AM | 0.0 | - | 5.2 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 29.6 | - | - | - | - | - |
| 1/5/2006 12:00 PM | 0.0 | - | 8.6 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 4.8 | - | - | - | - | - |
| 1/5/2006 16:00 PM | 0.0 | - | 35.6 | - | 0.0 | - | 0.0 | - | 0.0 | | 8.8 | - | 10.6 | - | - | - | - | - |
| 1/6/2006 8:00 AM | 0.0 | - | 4.3 | - | 0.0 | - | 0.0 | - | 0.0 | - | 10.7 | - | 166.0 | - | - | - | - | - |
| 1/6/2006 12:00 PM | 0.0 | - | 13.6 | - | 0.0 | - | 0.0 | - | 0.0 | | 13.6 | - | 45.0 | - | - | - | - | - |
| 1/6/2006 16:00 PM | 0.0 | - | 6.8 | - | 0.0 | - | 0.0 | - | 0.0 | | 8.4 | - | 46.0 | - | - | - | - | - |
| 1/8/2006 6:00 AM | 0.0 | - | 7.4 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 1.4 | - | - | - | - | - |
| 1/8/2006 10:00 AM | 0.0 | - | 10.7 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 19.4 | - | - | - | - | - |
| 1/8/2006 14:00 PM | 0.0 | - | 52.4 | - | 0.0 | - | 0.0 | - | 0.0 | | 1.3 | - | 0.0 | - | - | - | - | - |
| 1/8/2006 18:00 PM | 0.0 | - | 232.0 | - | 284.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/9/2006 6:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 97.0 | - | - | - | - | - |
| 1/9/2006 10:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 58.6 | - | 59.2 | - | - | - | - | - |
| 1/9/2006 14:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.7 | - | - | - | - | - |
| 1/9/2006 18:00 PM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.6 | - | - | - | - | - |
| 1/10/2006 6:00 AM | 0.0 | - | 7.4 | - | 0.0 | - | 0.0 | - | 0.0 | - | 17.6 | - | 28.9 | - | - | - | - | - |
| 1/10/2006 10:00 AM | 0.0 | - | 1.4 | - | 0.0 | - | 0.0 | - | 0.0 | | 9.2 | - | 1.7 | - | - | - | - | - |
| 1/10/2006 14:00 PM | 0.0 | - | 40.6 | - | 68.7 | - | 0.0 | - | 0.0 | | 3.2 | - | 0.0 | - | - | - | - | - |
| 1/10/2006 18:00 PM | 0.0 | - | 26.9 | - | 93.7 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/11/2006 6:00 AM | 0.0 | - | 13.6 | - | 0.0 | - | 0.0 | - | 0.0 | - | 1.3 | - | 0.0 | - | - | - | - | - |
| 1/11/2006 10:00 AM | 0.0 | - | 14.3 | - | 7.8 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/11/2006 14:00 PM | 0.0 | - | 7.6 | - | 0.0 | - | 0.0 | - | 0.0 | | 7.6 | - | 18.0 | - | - | - | - | - |
| 1/12/2006 6:00 AM | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | - | - |
| 1/12/2006 10:00 AM | 0.0 | - | 2.8 | - | 9.6 | - | 0.0 | - | 0.0 | | 3.8 | - | 50.7 | - | - | - | - | - |
| 1/12/2006 14:00 PM | 0.0 | - | 11.1 | - | 87.6 | - | 0.0 | - | 0.0 | | 13.8 | - | 56.7 | - | - | - | - | - |
| 1/12/2006 18:00 PM | 0.0 | - | 4.7 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 2/22/2006 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 03/01/06 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 03/08/06 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |
| 03/15/06 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | | 0.0 | - | 0.0 | - | - | - | - | - |

**Notes:**

PID - Photoionization Detector (readings in parts per million by volume - ppm-v)
LEL - Lower Explosive Limit



"An Equal Opportunity Employer"

*Table 2*

**Liquid Level and Groundwater Analytical Data Summary**

Shell Parklawn
11800 Parklawn Drive
Rockville, Maryland

| Monitoring Well | Date | Top of Casing (ft) | Depth to Water (ft) | Depth to Product (ft) | Product Thickness (ft) | Prod Adj GW Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | Total BTEX (µg/L) | MTBE (µg/L) | Naphthalene (µg/L) | tert-Butyl Alcohol (µg/L) | Diisopropyl ether (µg/L) | ethyl tert-butyl ether (µg/L) | tert-amyl methyl ether (µg/L) | TPH-DRO (µg/L) | TPH-GRO (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H-1 | 08/22/2005 | 269.39 | 19.02 | 17.85 | 1.17 | 251.25 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/23/2005 | 269.39 | 19.33 | 18.62 | 0.71 | 250.59 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/25/2005 | 269.39 | 19.12 | 18.55 | 0.57 | 250.70 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/01/2005 | 269.39 | 19.40 | - | - | 249.99 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/02/2005 | 269.39 | 19.48 | - | - | 249.91 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/06/2005 | 269.39 | 19.45 | - | - | 249.94 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/03/2005 | 269.39 | 19.34 | 19.29 | 0.05 | 250.09 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 269.39 | 19.00 | - | - | 250.39 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 269.39 | 18.56 | - | - | 250.83 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 269.39 | 18.04 | - | - | 251.35 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 269.39 | 17.82 | - | - | 251.57 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 269.39 | 18.37 | - | - | 251.02 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 269.39 | 17.59 | - | - | 251.80 | 792 | 2,690 | 1,350 | 6,690 | 11,522 | 39,500 | - | 9,840 | 441 | <1.00 | 1,370 | - | - |
| | 02/01/2006 | 269.74 | 16.22 | - | - | 253.52 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 269.47 | 18.93 | - | - | 250.54 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 269.47 | 18.40 | - | - | 251.07 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW-3 | 08/12/2005 | 270.36 | 17.45 | - | - | 252.91 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/13/2005 | 270.36 | 18.47 | 18.15 | 0.32 | 252.13 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/15/2005 | 270.36 | 17.95 | 17.84 | 0.11 | 252.49 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/16/2005 | 270.36 | 17.80 | 15.80 | 2.00 | 254.06 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/17/2005 | 270.36 | 17.60 | 15.60 | 2.00 | 254.26 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/18/2005 | 270.36 | 22.64 | 17.61 | 5.03 | 251.49 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/19/2005 | 270.36 | 18.27 | 18.20 | 0.07 | 252.14 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/23/2005 | 270.36 | 19.81 | 18.70 | 1.11 | 251.38 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/25/2005 | 270.36 | 19.52 | 18.48 | 1.04 | 251.62 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/26/2005 | 270.36 | 19.52 | 18.44 | 1.08 | 251.65 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/31/2005 | 270.36 | 19.32 | 18.00 | 1.32 | 252.03 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/01/2005 | 270.36 | 21.81 | - | - | 248.55 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/02/2005 | 270.36 | 20.86 | - | - | 249.50 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/06/2005 | 270.36 | 22.15 | - | - | 248.21 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/03/2005 | 270.36 | 19.83 | - | - | 250.53 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 270.36 | 19.08 | - | - | 251.28 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 270.36 | 18.88 | - | - | 251.48 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 270.36 | 18.57 | - | - | 251.79 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 270.36 | 18.31 | - | - | 252.05 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 270.36 | 18.84 | - | - | 251.52 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 270.36 | 18.00 | - | - | 252.36 | 6,130 | 13,700 | 3,140 | 17,800 | 40,770 | 185,000 | - | <5,000 | 2,680 | 4.83 | 8,720 | - | - |
| | 02/01/2006 | - | 17.72 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 270.36 | 18.51 | - | - | 251.85 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 270.36 | 18.48 | - | - | 251.88 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW-12 | 09/02/2005 | 263.88 | 13.87 | 13.05 | 0.82 | 250.63 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/06/2005 | 263.88 | 12.82 | - | - | 251.06 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/17/2005 | 263.88 | 12.81 | - | - | 251.07 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/18/2005 | 263.88 | 12.99 | - | - | 250.89 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | 263.88 | 13.19 | - | - | 250.69 | 3,640 | 4,850 | 444 | 3,290 | 12,224 | 222,000 | - | <10,000 | 3,250 | <2,000 | 9,750 | - | - |
| | 10/03/2005 | 263.88 | 13.36 | - | - | 250.52 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 263.88 | 12.92 | 12.78 | 0.14 | 251.07 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 263.88 | 12.77 | 12.72 | 0.05 | 251.15 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 263.88 | 12.55 | - | - | 251.33 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 263.88 | 12.35 | - | - | 251.53 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 263.88 | 12.76 | 12.72 | 0.04 | 251.15 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 263.88 | 12.21 | 12.19 | 0.02 | 251.69 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 01/13/2006 | 263.88 | 8.88 | - | - | 255.00 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | 263.88 | 12.02 | SHEEN | SHEEN | 251.86 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 263.88 | 12.49 | - | - | 251.39 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 263.88 | 12.55 | - | - | 251.33 | - | - | - | - | - | - | - | - | - | - | - | - | - |



"An Equal Opportunity Employer"

*Table 2*

**Liquid Level and Groundwater Analytical Data Summary**

Shell Parklawn
11800 Parklawn Drive
Rockville, Maryland

| Monitoring Well | Date | Top of Casing (ft) | Depth to Water (ft) | Depth to Product (ft) | Product Thickness (ft) | Prod Adj GW Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | Total BTEX (µg/L) | MTBE (µg/L) | Naphthalene (µg/L) | tert-Butyl Alcohol (µg/L) | Diisopropyl ether (µg/L) | ethyl tert-butyl ether (µg/L) | tert-amyl methyl ether (µg/L) | TPH-DRO (µg/L) | TPH-GRO (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-13 | 09/02/2005 | 267.97 | 17.42 | 17.00 | 0.42 | 250.87 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/06/2005 | 267.97 | 17.60 | 16.99 | 0.61 | 250.83 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/07/2005 | 267.97 | 17.88 | 17.08 | 0.80 | 250.69 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/17/2005 | 267.97 | 17.04 | - | - | 250.93 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/18/2005 | 267.97 | 17.55 | 17.22 | 0.33 | 250.67 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/03/2005 | 267.97 | 18.08 | 17.65 | 0.43 | 250.21 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 267.97 | 17.50 | 17.25 | 0.25 | 250.66 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 267.97 | 17.12 | 16.98 | 0.14 | 250.96 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 267.97 | 16.65 | 16.60 | 0.05 | 251.36 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 267.97 | 16.56 | - | - | 251.41 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 267.97 | 17.18 | 17.10 | 0.08 | 250.85 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 267.97 | 16.56 | 16.27 | 0.29 | 251.63 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | - | 16.35 | 16.02 | 0.33 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 267.97 | 17.04 | - | - | 250.93 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 267.97 | 17.11 | 16.68 | 0.43 | 251.18 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW-14 | 09/17/2005 | 261.20 | 10.45 | - | - | 250.75 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | 261.20 | 10.74 | - | - | 250.46 | 34.2 | 0.71 | <1.0 | 3.2 | 38.11 | 8,860 | - | 483 | 82.9 | <5.0 | 336 | - | - |
| | 10/03/2005 | 261.20 | 10.78 | - | - | 250.42 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 261.20 | 10.37 | - | - | 250.83 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 261.20 | 10.32 | - | - | 250.88 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 261.20 | 10.09 | - | - | 251.11 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 261.20 | 10.00 | - | - | 251.20 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 261.20 | 10.29 | - | - | 250.91 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 261.20 | 9.73 | - | - | 251.47 | 221 | 15.8 | <1.00 | 127 | 363.80 | 14,800 | - | <500 | 238 | <1.00 | 619 | - | - |
| | 01/13/2006 | 261.20 | 9.80 | - | - | 251.40 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | 261.20 | 9.64 | - | - | 251.56 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 261.20 | 10.03 | - | - | 251.17 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 261.20 | 10.05 | - | - | 251.15 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW-15 | 09/17/2005 | 261.22 | 10.49 | - | - | 250.73 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | 261.22 | 10.82 | - | - | 250.40 | 56.9 | <100 | <100 | <100 | 56.9 | 19,500 | - | 2,700 | 230 | <500 | 715 | - | - |
| | 10/03/2005 | 261.22 | 10.89 | - | - | 250.33 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 261.22 | 10.40 | - | - | 250.82 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 261.22 | 10.31 | - | - | 250.91 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 261.22 | 10.07 | - | - | 251.15 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 261.22 | 9.92 | - | - | 251.30 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 261.22 | 10.28 | - | - | 250.94 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 261.22 | 9.66 | - | - | 251.56 | <1.00 | <1.00 | <1.00 | <3.00 | <6.00 | 2,220 | - | 461 | 32 | <1.00 | 63.4 | - | - |
| | 01/13/2006 | 261.22 | 9.59 | - | - | 251.63 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | 261.22 | 9.55 | - | - | 251.67 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 261.22 | 10.00 | - | - | 251.22 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 261.22 | 10.05 | - | - | 251.17 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW-16 | 09/17/2005 | 260.65 | 9.81 | - | - | 250.84 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | 260.65 | 10.30 | - | - | 250.35 | <100 | <100 | <100 | <100 | <400 | 14,000 | - | 3,010 | 87.8 | <500 | 543 | - | - |
| | 10/03/2005 | 260.65 | 10.31 | - | - | 250.34 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 260.65 | 9.80 | - | - | 250.85 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 260.65 | 9.70 | - | - | 250.95 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 260.65 | 9.38 | - | - | 251.27 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 260.65 | 9.22 | - | - | 251.43 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 260.65 | 9.67 | - | - | 250.98 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 260.65 | 8.96 | - | - | 251.69 | <1.00 | <1.00 | <1.00 | <3.00 | <6.00 | 1,400 | - | 91.2 | 18.3 | <1.00 | 45 | - | - |
| | 01/13/2006 | 260.65 | 8.88 | - | - | 251.77 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | 260.65 | 8.81 | - | - | 251.84 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 260.65 | 9.38 | - | - | 251.27 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 260.65 | 9.40 | - | - | 251.25 | - | - | - | - | - | - | - | - | - | - | - | - | - |



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Shell Parklawn
11800 Parklawn Drive
Rockville, Maryland

| Monitoring Well | Date | Top of Casing (ft) | Depth to Water (ft) | Depth to Product (ft) | Product Thickness (ft) | Prod Adj GW Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | Total BTEX (µg/L) | MTBE (µg/L) | Naphthalene (µg/L) | tert-Butyl Alcohol (µg/L) | Diisopropyl ether (µg/L) | ethyl tert-butyl ether (µg/L) | tert-amyl methyl ether (µg/L) | TPH-DRO (µg/L) | TPH-GRO (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-17 | 09/17/2005 | 260.21 | 9.57 | - | - | 250.64 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | 260.21 | 9.96 | - | - | 250.25 | <50 | <50 | <50 | <50 | <200 | 7,600 | - | 1,260 | 59 | <250 | 287 | - | - |
| | 10/03/2005 | 260.21 | 10.02 | - | - | 250.19 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 260.21 | 9.58 | - | - | 250.63 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 260.21 | 9.45 | - | - | 250.76 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 260.21 | 9.20 | - | - | 251.01 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 260.21 | 9.08 | - | - | 251.13 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 260.21 | 9.41 | - | - | 250.80 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 260.21 | 8.80 | - | - | 251.41 | <1.00 | <1.00 | <1.00 | <3.00 | <6.00 | 2,870 | - | 627 | 20.7 | <1.00 | 112 | - | - |
| | 01/13/2006 | 260.21 | 8.72 | - | - | 251.49 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | 260.21 | 8.70 | - | - | 251.51 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 260.21 | 9.12 | - | - | 251.09 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 260.21 | 9.15 | - | - | 251.06 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW-18 | 09/17/2005 | 260.28 | 9.62 | - | - | 250.66 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | 260.28 | 9.98 | - | - | 250.30 | <50 | <50 | <50 | <50 | <200 | 7,860 | - | 1,840 | 30.6 | <250 | 445 | - | - |
| | 10/03/2005 | 260.28 | 10.08 | - | - | 250.20 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 260.28 | 9.61 | - | - | 250.67 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 260.28 | 9.52 | - | - | 250.76 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 260.28 | 9.34 | - | - | 250.94 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 260.28 | 9.25 | - | - | 251.03 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 260.28 | 9.49 | - | - | 250.79 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 260.28 | 8.97 | - | - | 251.31 | 1.7 | 1.2 | <1.00 | 3.93 | 6.83 | 5,240 | - | 1,020 | 21.3 | <1.00 | 268 | - | - |
| | 01/13/2006 | 260.28 | 8.90 | - | - | 251.38 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | 260.28 | 8.85 | - | - | 251.43 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 260.28 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 260.28 | 9.24 | - | - | 251.04 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW-19 | 09/17/2005 | 260.13 | 9.52 | - | - | 250.61 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | 260.13 | 9.86 | - | - | 250.27 | <50 | <50 | <50 | <50 | <200 | 5,910 | - | 1,180 | 22.2 | <250 | 364 | - | - |
| | 10/03/2005 | 260.13 | 9.97 | - | - | 250.16 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 260.13 | 9.50 | - | - | 250.63 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 260.13 | 9.43 | - | - | 250.70 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 260.13 | 9.27 | - | - | 250.86 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 260.13 | 9.18 | - | - | 250.95 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 260.13 | 9.41 | - | - | 250.72 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 260.13 | 8.90 | - | - | 251.23 | 2.88 | 1.04 | <1.00 | 3.16 | 7.08 | 5,380 | - | 1,060 | 20.2 | <1.00 | 342 | - | - |
| | 01/13/2006 | 260.13 | 8.84 | - | - | 251.29 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | 260.16 | 8.77 | - | - | 251.39 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 260.16 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 260.16 | 9.10 | - | - | 251.06 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RW-1 | 08/12/2005 | NM | 21.82 | 15.92 | 5.90 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/13/2005 | NM | 23.00 | 16.60 | 6.40 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/15/2005 | NM | 22.33 | 16.76 | 5.57 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/16/2005 | NM | 21.55 | 17.29 | 4.26 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/17/2005 | NM | 21.52 | 17.08 | 4.44 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/18/2005 | NM | 21.16 | 17.13 | 4.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/19/2005 | NM | 20.94 | 17.16 | 3.78 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/20/2005 | NM | 21.02 | 17.15 | 3.87 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/22/2005 | NM | 20.77 | 20.15 | 0.62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/23/2005 | NM | 20.77 | 20.15 | 0.62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/24/2005 | NM | 21.96 | 21.25 | 0.71 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/25/2005 | NM | 18.46 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/31/2005 | NM | 20.60 | 19.85 | 0.75 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/02/2005 | NM | 21.53 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/06/2005 | NM | 24.41 | 21.39 | 3.02 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | NM | 18.92 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | NM | 18.42 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | NM | 19.10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | NM | 18.52 | - | - | - | 3,450 | 5,350 | 1,320 | 7,060 | 17,180 | 238,000 | - | 37,400 | 2,200 | 3.99 | 6,090 | - | - |
| | 02/01/2006 | 269.79 | 17.59 | - | - | 252.20 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 269.79 | 20.57 | - | - | 249.22 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 269.79 | 18.55 | - | - | 251.24 | - | - | - | - | - | - | - | - | - | - | - | - | - |



"An Equal Opportunity Employer"

*Table 2*

**Liquid Level and Groundwater Analytical Data Summary**

Shell Parklawn
11800 Parklawn Drive
Rockville, Maryland

| Monitoring Well | Date | Top of Casing (ft) | Depth to Water (ft) | Depth to Product (ft) | Product Thickness (ft) | Prod Adj GW Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | Total BTEX (µg/L) | MTBE (µg/L) | Naphthalene (µg/L) | tert-Butyl Alcohol (µg/L) | Diisopropyl ether (µg/L) | ethyl tert-butyl ether (µg/L) | tert-amyl methyl ether (µg/L) | TPH-DRO (µg/L) | TPH-GRO (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW-2 | 08/12/2005 | 266.47 | 14.82 | - | - | 251.65 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/13/2005 | 266.47 | 14.83 | - | - | 251.64 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/15/2005 | 266.47 | 14.74 | - | - | 251.73 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/16/2005 | 266.47 | 14.84 | - | - | 251.63 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/17/2005 | 266.47 | 14.57 | - | - | 251.90 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/18/2005 | 266.47 | 14.72 | - | - | 251.75 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/19/2005 | 266.47 | 15.01 | - | - | 251.46 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/21/2005 | 266.47 | 14.70 | - | - | 251.77 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/23/2005 | 266.47 | 15.52 | - | - | 250.95 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/25/2005 | 266.47 | 15.12 | - | - | 251.35 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/26/2005 | 266.47 | 15.64 | - | - | 250.83 | 71.3 | 126 | 20.7 | 210 | 428.0 | 583 | - | <130 | 17.2 | <25 | 31.7 | - | - |
| | 09/06/2005 | 266.47 | 15.65 | - | - | 250.82 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/29/2005 | - | - | - | - | - | 127 | 79.6 | <20 | 70.6 | 277.2 | 2,800 | - | <500 | 87.6 | <100 | 208 | - | - |
| | 10/03/2005 | 266.47 | 16.18 | - | - | 250.29 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 266.47 | 15.70 | - | - | 250.77 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 266.47 | 16.55 | - | - | 249.92 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 266.47 | 15.07 | - | - | 251.40 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 266.47 | 14.89 | - | - | 251.58 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 266.47 | 15.38 | - | - | 251.09 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 266.47 | 14.65 | - | - | 251.82 | 425 | 530 | 106 | 753 | 1,814 | 10,100 | - | 5,890 | 192 | <1.00 | 690 | - | - |
| | 01/13/2006 | 266.47 | 14.51 | - | - | 251.96 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | 266.47 | 14.44 | - | - | 252.03 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 266.47 | 15.07 | - | - | 251.40 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 266.47 | 14.51 | - | - | 251.96 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RW-4 | 08/22/2005 | NM | 20.55 | 19.08 | 1.47 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/23/2005 | NM | 20.87 | 16.72 | 4.15 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/24/2005 | NM | 20.52 | 19.72 | 0.80 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/25/2005 | NM | 20.14 | 19.22 | 0.92 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/31/2005 | NM | 20.00 | 18.78 | 1.22 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | NM | 17.67 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | NM | 19.40 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | NM | 18.58 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | NM | 16.92 | - | - | - | 4,080 | 13,500 | 5,170 | 41,000 | 63,750 | 217,000 | - | 60,700 | 2,130 | 4.77 | 8,600 | - | - |
| | 02/01/2006 | 268.98 | 17.00 | - | - | 251.98 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 268.98 | 19.30 | - | - | 249.68 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 268.98 | 17.94 | - | - | 251.04 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RW-6 | 08/20/2005 | 269.04 | 14.75 | 10.69 | 4.06 | 257.34 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/21/2005 | 269.04 | 20.42 | 16.04 | 4.38 | 251.91 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/22/2005 | 269.04 | 20.67 | 20.35 | 0.32 | 248.61 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/23/2005 | 269.04 | 20.67 | 20.35 | 0.32 | 248.61 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/24/2005 | 269.04 | 19.22 | 19.10 | 0.12 | 249.91 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/25/2005 | 269.04 | 19.27 | 18.72 | 0.55 | 250.18 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/31/2005 | 269.04 | 19.85 | 18.65 | 1.20 | 250.09 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/02/2005 | 269.04 | 20.15 | 19.75 | 0.40 | 249.19 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/06/2005 | 269.04 | 19.92 | 19.91 | 0.01 | 249.13 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | 269.04 | 19.1 | 18.83 | 0.27 | 250.14 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/03/2005 | 269.04 | 18.96 | 18.90 | 0.06 | 250.13 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 269.04 | 18.68 | 18.32 | 0.36 | 250.63 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 269.04 | 18.55 | 18.19 | 0.36 | 250.76 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 269.04 | 17.81 | 17.66 | 0.15 | 251.34 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 269.04 | 17.62 | 17.50 | 0.12 | 251.51 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 269.04 | 19.84 | - | - | 249.20 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 269.04 | 17.22 | - | - | 251.82 | 4,760 | 11,900 | 1,970 | 12,700 | 31,330 | 165,000 | - | 38,800 | 2,500 | 3.6 | 11,400 | - | - |
| | 02/01/2006 | 269.35 | 16.97 | - | - | 252.38 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 269.35 | 21.32 | - | - | 248.03 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 269.35 | 18.02 | - | - | 251.33 | - | - | - | - | - | - | - | - | - | - | - | - | - |



"An Equal Opportunity Employer"

*Table 2*

**Liquid Level and Groundwater Analytical Data Summary**

Shell Parklawn
11800 Parklawn Drive
Rockville, Maryland

| Monitoring Well | Date | Top of Casing (ft) | Depth to Water (ft) | Depth to Product (ft) | Product Thickness (ft) | Prod Adj GW Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | Total BTEX (µg/L) | MTBE (µg/L) | Naphthalene (µg/L) | tert-Butyl Alcohol (µg/L) | Diisopropyl ether (µg/L) | ethyl tert-butyl ether (µg/L) | tert-amyl methyl ether (µg/L) | TPH-DRO (µg/L) | TPH-GRO (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW-7 | 08/20/2005 | NM | 19.47 | 17.03 | 2.44 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/22/2005 | NM | 19.68 | 17.81 | 1.87 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/23/2005 | NM | 19.68 | 17.81 | 1.87 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/24/2005 | NM | 20.00 | 18.51 | 1.49 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/25/2005 | NM | 19.11 | 18.03 | 1.08 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/01/2005 | NM | 20.08 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/02/2005 | NM | 19.98 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/06/2005 | NM | 21.10 | 16.15 | 4.95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | NM | 17.35 | 17.26 | 0.09 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | NM | 19.15 | 18.92 | 0.23 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | NM | 18.40 | 17.35 | 1.05 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | NM | 17.27 | 16.71 | 0.56 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | 268.77 | 16.95 | 15.65 | 1.30 | 252.80 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 268.77 | 18.82 | - | - | 249.95 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 268.77 | 17.93 | - | - | 250.84 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RW-8 | 08/23/2005 | 268.24 | 17.38 | - | - | 250.86 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/25/2005 | 268.24 | 17.12 | - | - | 251.12 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/26/2005 | 268.24 | 17.65 | - | - | 250.59 | 3,370 | 7,190 | 992 | 4,420 | 15,972 | 197,000 | - | <2,500 | 2,100 | <500 | 7,760 | - | - |
| | 09/06/2005 | 268.24 | 17.76 | 17.56 | 0.20 | 250.63 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/07/2005 | 268.24 | 17.84 | 17.62 | 0.22 | 250.57 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | 268.24 | 17.17 | 16.98 | 0.19 | 251.21 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 268.24 | 15.94 | - | - | 252.30 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 268.24 | 15.80 | - | - | 252.44 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 268.24 | 16.32 | - | - | 251.92 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 268.24 | 15.70 | - | - | 252.54 | 2,270 | 3,650 | 801 | 5,670 | 12,391 | 116,000 | - | <5,000 | 1,740 | <1.00 | 4,500 | - | - |
| | 01/13/2006 | 268.24 | 15.50 | - | - | 252.74 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | 267.48 | 14.42 | - | - | 253.06 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 267.48 | 16.28 | - | - | 251.20 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 267.48 | 16.50 | - | - | 250.98 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RW-9 | 08/25/2005 | 267.50 | 17.04 | - | - | 250.46 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/26/2005 | 267.50 | 17.50 | - | - | 250.00 | 14.6 | 37.3 | 17.6 | 85.3 | 154.8 | 52.3 | - | <25 | 1.5 | <5.0 | 6.8 | - | - |
| | 09/06/2005 | 267.50 | 17.47 | - | - | 250.03 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | 267.50 | 16.95 | - | - | 250.55 | 9.7 | 2.5 | 0.58 | 14.7 | 27.48 | 36.9 | - | <25 | 2.6 | <5.0 | 6.4 | - | - |
| | 10/03/2005 | 267.50 | 17.10 | - | - | 250.40 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 267.50 | 16.31 | - | - | 251.19 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 267.50 | 15.98 | - | - | 251.52 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 267.50 | 15.73 | - | - | 251.77 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 267.50 | 16.26 | - | - | 251.24 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 267.50 | 15.50 | - | - | 252.00 | 310 | 20.4 | 1.26 | 202 | 533.66 | 958 | - | <10.0 | 126 | <1.00 | 315 | - | - |
| | 01/13/2006 | 267.50 | 15.35 | - | - | 252.15 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | 267.50 | 13.98 | - | - | 253.52 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 267.50 | 16.11 | - | - | 251.39 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 267.50 | 14.92 | - | - | 252.58 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RW-10 | 08/23/2005 | NM | 19.39 | 19.08 | 0.31 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/25/2005 | NM | 19.42 | 19.17 | 0.25 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/26/2005 | NM | 20.88 | 19.79 | 1.09 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/31/2005 | NM | 21.55 | 19.65 | 1.90 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/01/2005 | NM | 21.20 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/02/2005 | NM | 21.37 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/06/2005 | NM | 21.40 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | NM | 20.65 | 19.84 | 0.81 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/03/2005 | NM | 20.25 | 19.55 | 0.70 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | NM | 19.35 | 18.95 | 0.40 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | NM | 18.38 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | NM | 18.12 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | NM | 18.89 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | NM | 18.61 | - | - | - | 6,240 | 8,180 | 1,440 | 11,100 | 26,960 | 756,000 | - | 655 | 6,500 | 14.4 | 19,200 | - | - |
| | 02/01/2006 | 269.71 | 16.93 | - | - | 252.78 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 269.71 | 19.01 | - | - | 250.70 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 269.71 | 18.53 | - | - | 251.18 | - | - | - | - | - | - | - | - | - | - | - | - | - |



"An Equal Opportunity Employer"

*Table 2*

**Liquid Level and Groundwater Analytical Data Summary**

Shell Parklawn
11800 Parklawn Drive
Rockville, Maryland

| Monitoring Well | Date | Top of Casing (ft) | Depth to Water (ft) | Depth to Product (ft) | Product Thickness (ft) | Prod Adj GW Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | Total BTEX (µg/L) | MTBE (µg/L) | Naphthalene (µg/L) | tert-Butyl Alcohol (µg/L) | Diisopropyl ether (µg/L) | ethyl tert-butyl ether (µg/L) | tert-amyl methyl ether (µg/L) | TPH-DRO (µg/L) | TPH-GRO (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RW-11 | 08/25/2005 | 269.11 | 19.19 | 19.16 | 0.03 | 249.94 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/01/2005 | 269.11 | 21.60 | - | - | 247.51 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/02/2005 | 269.11 | 20.62 | - | - | 248.49 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/06/2005 | 269.11 | 20.52 | - | - | 248.59 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 09/28/2005 | 269.11 | 19.23 | 19.13 | 0.10 | 249.96 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 10/14/2005 | 269.11 | 18.62 | - | - | 250.49 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/02/2005 | 269.11 | 18.29 | - | - | 250.82 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/04/2005 | 269.11 | 17.76 | - | - | 251.35 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/05/2005 | 269.11 | 17.53 | - | - | 251.58 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 11/28/2005 | 269.11 | 18.10 | - | - | 251.01 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 12/29/2005 | 269.11 | 17.31 | - | - | 251.80 | 2,410 | 5,250 | 1,500 | 7,630 | 16,790 | 250,000 | - | 41,500 | 1,970 | 3.96 | 6,020 | - | - |
| | 02/01/2006 | 269.30 | 16.57 | - | - | 252.73 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/01/2006 | 269.30 | 18.80 | - | - | 250.50 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | 269.30 | 17.98 | - | - | 251.32 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| TP-1 | 08/09/2005 | NM | 6.60 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/10/2005 | NM | 5.58 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/11/2005 | NM | 6.80 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/12/2005 | NM | 6.83 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/13/2005 | NM | 6.83 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | NA | 6.85 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | NA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| TP-2 | 08/09/2005 | NM | 12.87 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/10/2005 | NM | 12.93 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/11/2005 | NM | 12.91 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/12/2005 | NM | 12.97 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/13/2005 | NM | 12.95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/15/2005 | NM | 12.98 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/16/2005 | NM | 12.93 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/17/2005 | NM | 12.91 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | NA | 13.02 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | NA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| TP-3 | 08/09/2005 | NM | 6.83 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/10/2005 | NM | 6.85 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/11/2005 | NM | 11.96 | - | - | - | 20,000 | 24,000 | 1,000 | 5,000 | 50,000 | 3,900,000 | - | 250,000 | 23,000 | <5.0 | 48,000 | 27,000 | 2,200,000 |
| | 08/12/2005 | NM | 12.00 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/13/2005 | NM | 12.10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/15/2005 | NM | 12.49 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/16/2005 | NM | 12.75 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/17/2005 | NM | 12.55 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | NA | 13.62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | NA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| TP-4 | 08/09/2005 | NM | 12.54 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/10/2005 | NM | 12.52 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/11/2005 | NM | 12.51 | - | - | - | 13,000 | 18,000 | 1,800 | 6,900 | 39,700 | 2,700,000 | - | 330,000 | 17,000 | <5.0 | 31,000 | - | 2,200,000 |
| | 08/12/2005 | NM | 12.77 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/13/2005 | NM | 12.80 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/15/2005 | NM | 12.79 | SHEEN | SHEEN | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/16/2005 | NM | 12.78 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/17/2005 | NM | 12.55 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | NA | 12.64 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | NA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |



"An Equal Opportunity Employer"

*Table 2*

**Liquid Level and Groundwater Analytical Data Summary**

Shell Parklawn
11800 Parklawn Drive
Rockville, Maryland

| Monitoring Well | Date | Top of Casing (ft) | Depth to Water (ft) | Depth to Product (ft) | Product Thickness (ft) | Prod Adj GW Elevation (ft) | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | Total BTEX (µg/L) | MTBE (µg/L) | Naphthalene (µg/L) | tert-Butyl Alcohol (µg/L) | Diisopropyl ether (µg/L) | ethyl tert-butyl ether (µg/L) | tert-amyl methyl ether (µg/L) | TPH-DRO (µg/L) | TPH-GRO (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP-5 | 08/09/2005 | NM | DRY | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/10/2005 | NM | DRY | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/11/2005 | NM | DRY | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/12/2005 | NM | DRY | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/13/2005 | NM | DRY | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/15/2005 | NM | DRY | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/16/2005 | NM | DRY | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 08/17/2005 | NM | DRY | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 02/01/2006 | NA | DRY | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 03/22/2006 | NA | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| VP-3 | 09/19/2005 | - | - | - | - | - | <1.0 | <1.0 | <1.0 | <1.0 | <4.0 | <1.0 | - | <25 | - | - | - | - | - |
| | 12/29/2005 | NM | 18.00 | - | - | - | <1.00 | <1.00 | <1.00 | <3.00 | <6.00 | <1.00 | - | <10.0 | <1.00 | <1.00 | <1.00 | - | - |
| | 03/22/2006 | NM | 18.13 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Notes:
<# = Where an analyte is not detected, a method detection limit is given.
NM = Not Measured
µg/L = Micrograms per Liter



"An Equal Opportunity Employer"

*Table 3*

# STREAM SAMPLING ANALYTICAL DATA SUMMARY

Shell Station #100558
11800 Parklawn Drive
Rockville, Maryland

| Station ID | Date | Benzene (ug/l) | Toluene (ug/l) | Ethylbenzene (ug/l) | Xylenes (ug/l) | Total BTEX (ug/l) | MTBE (ug/l) | TBA (ug/l) | DIPE (ug/l) | TAME (ug/l) | ETBE (ug/l) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Station A (2,000 feet)** | 09/26/05 | <1.0 | <1.0 | <1.0 | <1.0 | ND | 4.5 | <25 | <5.0 | <5.0 | <5.0 |
| | 12/02/05 | ND | ND | ND | ND | ND | 91.9 | ND | 1.48 | 4.95 | ND |
| **Station B (1,500 feet)** | 09/07/05 | <1.0 | <1.0 | <1.0 | <1.0 | ND | 49.3 | <25 | <5.0 | 1.4 | <5.0 |
| | 09/26/05 | <1.0 | <1.0 | <1.0 | <1.0 | ND | 8.6 | <25 | <5.0 | <5.0 | <5.0 |
| | 12/02/05 | ND | ND | ND | ND | ND | 79.9 | ND | 1.21 | 4.31 | ND |
| **Station C (1,000 feet)** | 09/07/05 | <2.0 | <2.0 | <2.0 | <2.0 | ND | 323 | <50 | 2.8 | 9.6 | <10 |
| | 09/26/05 | <1.0 | <1.0 | <1.0 | <1.0 | ND | 27.8 | <25 | 0.26 | 0.7 | <5.0 |
| | 12/02/05 | ND | ND | ND | ND | ND | 206 | ND | 3.55 | 12.1 | ND |
| **Station D (500 feet)** | 09/07/05 | <10 | 12.1 | 2.5 | 24 | 38 | 1,680 | <250 | 19.3 | 60.7 | <50 |
| | 09/26/05 | <1.0 | <1.0 | <1.0 | <1.0 | ND | 122 | <25 | 1.1 | 3.4 | <5.0 |
| | 12/02/05 | 1.70 | 1.07 | ND | ND | 2.77 | 315 | ND | 6.35 | 20.5 | ND |
| **Station E (creek-below boom)** | 08/30/05 | 65.6 | 227 | 43.7 | 403 | 739.3 | 6,530 | 49.2 | 118 | 339 | <5.0 |
| | 09/26/05 | <10 | <10 | <10 | <10 | ND | 1,290 | <250 | 12.5 | 37.7 | <50 |
| | 12/02/05 | 13.1 | 7.32 | ND | 9.42 | 29.84 | 600 | ND | 16.5 | 48.5 | ND |
| **Station F (baffle)** | 08/30/05 | 33.2 | 95.7 | 22.7 | 164 | 315.6 | 3,350 | 55.5 | 62 | 177 | <5.0 |
| | 09/26/05 | <5.0 | <5.0 | <5.0 | <5.0 | ND | 724 | <130 | 5.9 | 18.9 | <25 |
| | 12/02/05 | 59.4 | 36.8 | 2.56 | 42.0 | 140.76 | 1,150 | 44.2 | 55.4 | 158 | ND |
| **Station G (Outfall A)** | 08/30/05 | 136 | 511 | 139 | 1,020 | 1,806 | 13,300 | <1300 | 229 | 819 | <250 |
| | 09/26/05 | 9.0 | 1.7 | <1.0 | 2.5 | 13.2 | 2,170 | 97.1 | 24 | 67 | <5.0 |
| | 12/02/05 | 63.3 | 38.2 | 2.66 | 42.2 | 146.4 | 1,160 | 45.4 | 57.0 | 162 | ND |

*Table 3*

## STREAM SAMPLING ANALYTICAL DATA SUMMARY

Shell Station #100558
11800 Parklawn Drive
Rockville, Maryland

| Station ID | Date | Benzene (ug/l) | Toluene (ug/l) | Ethylbenzene (ug/l) | Xylenes (ug/l) | Total BTEX (ug/l) | MTBE (ug/l) | TBA (ug/l) | DIPE (ug/l) | TAME (ug/l) | ETBE (ug/l) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Station H (Outfall B)** | 08/30/05 | 9.3 | 8.0 | 1.4 | 6.9 | 25.6 | 2,180 | <130 | 25.8 | 66.1 | <25 |
| | 09/26/05 | <2.0 | <2.0 | <2.0 | <2.0 | ND | 704 | 39.3 | 5.5 | 17.9 | <10 |
| | 12/02/05 | 5.57 | ND | ND | ND | 5.57 | 435 | ND | 7.85 | 22.0 | ND |
| **Station I (Manhole A)** | 09/26/05 | <2.5 | <2.5 | <2.5 | <2.5 | ND | 37 | <63 | <13 | 1.2 | <13 |
| | 12/02/05 | 106 | 138.0 | 15.9 | 83.4 | 343.3 | 345 | ND | 44.0 | 107 | ND |
| **Station J (Manhole B)** | 09/26/05 | <10 | <10 | <10 | <10 | ND | 5.7 | <250 | <50 | <50 | <50 |
| | 12/02/05 | ND | ND | ND | ND | ND | 15.3 | ND | ND | ND | ND |
| **Station K (Upgradient A Manhole)** | 09/26/05 | <5.0 | <5.0 | <5.0 | <5.0 | ND | 5.7 | <130 | <25 | <25 | <25 |
| | 12/02/05 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| **Station L (Upgradient B Manhole)** | 09/26/05 | <1.0 | 0.37 | <1.0 | <1.0 | 0.37 | <1.0 | <25 | <5.0 | <5.0 | <5.0 |
| | 12/02/05 | ND | ND | ND | ND | ND | 13.5 | ND | ND | ND | ND |

**Notes:**

LPH = Liquid Phase Hydrocarbons (thickness in feet)
ug/l = micrograms per liter
BTEX = Benzene, toluene, ethylbenzene and xylenes
MTBE = methyl tert butyl ether
TBA = Tert Butyl Alcohol
DIPE = Di-Isopropyl Ether
TAME = Tert-Amyl Methyl Alcohol
ETBE = Tert-Butyl Ethyl-Ether
< = Concentration is less than the detection limit
NS = Location dry, no sample taken

# APPENDIX A

Maryland Department of the Environment Correspondence

MDE

# MARYLAND DEPARTMENT OF THE ENVIRONMENT

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

Robert L. Ehrlich, Jr.
Governor

Michael S. Steele
Lt. Governor

Kendl P. Philbrick
Secretary

Jonas A. Jacobson
Deputy Secretary

February 10, 2006

Mr. Douglas J. Weimer, P.G.
Health, Safety, & Environment
Shell Oil Products US
3800 Pickett Road
Fairfax VA 22031

RECEIVED
FEB 15 2006
BY: DW

**RE: APPROVAL OF CORRECTIVE ACTION PLAN**
**Case No. 2006-0124-MO1**
**Shell Service Station**
**11800 Parklawn Drive, Rockville**
**Facility I.D. No. 7773**

Dear Mr. Weimer:

The Oil Control Program has reviewed the *Draft Site Characterization Report and Corrective Action Plan - December 2005* for the above-referenced property located in Montgomery County. Due to the emergency nature of this response, the normal site investigation, pilot testing, and recovery system installation process has been streamlined and performed concurrently with groundwater cleanup activities. The Oil Control Program has been overseeing cleanup activities at Parklawn Shell since the initial report (August 8, 2005) that gasoline was observed in a below-grade tank top sump while contractors were conducting tests on the underground storage tank (UST) system to comply with Maryland regulations. This leak reportedly occurred from a leaking functional element located below ground on the gasoline pump in the tank sump.

**SITE CHRONOLOGY:**

After conducting a detailed review of the station's inventory records, the Oil Control Program determined that approximately 29,665 gallons of regular-grade gasoline was released from one of the UST systems. Discrepancies in the inventory records indicate that the release began on June 13, 2005 with an average daily loss of 400 gallons over a 58-day period. Although this UST has a 10,000-gallon capacity, gasoline was periodically delivered between the time the release occurred and when it was discovered.

The Department directed Shell Oil Products to begin recovery operations of the gasoline by installing two monitoring wells in the source area of the tank field with two additional wells on the perimeter of the property to assess groundwater migration. In response to this emergency situation, the Montgomery County

Fire Department and the Montgomery County Department of Environmental Protection were also mobilized to the site to assist the MDE in monitoring for vapors and gasoline conditions to ensure the protection of human health and the environment. As a precautionary measure, sewer and storm drain manholes were vented, air blowers were placed along strategic points of the sewer lines to prevent vapor buildup, and booms were placed at a storm water outfall.

On August 16, 2005, Shell voluntarily closed gasoline retail activities at the station and all remaining petroleum products were pumped from the six fiberglass reinforced plastic UST systems [three 10,000-gallon gasoline (regular-, mid-, premium-grade); a 1,000-gallon heating oil; and a 550-gallon used oil]. During the installation of a third well in the tank field area on August 18, 2005, the sanitary sewer line was damaged and, as a result, the Washington Sanitary Suburban Commission (WSSC) responded to the site to make the necessary repairs. Again, emergency crews from both the MDE and Montgomery County were mobilized to the site. Conditions were monitored and determined to be safe for surrounding occupants and for cleanup activities to continue. A temporary groundwater pumping and soil vapor extraction system was put in place to recover gasoline.

The Oil Control Program received a *Site Summary Report* on September 29, 2005 and has been involved with preliminary recovery well locations. The temporary system provided useful information on well and soil vapor capture. On November 16, 2005, In order to expedite the cleanup, a permanent remediation trailer was built and placed on-site. Trenching and well vaults and line hookups were also completed. The permanent system was placed online while the *Corrective Action Plan* (*CAP*) is being reviewed. The overall technical approach using vacuum enhanced groundwater extraction and the recovery wells proposed in the source area is conceptually acceptable to the Department. Due to the emergency nature of the cleanup response, the Department hereby grants approval of the *CAP* contingent upon the following modifications:

***SITE CHARACTERIZATION REPORT and CORRECTIVE ACTION PLAN***:

GENERAL COMMENTS:

(1) Of the eleven (11) on-site wells, nine (9) are proposed for conversion to recovery wells. It does not appear that there are adequate wells to judge the effectiveness of the recovery system. Additional monitoring wells must be installed to evaluate the effectiveness of recovery operations. Please provide the Department with a *Work Plan* or propose additional well locations.

(2) It is unclear at this time the extent of capture from the permanent system and its future effect on off-site contamination. Based on the effectiveness of the system, the Department reserves the right to require additional activities be conducted off-site and possibly other remedial technologies.

(3) Due to the rapid response to the emergency situation at this site, formal pilot testing was not possible. Information on static levels after shutdown of the temporary system has been collected. However, during startup of the permanent system, information must be collected on the area of influence from pumping and vacuum at each well. Please summarize information on the extent of capture by the permanent system and submit to the Oil Control Program as a substitute for a pilot testing report. This information will be important in assessing the future success of the permanent system.

(4) The Department understands that the Washington Suburban Sanitary Commission (WSSC) has future plans for line upgrades and repairs in the vicinity of this station, which may impact the long-term effectiveness of the recovery system. It will be the responsibility of Shell Oil Products to contact WSSC concerning these activities. Please keep us apprised of these actions and the likely effects on future remediation activities at this site.

DETAILED COMMENTS:

(5) **Section 3.2**: Based on additional field activities, expand the site-specific geology to include the thickness of saprolite and the depths to bedrock and utilities. Describe how this will affect local groundwater flow in the formation and preferential flow paths around the utility corridor.

(6) **Section 5.4.2**: Quarterly air sampling must be conducted on the soil vapor points and at the White Flint Children's House at 11810 Parklawn Drive. Please draft a *Plan* no later than March 3, 2006 for a long-term indoor air monitoring program. This *Plan* must include at a minimum subsurface slab sampling (i.e., using summa canisters for lab analysis). The sewer line blower and carbon treatment system must remain online until it has been demonstrated that the permanent system is capable of performing the same function.

(7) **Section 6.2**: Less than half of the estimated amount of product released has been recovered at this time. There is residual product in the pea gravel of the tank field and in the formation under the tank field. Please perform surfactant flushing events as needed for the tank field and underlying formation. This activity should be performed early in the remedial process and will improve capture of residual product adsorbed to the subsurface material.

(8) **Section 5.4**: The remedial endpoints proposed by your consultant are site-specific and will depend on the performance of the system. The Department does not concur with the proposed remedial endpoints. At this phase of the remediation, the Department is focusing on the removal of liquid phase hydrocarbons (LPH) to the maximum extent practicable and to control, reduce, and contain high dissolve petroleum concentrations. Please note that once the current remediation system has maximized its optimal capacity, the Department reserves the right to require other remedial technologies to further address groundwater contamination.

(9) **Section 6.2.1 - Operational Schedule** and **Section 6.2.2 - System Monitoring**. Provide more detail on the anticipated system's servicing and monitoring schedule. Provide information on anticipated amounts of remaining contamination that will be recovered.

(10) **Section 7.1**: The stream sampling network was detailed and appropriate for rapid response activities, but should be streamlined for long-term assessment. Please describe in a Work Plan how stream sampling will be streamlined in the future.

(11) **Section 7.1**: Please include a brief discussion of testing and sequencing for air treatment technology to transition move from the initial CATOX system to GAC.

(12) **Section 7.0**: When submitting documentation to the Department, please provide two hard copies and one copy on a compact disc (CD) for updating the Oil Control Program's *"Remediation Sites"* list on the Internet. Copies must also be provided to the Montgomery County Department of Environmental Protection and representatives of the immediately adjacent property (WRIT-property owner, White Flint Children's House).

(13) **Figure 13** is somewhat confusing. There are no connections shown between the air stripper and the blower and between the three bag filters and the oil/water separator. Please correct.

The above-referenced modifications must be addressed in a *Corrective Action Plan (CAP) Addendum* to be submitted to the Department no later than March 10, 2006. Failure to comply with the schedule specified by the Department may result in enforcement proceedings that could include the issuance of civil penalties and other legal sanctions.

Please note that the Oil Control Program must be apprised of the future disposition of the existing UST systems. We look forward to reviewing the *Extent of Capture Report* to assess the performance of the permanent system. Thank you for your cooperation in this matter. If you have any questions, please contact the case manager, Mr. Forest Arnold, at 410-537-3387 or via Email: farnold@mde.state.md.us.

Sincerely,

Yolande J.C. Norman, Chief
Remediation Division
Oil Control Program

FA/nln

cc: Mr. Robert G. Edwards (Arent Fox, LLC)
Mr. Dan Wilhelm (ECC, Inc.)
Mr. Ken Maderais (Montgomery County Dept. of Environmental Protection)
Mr. Jay Beatty (Montgomery County Health Dept.)
Mr. Herbert M. Meade
Mr. Horacio Tablada

# APPENDIX B

Soil Gas Sampling Plan, March 3, 2006

Groundwater
& Environmental Services, Inc.®

2142 Priest Bridge Court • Suite 1 • Crofton, MD 21114 • (410) 721-0047 • Fax (410) 721-3733

FILE COPY

March 3, 2006

Ms. Yolande Norman
Maryland Department of the Environment
Oil Control Program
1800 Washington Boulevard
Baltimore, Maryland 21230-1719

Re: **Soil Gas Sampling Plan**
Shell Service Station #100558
11800 Parklawn Drive
Rockville, Maryland
MDE Case #2006-0124-MO1

Dear Ms. Norman:

Groundwater and Environmental Services, Inc. (GES), on behalf of Motiva Enterprises LLC (Motiva), is submitting this soil gas sampling plan in accordance with the directive letter from the Maryland Department of the Environment (MDE), dated February 10, 2006. The objective of this sampling plan is to evaluate soil gas concentrations below the sub-slab of the adjacent White Flint Children's House.

GES is proposing that three (3) sub-slab soil gas monitoring points be installed within the White Flint Children's House, as shown on Figure 1. The monitoring points will be installed by drilling three-eighth inch diameter holes into and through the concrete slab. The monitoring points will be completed with a hollow stainless steel tube extending into and through the sub-slab area. Each monitoring point will be completed with a three-eighths inch ball valve and a port for sample collection. Each sub-slab soil gas monitoring point will be purged by filling two 1-Liter Tedlar bags in accordance with the United States Environmental Protection Agency's *Standard Operating Procedure (SOP) for Installation of Sub-Slab Vapor Probes and Sampling Using EPA Method TO-15 to Support Vapor Intrusion Investigations*. Summa canisters equipped with 24-hour regulators will be used to collect soil gas samples from each of the three monitoring points on a quarterly basis for a period of one year. This sampling will be coordinated with quarterly groundwater sampling being conducted at the Shell station and in the surrounding area.

As part of the monitoring plan, GES also proposes to collect soil gas samples from the existing soil gas monitoring points located on the Shell service station property (VP-1, VP-2, VP-3, and VP-4 shown on Figure 2). These soil gas monitoring points were installed on August 31 and September 1, 2005. Each point was installed with discrete sampling tubing having a shallow, intermediate and deep zone for soil gas sample collection. The soil gas monitoring points were installed to a depth of nine to eleven feet. The shallow zone of each soil gas monitoring point at the Shell station will be sampled initially at the same time soil gas samples are collected from the White Flint Children's House. The intermediate and deep zone points will be scanned with a photoionization detector (PID). After the initial round of sampling and screening, GES will scan all three zones (shallow, intermediate, and deep) with a PID on a monthly basis. PID readings from the soil gas monitoring points will be collected by utilizing a peristaltic pump. The extracted soil gas from each monitoring point will be pumped into a one-Liter Tedlar bag. The PID will

be connected to the Tedlar bag to measure the soil gas concentration. Prior to collecting the soil gas measurements, the PID will be calibrated using a 100 parts per million (ppm) isobutylene standard, which provides a response similar to benzene. Samples will not be collected unless PID readings are recorded above zero parts per million by volume (ppmv) three successive times from any given monitoring point. Three to five volumes of air will be purged from the points prior to sample collection and samples will be collected using summa canisters with 24-hour regulators. The samples will be analyzed in accordance with EPA Method TO-15.

Based upon the results of the sub-slab soil gas sampling within the White Flint Children's House and the results of soil gas sampling at the Shell station, an evaluation will be made as to whether additional indoor air sampling within the White Flint Children's House is warranted. This approach is consistent with the MDE *Voluntary Cleanup Program Guidance Document* (September 20, 2005).

Should you have any questions or require additional information, please feel free to contact either of the undersigned at (410) 721-0047, extensions 215 or 216, respectively.

Sincerely,

A. Ashley Bell

A. Ashley Bell, PG
Project Manager

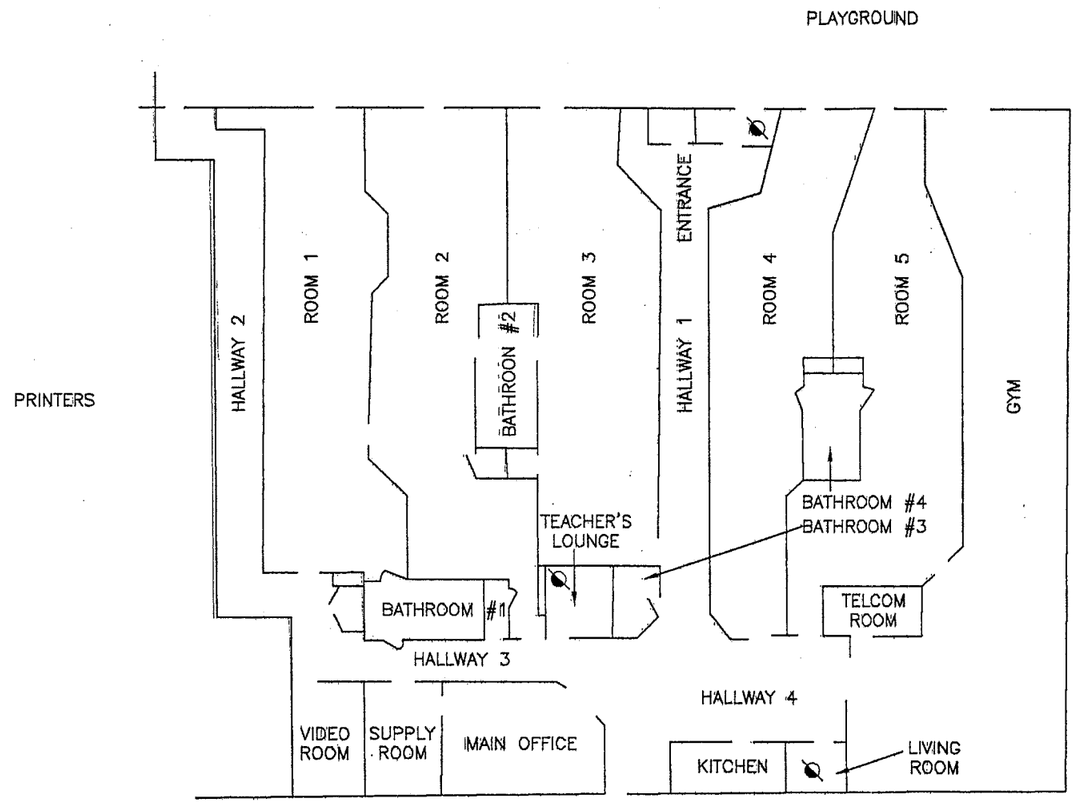
John F. Canzeri
Site Operations Manager

Figure 1. Sub-Slab Soil Gas Sampling Location Map
Figure 2. Site Map

c: Mr. Doug Weimer, Motiva
Mr. Forest Arnold, Maryland Department of the Environment
Marc Fleischaker, WRIT
Ken Maderais, Montgomery County Department of Environmental Protection
File, GES

LEGEND

SUB-SLAB SOIL GAS SAMPLING LOCATION



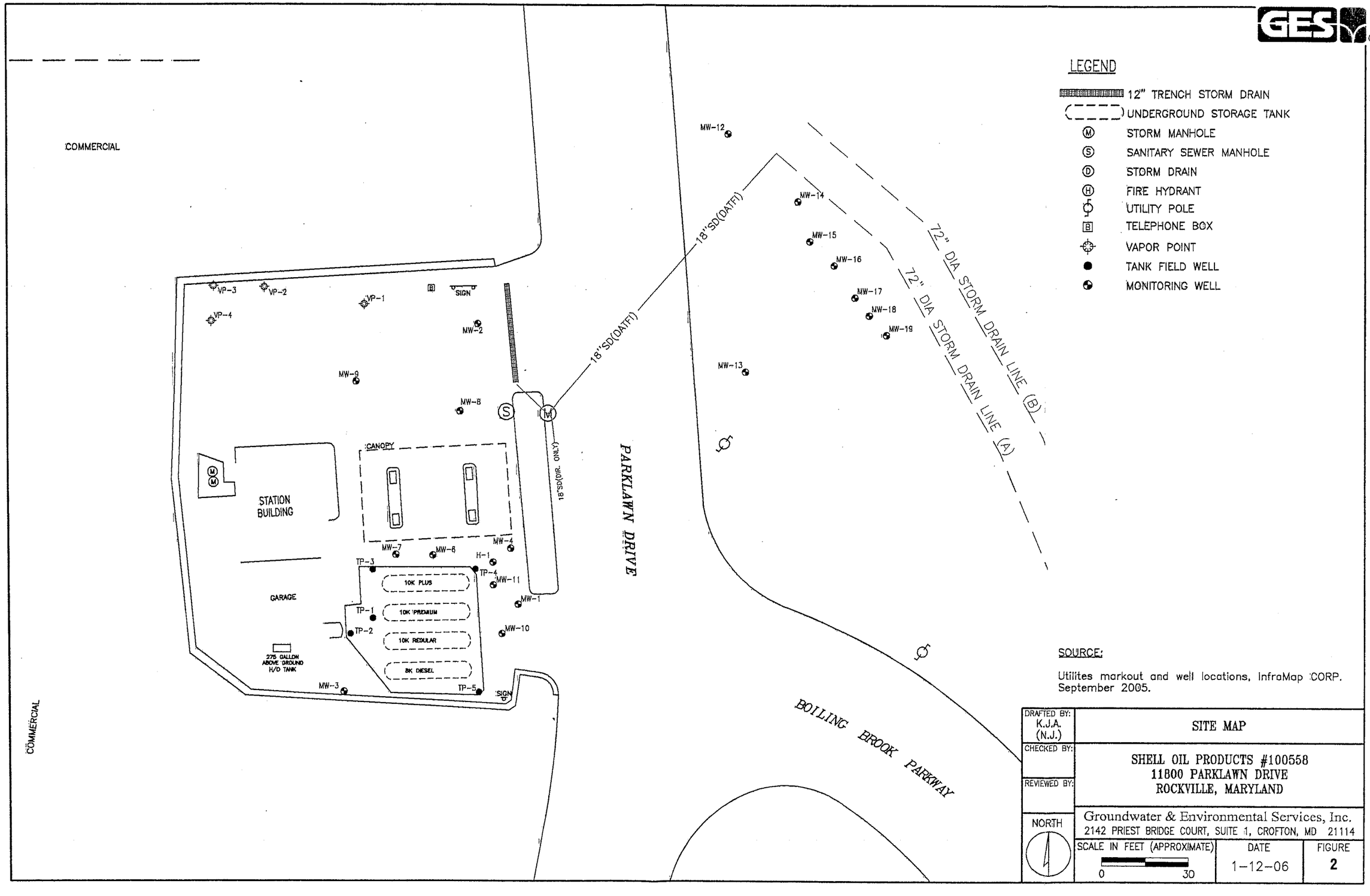

WHITE FLINT CHILDRENS HOUSE
11810 PARKLA DRIVE

(1ST FLOOR)

| | |
|---|---|
| DRAFTED BY: D.M.K. (N.J.) | SUB-SLAB SOIL GAS SAMPLING LOCATION MAP |
| CHECKED BY: | SHELL OIL PRODUCTS #100558<br>11800 PARKLAWN DRIVE<br>ROCKVILLE, MARYLAND |
| REVIEWED BY: | |
| NORTH | Groundwater & Environmental Services, Inc.<br>2142 PRIEST BRIDGE COURT, SUITE 1, CROFTON, MD 21114 |

| SCALE IN FEET | DATE | FIGURE |
|---|---|---|
| 0 APPROXIMATE 20 | 3-2-06 | 1 |

M:\Graphics\0400-Crofton\Shell Oil\100558 Rockville\100558 Rockville Childrens House.dwg, 3/2/2006 3:25:10 PM, DKessler




M:\Graphics\0400-Crofton\Shell Oil\100558 Rockville\100558 Rockville SM.dwg, 1/12/2006 4:58:26 PM, KKvella

# APPENDIX C

Stream Laboratory Analytical Reports and Chain of Custody Documentation

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

January 02, 2006

Client: GES (Crofton, MD) / SHELL (13673)
2142 Priest Bridge Ct. Ste. 2
Crofton, MD 21114
Attn: John Canzeri

Work Order: NOL0804
Project Name: 11800 Parklawn Dr., Rockville, MD
Project Nbr: SAP 100558
Date Received: 12/07/05

| SAMPLE IDENTIFICATION | LAB NUMBER | COLLECTION DATE AND TIME |
|---|---|---|
| Station-A | NOL0804-01 | 12/02/05 12:32 |
| Station-E | NOL0804-02 | 12/02/05 12:51 |
| Station-F | NOL0804-03 | 12/02/05 12:56 |
| Station-G | NOL0804-04 | 12/02/05 13:01 |
| Station-H | NOL0804-05 | 12/02/05 13:06 |
| Station-D | NOL0804-06 | 12/02/05 13:13 |
| Station-C | NOL0804-07 | 12/02/05 13:21 |
| Station-B | NOL0804-08 | 12/02/05 13:26 |
| Station-I | NOL0804-09 | 12/02/05 13:45 |
| Station-J | NOL0804-10 | 12/02/05 13:50 |
| Station-L | NOL0804-11 | 12/02/05 14:00 |
| Field Blank | NOL0804-12 | 12/02/05 13:30 |
| Trip blank | NOL0804-13 | 12/07/05 |

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accredidation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Maryland Certification Number: 316

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:

Gail Lage
Senior Project Manager

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673)<br>2142 Priest Bridge Ct. Ste. 2<br>Crofton, MD 21114 | Work Order: | NOL0804 |
| | | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL0804-01 (Station-A - Water) Sampled: 12/02/05 12:32** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **4.95** | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| Benzene | ND | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| 1,2-Dichloroethane | ND | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| Diisopropyl Ether | **1.48** | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| Methyl tert-Butyl Ether | **91.9** | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| Toluene | ND | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 12/16/05 17:54 | SW846 8260B | 5123268 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *95 %* | | | | | *12/16/05 17:54* | *SW846 8260B* | *5123268* |
| *Surr: Dibromofluoromethane (79-122%)* | *102 %* | | | | | *12/16/05 17:54* | *SW846 8260B* | *5123268* |
| *Surr: Toluene-d8 (78-121%)* | *103 %* | | | | | *12/16/05 17:54* | *SW846 8260B* | *5123268* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *106 %* | | | | | *12/16/05 17:54* | *SW846 8260B* | *5123268* |
| **Sample ID: NOL0804-02 (Station-E - Water) Sampled: 12/02/05 12:51** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **48.5** | | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| Benzene | **13.1** | | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| 1,2-Dichloroethane | ND | | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| Diisopropyl Ether | **16.5** | | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| Methyl tert-Butyl Ether | **600** | E3 | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| Toluene | **7.32** | | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| Xylenes, total | **9.42** | | ug/L | 3.00 | 1 | 12/16/05 18:16 | SW846 8260B | 5123268 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *95 %* | | | | | *12/16/05 18:16* | *SW846 8260B* | *5123268* |
| *Surr: Dibromofluoromethane (79-122%)* | *107 %* | | | | | *12/16/05 18:16* | *SW846 8260B* | *5123268* |
| *Surr: Toluene-d8 (78-121%)* | *107 %* | | | | | *12/16/05 18:16* | *SW846 8260B* | *5123268* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *103 %* | | | | | *12/16/05 18:16* | *SW846 8260B* | *5123268* |

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL0804 |
| | 2142 Priest Bridge Ct. Ste. 2 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL0804-03 (Station-F - Water) Sampled: 12/02/05 12:56** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **158** | | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| Benzene | **59.4** | | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| 1,2-Dichloroethane | **1.35** | | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| Ethylbenzene | **2.56** | | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| Diisopropyl Ether | **55.4** | | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| Methyl tert-Butyl Ether | **1150** | E3 | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| Tertiary Butyl Alcohol | **44.2** | | ug/L | 10.0 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| Toluene | **36.8** | | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| 1,2,4-Trimethylbenzene | **5.22** | | ug/L | 1.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| Xylenes, total | **42.0** | | ug/L | 3.00 | 1 | 12/16/05 18:38 | SW846 8260B | 5123268 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *95 %* | | | | | *12/16/05 18:38* | *SW846 8260B* | *5123268* |
| *Surr: Dibromofluoromethane (79-122%)* | *104 %* | | | | | *12/16/05 18:38* | *SW846 8260B* | *5123268* |
| *Surr: Toluene-d8 (78-121%)* | *106 %* | | | | | *12/16/05 18:38* | *SW846 8260B* | *5123268* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *104 %* | | | | | *12/16/05 18:38* | *SW846 8260B* | *5123268* |
| **Sample ID: NOL0804-04 (Station-G - Water) Sampled: 12/02/05 13:01** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **162** | | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| Benzene | **63.3** | | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| 1,2-Dichloroethane | **1.42** | | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| Ethylbenzene | **2.66** | | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| Diisopropyl Ether | **57.0** | | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| Methyl tert-Butyl Ether | **1160** | E3 | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| Tertiary Butyl Alcohol | **45.4** | | ug/L | 10.0 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| Toluene | **38.2** | | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| 1,2,4-Trimethylbenzene | **5.40** | | ug/L | 1.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| Xylenes, total | **42.2** | | ug/L | 3.00 | 1 | 12/16/05 19:00 | SW846 8260B | 5123268 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *100 %* | | | | | *12/16/05 19:00* | *SW846 8260B* | *5123268* |
| *Surr: Dibromofluoromethane (79-122%)* | *109 %* | | | | | *12/16/05 19:00* | *SW846 8260B* | *5123268* |
| *Surr: Toluene-d8 (78-121%)* | *105 %* | | | | | *12/16/05 19:00* | *SW846 8260B* | *5123268* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *111 %* | | | | | *12/16/05 19:00* | *SW846 8260B* | *5123268* |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673)<br>2142 Priest Bridge Ct. Ste. 2<br>Crofton, MD 21114 | Work Order: | NOL0804 |
| | | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL0804-05 (Station-H - Water) Sampled: 12/02/05 13:06** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **22.0** | | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| Benzene | **5.57** | | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| 1,2-Dichloroethane | ND | | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| Diisopropyl Ether | **7.85** | | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| Methyl tert-Butyl Ether | **435** | E3 | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| Toluene | ND | | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 12/16/05 19:22 | SW846 8260B | 5123268 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *96 %* | | | | | *12/16/05 19:22* | *SW846 8260B* | *5123268* |
| *Surr: Dibromofluoromethane (79-122%)* | *102 %* | | | | | *12/16/05 19:22* | *SW846 8260B* | *5123268* |
| *Surr: Toluene-d8 (78-121%)* | *106 %* | | | | | *12/16/05 19:22* | *SW846 8260B* | *5123268* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *104 %* | | | | | *12/16/05 19:22* | *SW846 8260B* | *5123268* |
| **Sample ID: NOL0804-06 (Station-D - Water) Sampled: 12/02/05 13:13** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **20.5** | | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| Benzene | **1.70** | | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| 1,2-Dichloroethane | ND | | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| Diisopropyl Ether | **6.35** | | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| Methyl tert-Butyl Ether | **315** | E3 | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| Toluene | **1.07** | | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 12/16/05 19:44 | SW846 8260B | 5123268 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *98 %* | | | | | *12/16/05 19:44* | *SW846 8260B* | *5123268* |
| *Surr: Dibromofluoromethane (79-122%)* | *103 %* | | | | | *12/16/05 19:44* | *SW846 8260B* | *5123268* |
| *Surr: Toluene-d8 (78-121%)* | *104 %* | | | | | *12/16/05 19:44* | *SW846 8260B* | *5123268* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *105 %* | | | | | *12/16/05 19:44* | *SW846 8260B* | *5123268* |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL0804 |
| | 2142 Priest Bridge Ct. Ste. 2 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL0804-07 (Station-C - Water) Sampled: 12/02/05 13:21** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **12.1** | | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| Benzene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| 1,2-Dichloroethane | ND | | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| Diisopropyl Ether | **3.55** | | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| Methyl tert-Butyl Ether | **206** | E3 | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| Toluene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 12/16/05 20:06 | SW846 8260B | 5123268 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *96 %* | | | | | *12/16/05 20:06* | *SW846 8260B* | *5123268* |
| *Surr: Dibromofluoromethane (79-122%)* | *102 %* | | | | | *12/16/05 20:06* | *SW846 8260B* | *5123268* |
| *Surr: Toluene-d8 (78-121%)* | *102 %* | | | | | *12/16/05 20:06* | *SW846 8260B* | *5123268* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *109 %* | | | | | *12/16/05 20:06* | *SW846 8260B* | *5123268* |
| **Sample ID: NOL0804-08 (Station-B - Water) Sampled: 12/02/05 13:26** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **4.31** | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| Benzene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| 1,2-Dichloroethane | ND | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| Diisopropyl Ether | **1.21** | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| Methyl tert-Butyl Ether | **79.9** | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| Toluene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 12/16/05 20:28 | SW846 8260B | 5123268 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *97 %* | | | | | *12/16/05 20:28* | *SW846 8260B* | *5123268* |
| *Surr: Dibromofluoromethane (79-122%)* | *104 %* | | | | | *12/16/05 20:28* | *SW846 8260B* | *5123268* |
| *Surr: Toluene-d8 (78-121%)* | *103 %* | | | | | *12/16/05 20:28* | *SW846 8260B* | *5123268* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *104 %* | | | | | *12/16/05 20:28* | *SW846 8260B* | *5123268* |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL0804 |
| | 2142 Priest Bridge Ct. Ste. 2 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL0804-09 (Station-I - Water) Sampled: 12/02/05 13:45** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **107** | | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| Benzene | **106** | | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| 1,2-Dichloroethane | **2.52** | | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| Ethylbenzene | **15.9** | | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| Diisopropyl Ether | **44.0** | | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| Methyl tert-Butyl Ether | **345** | E3 | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| Naphthalene | **5.37** | | ug/L | 5.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| Toluene | **138** | | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| 1,3,5-Trimethylbenzene | **2.28** | | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| 1,2,4-Trimethylbenzene | **13.5** | | ug/L | 1.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| Xylenes, total | **83.4** | | ug/L | 3.00 | 1 | 12/16/05 20:50 | SW846 8260B | 5123268 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *96 %* | | | | | *12/16/05 20:50* | *SW846 8260B* | *5123268* |
| *Surr: Dibromofluoromethane (79-122%)* | *104 %* | | | | | *12/16/05 20:50* | *SW846 8260B* | *5123268* |
| *Surr: Toluene-d8 (78-121%)* | *103 %* | | | | | *12/16/05 20:50* | *SW846 8260B* | *5123268* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *106 %* | | | | | *12/16/05 20:50* | *SW846 8260B* | *5123268* |
| **Sample ID: NOL0804-10 (Station-J - Water) Sampled: 12/02/05 13:50** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | ND | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| Benzene | ND | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| 1,2-Dichloroethane | ND | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| Diisopropyl Ether | ND | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| Methyl tert-Butyl Ether | **15.3** | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| Toluene | ND | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 12/12/05 20:54 | SW846 8260B | 5122166 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *88 %* | | | | | *12/12/05 20:54* | *SW846 8260B* | *5122166* |
| *Surr: Dibromofluoromethane (79-122%)* | *100 %* | | | | | *12/12/05 20:54* | *SW846 8260B* | *5122166* |
| *Surr: Toluene-d8 (78-121%)* | *103 %* | | | | | *12/12/05 20:54* | *SW846 8260B* | *5122166* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *115 %* | | | | | *12/12/05 20:54* | *SW846 8260B* | *5122166* |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673)<br>2142 Priest Bridge Ct. Ste. 2<br>Crofton, MD 21114 | Work Order: | NOL0804 |
| | | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL0804-11 (Station-L - Water) Sampled: 12/02/05 14:00** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | ND | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| Benzene | ND | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| 1,2-Dichloroethane | ND | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| Diisopropyl Ether | ND | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| Methyl tert-Butyl Ether | **13.5** | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| Toluene | ND | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 12/12/05 21:16 | SW846 8260B | 5122166 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *91 %* | | | | | *12/12/05 21:16* | *SW846 8260B* | *5122166* |
| *Surr: Dibromofluoromethane (79-122%)* | *102 %* | | | | | *12/12/05 21:16* | *SW846 8260B* | *5122166* |
| *Surr: Toluene-d8 (78-121%)* | *102 %* | | | | | *12/12/05 21:16* | *SW846 8260B* | *5122166* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *113 %* | | | | | *12/12/05 21:16* | *SW846 8260B* | *5122166* |
| **Sample ID: NOL0804-12 (Field Blank - Water) Sampled: 12/02/05 13:30** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| Benzene | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| 1,2-Dichloroethane | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| Diisopropyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| Methyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| Toluene | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 12/16/05 21:13 | SW846 8260B | 5123268 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *98 %* | | | | | *12/16/05 21:13* | *SW846 8260B* | *5123268* |
| *Surr: Dibromofluoromethane (79-122%)* | *102 %* | | | | | *12/16/05 21:13* | *SW846 8260B* | *5123268* |
| *Surr: Toluene-d8 (78-121%)* | *104 %* | | | | | *12/16/05 21:13* | *SW846 8260B* | *5123268* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *103 %* | | | | | *12/16/05 21:13* | *SW846 8260B* | *5123268* |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL0804 |
| | 2142 Priest Bridge Ct. Ste. 2 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL0804-13 (Trip blank - Water) Sampled: 12/07/05** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| Benzene | ND | | ug/L | 1.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| 1,2-Dibromoethane (EDB) | ND | | ug/L | 1.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| 1,2-Dichloroethane | ND | | ug/L | 1.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| Isopropylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| Methyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| Naphthalene | ND | | ug/L | 5.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| Toluene | ND | | ug/L | 1.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| 1,3,5-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| 1,2,4-Trimethylbenzene | ND | | ug/L | 1.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 12/16/05 02:04 | SW846 8260B | 5122198 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *113 %* | | | | | *12/16/05 02:04* | *SW846 8260B* | *5122198* |
| *Surr: Dibromofluoromethane (79-122%)* | *110 %* | | | | | *12/16/05 02:04* | *SW846 8260B* | *5122198* |
| *Surr: Toluene-d8 (78-121%)* | *96 %* | | | | | *12/16/05 02:04* | *SW846 8260B* | *5122198* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *98 %* | | | | | *12/16/05 02:04* | *SW846 8260B* | *5122198* |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL0804 |
| | 2142 Priest Bridge Ct. Ste. 2 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## PROJECT QUALITY CONTROL DATA
### Blank

| Analyte | Blank Value | Q | Units | Q.C. Batch | Lab Number | Analyzed Date/Time |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA Method 8260B** | | | | | | |
| **5122166-BLK1** | | | | | | |
| Tert-Amyl Methyl Ether | <0.350 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| Benzene | <0.290 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| 1,2-Dibromoethane (EDB) | <0.380 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| 1,2-Dichloroethane | <0.280 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| Ethylbenzene | <0.340 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| Ethyl tert-Butyl Ether | <0.410 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| Isopropylbenzene | <0.340 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| Diisopropyl Ether | <0.420 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| Methyl tert-Butyl Ether | <0.320 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| Naphthalene | <1.13 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| Tertiary Butyl Alcohol | <8.26 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| Toluene | <0.280 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| 1,3,5-Trimethylbenzene | <0.280 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| 1,2,4-Trimethylbenzene | <0.340 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| Xylenes, total | <0.820 | | ug/L | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| *Surrogate: 1,2-Dichloroethane-d4* | 86% | | | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| *Surrogate: Dibromofluoromethane* | 100% | | | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| *Surrogate: Toluene-d8* | 110% | | | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| *Surrogate: 4-Bromofluorobenzene* | 115% | | | 5122166 | 5122166-BLK1 | 12/12/05 13:57 |
| **5122198-BLK1** | | | | | | |
| Tert-Amyl Methyl Ether | <0.350 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| Benzene | <0.290 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| 1,2-Dibromoethane (EDB) | <0.380 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| 1,2-Dichloroethane | <0.280 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| Ethylbenzene | <0.340 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| Ethyl tert-Butyl Ether | <0.410 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| Isopropylbenzene | <0.340 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| Methyl tert-Butyl Ether | <0.320 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| Naphthalene | <1.13 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| Tertiary Butyl Alcohol | <8.26 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| Toluene | <0.280 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| 1,3,5-Trimethylbenzene | <0.280 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| 1,2,4-Trimethylbenzene | <0.340 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| Xylenes, total | <0.820 | | ug/L | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| *Surrogate: 1,2-Dichloroethane-d4* | 111% | | | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| *Surrogate: Dibromofluoromethane* | 109% | | | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| *Surrogate: Toluene-d8* | 105% | | | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| *Surrogate: 4-Bromofluorobenzene* | 100% | | | 5122198 | 5122198-BLK1 | 12/16/05 01:06 |
| **5123268-BLK1** | | | | | | |
| Tert-Amyl Methyl Ether | <0.350 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL0804 |
| | 2142 Priest Bridge Ct. Ste. 2 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## PROJECT QUALITY CONTROL DATA
### Blank - Cont.

| Analyte | Blank Value | Q | Units | Q.C. Batch | Lab Number | Analyzed Date/Time |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA Method 8260B** | | | | | | |
| **5123268-BLK1** | | | | | | |
| Benzene | <0.290 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| 1,2-Dibromoethane (EDB) | <0.380 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| 1,2-Dichloroethane | <0.280 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| Ethylbenzene | <0.340 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| Ethyl tert-Butyl Ether | <0.410 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| Isopropylbenzene | <0.340 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| Diisopropyl Ether | <0.420 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| Methyl tert-Butyl Ether | <0.320 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| Naphthalene | <1.13 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| Tertiary Butyl Alcohol | <8.26 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| Toluene | <0.280 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| 1,3,5-Trimethylbenzene | <0.280 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| 1,2,4-Trimethylbenzene | <0.340 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| Xylenes, total | <0.820 | | ug/L | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| *Surrogate: 1,2-Dichloroethane-d4* | 96% | | | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| *Surrogate: Dibromofluoromethane* | 102% | | | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| *Surrogate: Toluene-d8* | 105% | | | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |
| *Surrogate: 4-Bromofluorobenzene* | 108% | | | 5123268 | 5123268-BLK1 | 12/16/05 16:47 |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL0804 |
| | 2142 Priest Bridge Ct. Ste. 2 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## PROJECT QUALITY CONTROL DATA
## LCS

| Analyte | Known Val. | Analyzed Val | Q | Units | % Rec. | Target Range | Batch | Analyzed Date/Time |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA Method 8260B** | | | | | | | | |
| **5122166-BS1** | | | | | | | | |
| Tert-Amyl Methyl Ether | 50.0 | 50.9 | | ug/L | 102% | 49 - 158 | 5122166 | 12/12/05 12:29 |
| Benzene | 50.0 | 49.7 | | ug/L | 99% | 78 - 122 | 5122166 | 12/12/05 12:29 |
| 1,2-Dibromoethane (EDB) | 50.0 | 54.8 | | ug/L | 110% | 76 - 128 | 5122166 | 12/12/05 12:29 |
| 1,2-Dichloroethane | 50.0 | 39.6 | | ug/L | 79% | 65 - 137 | 5122166 | 12/12/05 12:29 |
| Ethylbenzene | 50.0 | 47.0 | | ug/L | 94% | 82 - 122 | 5122166 | 12/12/05 12:29 |
| Ethyl tert-Butyl Ether | 50.0 | 49.1 | | ug/L | 98% | 60 - 153 | 5122166 | 12/12/05 12:29 |
| Isopropylbenzene | 50.0 | 50.8 | | ug/L | 102% | 75 - 130 | 5122166 | 12/12/05 12:29 |
| Diisopropyl Ether | 50.0 | 51.2 | | ug/L | 102% | 71 - 134 | 5122166 | 12/12/05 12:29 |
| Methyl tert-Butyl Ether | 50.0 | 46.1 | | ug/L | 92% | 65 - 144 | 5122166 | 12/12/05 12:29 |
| Naphthalene | 50.0 | 67.1 | | ug/L | 134% | 64 - 144 | 5122166 | 12/12/05 12:29 |
| Tertiary Butyl Alcohol | 500 | 500 | | ug/L | 100% | 25 - 168 | 5122166 | 12/12/05 12:29 |
| Toluene | 50.0 | 47.8 | | ug/L | 96% | 80 - 120 | 5122166 | 12/12/05 12:29 |
| 1,3,5-Trimethylbenzene | 50.0 | 50.9 | | ug/L | 102% | 78 - 129 | 5122166 | 12/12/05 12:29 |
| 1,2,4-Trimethylbenzene | 50.0 | 55.8 | | ug/L | 112% | 78 - 126 | 5122166 | 12/12/05 12:29 |
| Xylenes, total | 150 | 144 | | ug/L | 96% | 81 - 125 | 5122166 | 12/12/05 12:29 |
| *Surrogate: 1,2-Dichloroethane-d4* | 50.0 | 43.9 | | | 88% | 70 - 130 | 5122166 | 12/12/05 12:29 |
| *Surrogate: Dibromofluoromethane* | 50.0 | 48.1 | | | 96% | 79 - 122 | 5122166 | 12/12/05 12:29 |
| *Surrogate: Toluene-d8* | 50.0 | 55.7 | | | 111% | 78 - 121 | 5122166 | 12/12/05 12:29 |
| *Surrogate: 4-Bromofluorobenzene* | 50.0 | 54.7 | | | 109% | 78 - 126 | 5122166 | 12/12/05 12:29 |
| **5122198-BS1** | | | | | | | | |
| Tert-Amyl Methyl Ether | 50.0 | 48.2 | | ug/L | 96% | 49 - 158 | 5122198 | 12/15/05 22:42 |
| Benzene | 50.0 | 47.1 | | ug/L | 94% | 78 - 122 | 5122198 | 12/15/05 22:42 |
| 1,2-Dibromoethane (EDB) | 50.0 | 53.5 | | ug/L | 107% | 76 - 128 | 5122198 | 12/15/05 22:42 |
| 1,2-Dichloroethane | 50.0 | 53.8 | | ug/L | 108% | 65 - 137 | 5122198 | 12/15/05 22:42 |
| Ethylbenzene | 50.0 | 47.9 | | ug/L | 96% | 82 - 122 | 5122198 | 12/15/05 22:42 |
| Ethyl tert-Butyl Ether | 50.0 | 48.0 | | ug/L | 96% | 60 - 153 | 5122198 | 12/15/05 22:42 |
| Isopropylbenzene | 50.0 | 55.4 | | ug/L | 111% | 75 - 130 | 5122198 | 12/15/05 22:42 |
| Methyl tert-Butyl Ether | 50.0 | 51.3 | | ug/L | 103% | 65 - 144 | 5122198 | 12/15/05 22:42 |
| Naphthalene | 50.0 | 55.4 | | ug/L | 111% | 64 - 144 | 5122198 | 12/15/05 22:42 |
| Tertiary Butyl Alcohol | 500 | 541 | | ug/L | 108% | 25 - 168 | 5122198 | 12/15/05 22:42 |
| Toluene | 50.0 | 42.3 | | ug/L | 85% | 80 - 120 | 5122198 | 12/15/05 22:42 |
| 1,3,5-Trimethylbenzene | 50.0 | 49.0 | | ug/L | 98% | 78 - 129 | 5122198 | 12/15/05 22:42 |
| 1,2,4-Trimethylbenzene | 50.0 | 45.1 | | ug/L | 90% | 78 - 126 | 5122198 | 12/15/05 22:42 |
| Xylenes, total | 150 | 154 | | ug/L | 103% | 81 - 125 | 5122198 | 12/15/05 22:42 |
| *Surrogate: 1,2-Dichloroethane-d4* | 50.0 | 53.4 | | | 107% | 70 - 130 | 5122198 | 12/15/05 22:42 |
| *Surrogate: Dibromofluoromethane* | 50.0 | 53.0 | | | 106% | 79 - 122 | 5122198 | 12/15/05 22:42 |
| *Surrogate: Toluene-d8* | 50.0 | 44.8 | | | 90% | 78 - 121 | 5122198 | 12/15/05 22:42 |
| *Surrogate: 4-Bromofluorobenzene* | 50.0 | 47.3 | | | 95% | 78 - 126 | 5122198 | 12/15/05 22:42 |
| **5123268-BS1** | | | | | | | | |
| Tert-Amyl Methyl Ether | 50.0 | 47.6 | | ug/L | 95% | 49 - 158 | 5123268 | 12/16/05 15:19 |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673)<br>2142 Priest Bridge Ct. Ste. 2<br>Crofton, MD 21114 | Work Order: | NOL0804 |
| | | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## PROJECT QUALITY CONTROL DATA
### LCS - Cont.

| Analyte | Known Val. | Analyzed Val | Q | Units | % Rec. | Target Range | Batch | Analyzed Date/Time |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA Method 8260B** | | | | | | | | |
| **5123268-BS1** | | | | | | | | |
| Benzene | 50.0 | 51.3 | | ug/L | 103% | 78 - 122 | 5123268 | 12/16/05 15:19 |
| 1,2-Dibromoethane (EDB) | 50.0 | 50.4 | | ug/L | 101% | 76 - 128 | 5123268 | 12/16/05 15:19 |
| 1,2-Dichloroethane | 50.0 | 47.1 | | ug/L | 94% | 65 - 137 | 5123268 | 12/16/05 15:19 |
| Ethylbenzene | 50.0 | 55.8 | | ug/L | 112% | 82 - 122 | 5123268 | 12/16/05 15:19 |
| Ethyl tert-Butyl Ether | 50.0 | 47.9 | | ug/L | 96% | 60 - 153 | 5123268 | 12/16/05 15:19 |
| Isopropylbenzene | 50.0 | 55.5 | | ug/L | 111% | 75 - 130 | 5123268 | 12/16/05 15:19 |
| Diisopropyl Ether | 50.0 | 44.3 | | ug/L | 89% | 71 - 134 | 5123268 | 12/16/05 15:19 |
| Methyl tert-Butyl Ether | 50.0 | 45.1 | | ug/L | 90% | 65 - 144 | 5123268 | 12/16/05 15:19 |
| Naphthalene | 50.0 | 61.0 | | ug/L | 122% | 64 - 144 | 5123268 | 12/16/05 15:19 |
| Tertiary Butyl Alcohol | 500 | 543 | | ug/L | 109% | 25 - 168 | 5123268 | 12/16/05 15:19 |
| Toluene | 50.0 | 49.9 | | ug/L | 100% | 80 - 120 | 5123268 | 12/16/05 15:19 |
| 1,3,5-Trimethylbenzene | 50.0 | 56.8 | | ug/L | 114% | 78 - 129 | 5123268 | 12/16/05 15:19 |
| 1,2,4-Trimethylbenzene | 50.0 | 56.3 | | ug/L | 113% | 78 - 126 | 5123268 | 12/16/05 15:19 |
| Xylenes, total | 150 | 154 | | ug/L | 103% | 81 - 125 | 5123268 | 12/16/05 15:19 |
| *Surrogate: 1,2-Dichloroethane-d4* | 50.0 | 49.9 | | | 100% | 70 - 130 | 5123268 | 12/16/05 15:19 |
| *Surrogate: Dibromofluoromethane* | 50.0 | 50.3 | | | 101% | 79 - 122 | 5123268 | 12/16/05 15:19 |
| *Surrogate: Toluene-d8* | 50.0 | 51.6 | | | 103% | 78 - 121 | 5123268 | 12/16/05 15:19 |
| *Surrogate: 4-Bromofluorobenzene* | 50.0 | 54.4 | | | 109% | 78 - 126 | 5123268 | 12/16/05 15:19 |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673)<br>2142 Priest Bridge Ct. Ste. 2<br>Crofton, MD 21114 | Work Order: | NOL0804 |
| | | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## PROJECT QUALITY CONTROL DATA
### Matrix Spike

| Analyte | Orig. Val. | MS Val | Q | Units | Spike Conc | % Rec. | Target Range | Batch | Sample Spiked | Analyzed Date/Time |
|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA Method 8260B** | | | | | | | | | | |
| **5122166-MS1** | | | | | | | | | | |
| Tert-Amyl Methyl Ether | ND | 31.6 | | ug/L | 50.0 | 63% | 43 - 165 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| Benzene | ND | 32.1 | M8 | ug/L | 50.0 | 64% | 74 - 133 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| 1,2-Dibromoethane (EDB) | ND | 33.7 | M8 | ug/L | 50.0 | 67% | 72 - 133 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| 1,2-Dichloroethane | ND | 28.2 | M8 | ug/L | 50.0 | 56% | 62 - 140 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| Ethylbenzene | ND | 31.9 | M8 | ug/L | 50.0 | 64% | 74 - 134 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| Ethyl tert-Butyl Ether | ND | 30.6 | | ug/L | 50.0 | 61% | 57 - 155 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| Isopropylbenzene | ND | 34.5 | | ug/L | 50.0 | 69% | 69 - 138 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| Diisopropyl Ether | ND | 34.0 | | ug/L | 50.0 | 68% | 67 - 139 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| Methyl tert-Butyl Ether | 13.5 | 40.3 | M8 | ug/L | 50.0 | 54% | 58 - 151 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| Naphthalene | ND | 29.8 | | ug/L | 50.0 | 60% | 47 - 154 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| Tertiary Butyl Alcohol | ND | 399 | | ug/L | 500 | 80% | 10 - 186 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| Toluene | ND | 35.7 | M8 | ug/L | 50.0 | 71% | 73 - 133 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| 1,3,5-Trimethylbenzene | ND | 34.1 | | ug/L | 50.0 | 68% | 65 - 140 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| 1,2,4-Trimethylbenzene | 0.420 | 37.1 | | ug/L | 50.0 | 73% | 60 - 143 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| Xylenes, total | ND | 98.3 | M8 | ug/L | 150 | 66% | 68 - 139 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| *Surrogate: 1,2-Dichloroethane-d4* | | 47.7 | | ug/L | 50.0 | 95% | 70 - 130 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| *Surrogate: Dibromofluoromethane* | | 50.6 | | ug/L | 50.0 | 101% | 79 - 122 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| *Surrogate: Toluene-d8* | | 52.3 | | ug/L | 50.0 | 105% | 78 - 121 | 5122166 | NOL0804-11 | 12/12/05 21:38 |
| *Surrogate: 4-Bromofluorobenzene* | | 55.8 | | ug/L | 50.0 | 112% | 78 - 126 | 5122166 | NOL0804-11 | 12/12/05 21:38 |

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673)<br>2142 Priest Bridge Ct. Ste. 2<br>Crofton, MD 21114 | Work Order: | NOL0804 |
| | | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## PROJECT QUALITY CONTROL DATA
### Matrix Spike Dup

| Analyte | Orig. Val. | Duplicate | Q | Units | Spike Conc | % Rec. | Target Range | RPD | Limit | Batch | Sample Duplicated | Analyzed Date/Time |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA Method 8260B** | | | | | | | | | | | | |
| **5122166-MSD1** | | | | | | | | | | | | |
| Tert-Amyl Methyl Ether | ND | 32.9 | | ug/L | 50.0 | 66% | 43 - 165 | 4 | 20 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| Benzene | ND | 34.8 | M8 | ug/L | 50.0 | 70% | 74 - 133 | 8 | 19 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| 1,2-Dibromoethane (EDB) | ND | 36.3 | | ug/L | 50.0 | 73% | 72 - 133 | 7 | 17 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| 1,2-Dichloroethane | ND | 28.0 | M8 | ug/L | 50.0 | 56% | 62 - 140 | 0.7 | 17 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| Ethylbenzene | ND | 33.0 | M8 | ug/L | 50.0 | 66% | 74 - 134 | 3 | 21 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| Ethyl tert-Butyl Ether | ND | 31.8 | | ug/L | 50.0 | 64% | 57 - 155 | 4 | 19 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| Isopropylbenzene | ND | 37.4 | | ug/L | 50.0 | 75% | 69 - 138 | 8 | 21 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| Diisopropyl Ether | ND | 36.6 | | ug/L | 50.0 | 73% | 67 - 139 | 7 | 17 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| Methyl tert-Butyl Ether | 13.5 | 44.4 | | ug/L | 50.0 | 62% | 58 - 151 | 10 | 28 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| Naphthalene | ND | 36.4 | | ug/L | 50.0 | 73% | 47 - 154 | 20 | 43 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| Tertiary Butyl Alcohol | ND | 407 | | ug/L | 500 | 81% | 10 - 186 | 2 | 37 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| Toluene | ND | 34.4 | M8 | ug/L | 50.0 | 69% | 73 - 133 | 4 | 20 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| 1,3,5-Trimethylbenzene | ND | 35.9 | | ug/L | 50.0 | 72% | 65 - 140 | 5 | 23 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| 1,2,4-Trimethylbenzene | 0.420 | 38.1 | | ug/L | 50.0 | 75% | 60 - 143 | 3 | 24 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| Xylenes, total | ND | 105 | | ug/L | 150 | 70% | 68 - 139 | 7 | 23 | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| *Surrogate: 1,2-Dichloroethane-d4* | | 46.8 | | ug/L | 50.0 | 94% | 70 - 130 | | | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| *Surrogate: Dibromofluoromethane* | | 50.3 | | ug/L | 50.0 | 101% | 79 - 122 | | | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| *Surrogate: Toluene-d8* | | 52.0 | | ug/L | 50.0 | 104% | 78 - 121 | | | 5122166 | NOL0804-11 | 12/12/05 22:00 |
| *Surrogate: 4-Bromofluorobenzene* | | 54.2 | | ug/L | 50.0 | 108% | 78 - 126 | | | 5122166 | NOL0804-11 | 12/12/05 22:00 |

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673)<br>2142 Priest Bridge Ct. Ste. 2<br>Crofton, MD 21114 | Work Order: | NOL0804 |
| | | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## CERTIFICATION SUMMARY

**TestAmerica Analytical - Nashville**

| Method | Matrix | AIHA | Nelac | Maryland |
|---|---|---|---|---|
| SW846 8260B | Water | N/A | X | N/A |

| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL0804 |
| | 2142 Priest Bridge Ct. Ste. 2 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 100558 |
| Attn | John Canzeri | Received: | 12/07/05 07:50 |

## DATA QUALIFIERS AND DEFINITIONS

**E3** Concentration estimated. Analyte exceeded calibration range. Reanalysis not peformed due to holding time requirements.

**M8** The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).

## METHOD MODIFICATION NOTES

NOL0804

**TEST AMERICA** 12/14/05 17:00

# Shell Oil Products US Chain Of Custody Record

☐ 2690 FOSTER CREIGHTON, NASHVILLE, TN 37204
PHONE 800-765-0980 FAX# 616-726-3404
24 TAT ONLY
☑ 1008 W. NINTH AVE, KING OF PRUSSIA, PA 19406

**SOP US Project Manager to be invoiced:**
☑ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ CRMT HOUSTON
☐ BILL CONSULTANT

NAME OF PM TO BILL: Doug Weimer
NAME OF TS TO BILL:

INCIDENT # (S&E ONLY): 97151921
SAP or CRMT # (TS/CRMT): 100558

DATE: 12-2-05
PAGE: 1 of 2

CONSULTANT COMPANY: Groundwater and Environmental Services, Inc.
ADDRESS: 2142 Priest Bridge Ct, Suite 1
CITY: Crofton, MD
TELEPHONE: 410-721-0047 FAX: 410-721-3733 E-MAIL: abell@gesonline.com

SITE ADDRESS (Street and City): 11800 Parklawn Drive Rockville Md.
PROJECT CONTACT (Report to): Ashley Bell
CONSULTANT PROJECT NO.: 04-01330
SAMPLER NAME(S) (Print): Jeff Plummer
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☐ STANDARD (10 DAY) ☒ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

TEMPERATURE ON RECEIPT C°

SPECIAL INSTRUCTIONS OR NOTES: *Trip blank included in cooler

REQUESTED ANALYSIS

| LAB USE ONLY | Field Sample Identification | SAMPLING DATE | SAMPLING TIME | MATRIX | PRESERVATIVE HCL | HNO3 | H2SO4 | NONE | OTHER | NO. OF CONT. | BTEX ___ MTBE ___ TBA ___ | OXY's DIPE ___ ETBE ___ TAME ___ | ETHANOL ___ METHANOL ___ | TPHC (418.1) | VOCs +10PPL ___ TCL ___ | TPH-GRO | TPH-DRO | LEAD | OXYS 8260 | 8260 Full Volatiles | Container PID Readings or Laboratory Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | STATION - A | 12-2-05 | 12:32 | GW | X | | | | | 3 | | | | | | | | | X | X | NOL0804-01 |
| | STATION - E | | 12:51 | | | | | | | | | | | | | | | | | | 02 |
| | STATION - F | | 12:56 | | | | | | | | | | | | | | | | | | 03 |
| | STATION - G | | 13:01 | | | | | | | | | | | | | | | | | | 04 |
| | STATION - H | | 13:06 | | | | | | | | | | | | | | | | | | 05 |
| | STATION - D | | 13:13 | | | | | | | | | | | | | | | | | | 06 |
| | STATION - C | | 13:21 | | | | | | | | | | | | | | | | | | 07 |
| | STATION - B | | 13:26 | | | | | | | | | | | | | | | | | | 08 |
| | STATION - I | | 13:45 | | | | | | | | | | | | | | | | | | 09 |
| | STATION - J | 12-2-05 | 13:50 | GW | X | | | | | 3 | | | | | | | | | X | X | 10 |

| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
|---|---|---|---|
| Jeff Plummer | | 12-2-05 | 1545 |
| | | | |
| | [illegible] | 12-7-05 | 0750 |

DISTRIBUTION: White with final report. Green to File. Yellow and Pink to Client.

05/1/01 Revision

# APPENDIX D

Groundwater Laboratory Analytical Reports and Chain of Custody Documentation

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

January 19, 2006

Client: GES (Crofton, MD) / SHELL (13673)
2142 Priest Bridge Ct. Ste. 1
Crofton, MD 21114
Attn: Ashley Bell

Work Order: NOL3763
Project Name: 11800 Parklawn Dr., Rockville, MD
Project Nbr: SAP 129427
Date Received: 12/30/05

| SAMPLE IDENTIFICATION | LAB NUMBER | COLLECTION DATE AND TIME |
|---|---|---|
| VP-3 | NOL3763-01 | 12/29/05 08:41 |
| MW-9 | NOL3763-02 | 12/29/05 09:16 |
| MW-2 | NOL3763-03 | 12/29/05 09:34 |
| MW-19 | NOL3763-04 | 12/29/05 10:57 |
| MW-17 | NOL3763-05 | 12/29/05 11:03 |
| MW-18 | NOL3763-06 | 12/29/05 11:09 |
| MW-14 | NOL3763-07 | 12/29/05 11:15 |
| MW-16 | NOL3763-08 | 12/29/05 11:21 |
| MW-15 | NOL3763-09 | 12/29/05 11:27 |
| MW-8 | NOL3763-10 | 12/29/05 10:01 |
| MW-10 | NOL3763-11 | 12/29/05 09:45 |
| MW-11 | NOL3763-12 | 12/29/05 09:51 |
| MW-6 | NOL3763-13 | 12/29/05 09:57 |
| MW-4 | NOL3763-14 | 12/29/05 10:03 |
| MW-3 | NOL3763-15 | 12/29/05 10:09 |
| MW-1 | NOL3763-16 | 12/29/05 10:15 |
| H-1 | NOL3763-17 | 12/29/05 10:21 |

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accredidation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Maryland Certification Number: 316

The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:

JA Mitchell

Johnny A. Mitchell
Laboratory Director

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL3763-01 (VP-3 - Water) Sampled: 12/29/05 08:41** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | ND | | ug/L | 1.00 | 1 | 01/06/06 12:11 | SW846 8260B | 6010867 |
| Benzene | ND | | ug/L | 1.00 | 1 | 01/06/06 12:11 | SW846 8260B | 6010867 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 01/06/06 12:11 | SW846 8260B | 6010867 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/06/06 12:11 | SW846 8260B | 6010867 |
| Toluene | ND | | ug/L | 1.00 | 1 | 01/06/06 12:11 | SW846 8260B | 6010867 |
| Diisopropyl Ether | ND | | ug/L | 1.00 | 1 | 01/06/06 12:11 | SW846 8260B | 6010867 |
| Methyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/06/06 12:11 | SW846 8260B | 6010867 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 01/06/06 12:11 | SW846 8260B | 6010867 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 01/06/06 12:11 | SW846 8260B | 6010867 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *107 %* | | | | | *01/06/06 12:11* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *108 %* | | | | | *01/06/06 12:11* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *76 %* | *Z10* | | | | *01/06/06 12:11* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *97 %* | | | | | *01/06/06 12:11* | *SW846 8260B* | *6010867* |
| **Sample ID: NOL3763-02RE1 (MW-9 - Water) Sampled: 12/29/05 09:16** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **315** | | ug/L | 20.0 | 20 | 01/08/06 19:21 | SW846 8260B | 6011093 |
| Benzene | **310** | | ug/L | 20.0 | 20 | 01/08/06 19:21 | SW846 8260B | 6011093 |
| Ethylbenzene | **1.26** | | ug/L | 1.00 | 1 | 01/06/06 12:40 | SW846 8260B | 6010867 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/06/06 12:40 | SW846 8260B | 6010867 |
| Toluene | **20.4** | | ug/L | 1.00 | 1 | 01/06/06 12:40 | SW846 8260B | 6010867 |
| Diisopropyl Ether | **126** | | ug/L | 1.00 | 1 | 01/06/06 12:40 | SW846 8260B | 6010867 |
| Methyl tert-Butyl Ether | **958** | | ug/L | 20.0 | 20 | 01/08/06 19:21 | SW846 8260B | 6011093 |
| Tertiary Butyl Alcohol | ND | | ug/L | 10.0 | 1 | 01/06/06 12:40 | SW846 8260B | 6010867 |
| Xylenes, total | **202** | | ug/L | 3.00 | 1 | 01/06/06 12:40 | SW846 8260B | 6010867 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *107 %* | | | | | *01/06/06 12:40* | *SW846 8260B* | *6010867* |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *98 %* | | | | | *01/08/06 19:21* | *SW846 8260B* | *6011093* |
| *Surr: Dibromofluoromethane (79-122%)* | *107 %* | | | | | *01/06/06 12:40* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *101 %* | | | | | *01/08/06 19:21* | *SW846 8260B* | *6011093* |
| *Surr: Toluene-d8 (78-121%)* | *79 %* | | | | | *01/06/06 12:40* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *79 %* | | | | | *01/08/06 19:21* | *SW846 8260B* | *6011093* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *98 %* | | | | | *01/06/06 12:40* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *91 %* | | | | | *01/08/06 19:21* | *SW846 8260B* | *6011093* |

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL3763-03RE1 (MW-2 - Water) Sampled: 12/29/05 09:34** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **690** | | ug/L | 10.0 | 10 | 01/08/06 02:13 | SW846 8260B | 6011094 |
| Benzene | **425** | | ug/L | 10.0 | 10 | 01/08/06 02:13 | SW846 8260B | 6011094 |
| Ethylbenzene | **106** | | ug/L | 1.00 | 1 | 01/06/06 13:09 | SW846 8260B | 6010867 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/06/06 13:09 | SW846 8260B | 6010867 |
| Toluene | **530** | | ug/L | 10.0 | 10 | 01/08/06 02:13 | SW846 8260B | 6011094 |
| Diisopropyl Ether | **192** | | ug/L | 10.0 | 10 | 01/08/06 02:13 | SW846 8260B | 6011094 |
| Methyl tert-Butyl Ether | **10100** | | ug/L | 200 | 200 | 01/08/06 02:42 | SW846 8260B | 6011094 |
| Tertiary Butyl Alcohol | **5890** | | ug/L | 100 | 10 | 01/08/06 02:13 | SW846 8260B | 6011094 |
| Xylenes, total | **753** | | ug/L | 30.0 | 10 | 01/08/06 02:13 | SW846 8260B | 6011094 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *95 %* | | | | | *01/06/06 13:09* | *SW846 8260B* | *6010867* |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *97 %* | | | | | *01/08/06 02:13* | *SW846 8260B* | *6011094* |
| *Surr: Dibromofluoromethane (79-122%)* | *95 %* | | | | | *01/06/06 13:09* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *100 %* | | | | | *01/08/06 02:13* | *SW846 8260B* | *6011094* |
| *Surr: Toluene-d8 (78-121%)* | *83 %* | | | | | *01/06/06 13:09* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *77 %* | *Z10* | | | | *01/08/06 02:13* | *SW846 8260B* | *6011094* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *87 %* | | | | | *01/06/06 13:09* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *85 %* | | | | | *01/08/06 02:13* | *SW846 8260B* | *6011094* |
| **Sample ID: NOL3763-04 (MW-19 - Water) Sampled: 12/29/05 10:57** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **342** | | ug/L | 10.0 | 10 | 01/08/06 01:16 | SW846 8260B | 6011094 |
| Benzene | **2.88** | | ug/L | 1.00 | 1 | 01/08/06 00:47 | SW846 8260B | 6011094 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 01/08/06 00:47 | SW846 8260B | 6011094 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/08/06 00:47 | SW846 8260B | 6011094 |
| Toluene | **1.04** | | ug/L | 1.00 | 1 | 01/08/06 00:47 | SW846 8260B | 6011094 |
| Diisopropyl Ether | **20.2** | | ug/L | 1.00 | 1 | 01/08/06 00:47 | SW846 8260B | 6011094 |
| Methyl tert-Butyl Ether | **5380** | | ug/L | 200 | 200 | 01/08/06 01:44 | SW846 8260B | 6011094 |
| Tertiary Butyl Alcohol | **1060** | | ug/L | 100 | 10 | 01/08/06 01:16 | SW846 8260B | 6011094 |
| Xylenes, total | **3.16** | | ug/L | 3.00 | 1 | 01/08/06 00:47 | SW846 8260B | 6011094 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *93 %* | | | | | *01/08/06 00:47* | *SW846 8260B* | *6011094* |
| *Surr: Dibromofluoromethane (79-122%)* | *101 %* | | | | | *01/08/06 00:47* | *SW846 8260B* | *6011094* |
| *Surr: Toluene-d8 (78-121%)* | *76 %* | *Z10* | | | | *01/08/06 00:47* | *SW846 8260B* | *6011094* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *85 %* | | | | | *01/08/06 00:47* | *SW846 8260B* | *6011094* |
| **Sample ID: NOL3763-05 (MW-17 - Water) Sampled: 12/29/05 11:03** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **112** | | ug/L | 1.00 | 1 | 01/07/06 19:00 | SW846 8260B | 6011064 |
| Benzene | ND | | ug/L | 1.00 | 1 | 01/07/06 19:00 | SW846 8260B | 6011064 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 01/07/06 19:00 | SW846 8260B | 6011064 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/07/06 19:00 | SW846 8260B | 6011064 |
| Toluene | ND | | ug/L | 1.00 | 1 | 01/07/06 19:00 | SW846 8260B | 6011064 |
| Diisopropyl Ether | **20.7** | | ug/L | 1.00 | 1 | 01/07/06 19:00 | SW846 8260B | 6011064 |
| Methyl tert-Butyl Ether | **2870** | | ug/L | 50.0 | 50 | 01/07/06 19:29 | SW846 8260B | 6011064 |
| Tertiary Butyl Alcohol | **627** | | ug/L | 10.0 | 1 | 01/07/06 19:00 | SW846 8260B | 6011064 |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL3763-05 (MW-17 - Water) - cont. Sampled: 12/29/05 11:03** | | | | | | | | |
| Selected Volatile Organic Compounds by EPA Method 8260B - cont. | | | | | | | | |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 01/07/06 19:00 | SW846 8260B | 6011064 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *95 %* | | | | | *01/07/06 19:00* | *SW846 8260B* | *6011064* |
| *Surr: Dibromofluoromethane (79-122%)* | *100 %* | | | | | *01/07/06 19:00* | *SW846 8260B* | *6011064* |
| *Surr: Toluene-d8 (78-121%)* | *76 %* | *Z10* | | | | *01/07/06 19:00* | *SW846 8260B* | *6011064* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *88 %* | | | | | *01/07/06 19:00* | *SW846 8260B* | *6011064* |
| **Sample ID: NOL3763-06RE1 (MW-18 - Water) Sampled: 12/29/05 11:09** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **268** | | ug/L | 50.0 | 50 | 01/08/06 19:50 | SW846 8260B | 6011093 |
| Benzene | **1.70** | | ug/L | 1.00 | 1 | 01/06/06 14:36 | SW846 8260B | 6010867 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 01/06/06 14:36 | SW846 8260B | 6010867 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/06/06 14:36 | SW846 8260B | 6010867 |
| Toluene | **1.20** | | ug/L | 1.00 | 1 | 01/06/06 14:36 | SW846 8260B | 6010867 |
| Diisopropyl Ether | **21.3** | | ug/L | 1.00 | 1 | 01/06/06 14:36 | SW846 8260B | 6010867 |
| Methyl tert-Butyl Ether | **5240** | | ug/L | 50.0 | 50 | 01/08/06 19:50 | SW846 8260B | 6011093 |
| Tertiary Butyl Alcohol | **1020** | | ug/L | 500 | 50 | 01/08/06 19:50 | SW846 8260B | 6011093 |
| Xylenes, total | **3.93** | | ug/L | 3.00 | 1 | 01/06/06 14:36 | SW846 8260B | 6010867 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *98 %* | | | | | *01/06/06 14:36* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *104 %* | | | | | *01/06/06 14:36* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *80 %* | | | | | *01/06/06 14:36* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *91 %* | | | | | *01/06/06 14:36* | *SW846 8260B* | *6010867* |
| **Sample ID: NOL3763-07RE1 (MW-14 - Water) Sampled: 12/29/05 11:15** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **619** | | ug/L | 50.0 | 50 | 01/07/06 20:56 | SW846 8260B | 6011064 |
| Benzene | **221** | | ug/L | 50.0 | 50 | 01/07/06 20:56 | SW846 8260B | 6011064 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 01/06/06 15:05 | SW846 8260B | 6010867 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/06/06 15:05 | SW846 8260B | 6010867 |
| Toluene | **15.8** | | ug/L | 1.00 | 1 | 01/06/06 15:05 | SW846 8260B | 6010867 |
| Diisopropyl Ether | **238** | | ug/L | 50.0 | 50 | 01/07/06 20:56 | SW846 8260B | 6011064 |
| Methyl tert-Butyl Ether | **14800** | | ug/L | 100 | 100 | 01/08/06 14:02 | SW846 8260B | 6011093 |
| Tertiary Butyl Alcohol | ND | | ug/L | 500 | 50 | 01/07/06 20:56 | SW846 8260B | 6011064 |
| Xylenes, total | **127** | | ug/L | 3.00 | 1 | 01/06/06 15:05 | SW846 8260B | 6010867 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *88 %* | | | | | *01/06/06 15:05* | *SW846 8260B* | *6010867* |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *94 %* | | | | | *01/07/06 20:56* | *SW846 8260B* | *6011064* |
| *Surr: Dibromofluoromethane (79-122%)* | *92 %* | | | | | *01/06/06 15:05* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *101 %* | | | | | *01/07/06 20:56* | *SW846 8260B* | *6011064* |
| *Surr: Toluene-d8 (78-121%)* | *80 %* | | | | | *01/06/06 15:05* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *77 %* | *Z10* | | | | *01/07/06 20:56* | *SW846 8260B* | *6011064* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *91 %* | | | | | *01/06/06 15:05* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *88 %* | | | | | *01/07/06 20:56* | *SW846 8260B* | *6011064* |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL3763-08 (MW-16 - Water) Sampled: 12/29/05 11:21** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **45.0** | | ug/L | 1.00 | 1 | 01/07/06 18:02 | SW846 8260B | 6011064 |
| Benzene | ND | | ug/L | 1.00 | 1 | 01/07/06 18:02 | SW846 8260B | 6011064 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 01/07/06 18:02 | SW846 8260B | 6011064 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/07/06 18:02 | SW846 8260B | 6011064 |
| Toluene | ND | | ug/L | 1.00 | 1 | 01/07/06 18:02 | SW846 8260B | 6011064 |
| Diisopropyl Ether | **18.3** | | ug/L | 1.00 | 1 | 01/07/06 18:02 | SW846 8260B | 6011064 |
| Methyl tert-Butyl Ether | **1400** | | ug/L | 20.0 | 20 | 01/07/06 18:31 | SW846 8260B | 6011064 |
| Tertiary Butyl Alcohol | **91.2** | | ug/L | 10.0 | 1 | 01/07/06 18:02 | SW846 8260B | 6011064 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 01/07/06 18:02 | SW846 8260B | 6011064 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *93 %* | | | | | *01/07/06 18:02* | *SW846 8260B* | *6011064* |
| *Surr: Dibromofluoromethane (79-122%)* | *99 %* | | | | | *01/07/06 18:02* | *SW846 8260B* | *6011064* |
| *Surr: Toluene-d8 (78-121%)* | *76 %* | *Z10* | | | | *01/07/06 18:02* | *SW846 8260B* | *6011064* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *86 %* | | | | | *01/07/06 18:02* | *SW846 8260B* | *6011064* |
| **Sample ID: NOL3763-09 (MW-15 - Water) Sampled: 12/29/05 11:27** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **63.4** | | ug/L | 1.00 | 1 | 01/06/06 16:03 | SW846 8260B | 6010867 |
| Benzene | ND | | ug/L | 1.00 | 1 | 01/06/06 16:03 | SW846 8260B | 6010867 |
| Ethylbenzene | ND | | ug/L | 1.00 | 1 | 01/06/06 16:03 | SW846 8260B | 6010867 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/06/06 16:03 | SW846 8260B | 6010867 |
| Toluene | ND | | ug/L | 1.00 | 1 | 01/06/06 16:03 | SW846 8260B | 6010867 |
| Diisopropyl Ether | **32.0** | | ug/L | 1.00 | 1 | 01/06/06 16:03 | SW846 8260B | 6010867 |
| Methyl tert-Butyl Ether | **2220** | | ug/L | 20.0 | 20 | 01/07/06 21:25 | SW846 8260B | 6011064 |
| Tertiary Butyl Alcohol | **461** | | ug/L | 10.0 | 1 | 01/06/06 16:03 | SW846 8260B | 6010867 |
| Xylenes, total | ND | | ug/L | 3.00 | 1 | 01/06/06 16:03 | SW846 8260B | 6010867 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *101 %* | | | | | *01/06/06 16:03* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *104 %* | | | | | *01/06/06 16:03* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *79 %* | | | | | *01/06/06 16:03* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *92 %* | | | | | *01/06/06 16:03* | *SW846 8260B* | *6010867* |
| **Sample ID: NOL3763-10RE1 (MW-8 - Water) Sampled: 12/29/05 10:01** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **4500** | | ug/L | 500 | 500 | 01/08/06 03:40 | SW846 8260B | 6011094 |
| Benzene | **2270** | | ug/L | 20.0 | 20 | 01/08/06 03:11 | SW846 8260B | 6011094 |
| Ethylbenzene | **801** | | ug/L | 20.0 | 20 | 01/08/06 03:11 | SW846 8260B | 6011094 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/06/06 16:31 | SW846 8260B | 6010867 |
| Toluene | **3650** | | ug/L | 20.0 | 20 | 01/08/06 03:11 | SW846 8260B | 6011094 |
| Diisopropyl Ether | **1740** | | ug/L | 20.0 | 20 | 01/08/06 03:11 | SW846 8260B | 6011094 |
| Methyl tert-Butyl Ether | **116000** | | ug/L | 1000 | 1000 | 01/08/06 14:31 | SW846 8260B | 6011093 |
| Tertiary Butyl Alcohol | ND | | ug/L | 5000 | 500 | 01/08/06 03:40 | SW846 8260B | 6011094 |
| Xylenes, total | **5670** | | ug/L | 60.0 | 20 | 01/08/06 03:11 | SW846 8260B | 6011094 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *84 %* | | | | | *01/06/06 16:31* | *SW846 8260B* | *6010867* |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *95 %* | | | | | *01/08/06 03:11* | *SW846 8260B* | *6011094* |
| *Surr: Dibromofluoromethane (79-122%)* | *80 %* | | | | | *01/06/06 16:31* | *SW846 8260B* | *6010867* |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL3763-10RE1 (MW-8 - Water) - cont. Sampled: 12/29/05 10:01** | | | | | | | | |
| Selected Volatile Organic Compounds by EPA Method 8260B - cont. | | | | | | | | |
| *Surr: Dibromofluoromethane (79-122%)* | *98 %* | | | | | *01/08/06 03:11* | *SW846 8260B* | *6011094* |
| *Surr: Toluene-d8 (78-121%)* | *70 %* | *Z10* | | | | *01/06/06 16:31* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *79 %* | | | | | *01/08/06 03:11* | *SW846 8260B* | *6011094* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *126 %* | | | | | *01/06/06 16:31* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *84 %* | | | | | *01/08/06 03:11* | *SW846 8260B* | *6011094* |
| **Sample ID: NOL3763-11RE1 (MW-10 - Water) Sampled: 12/29/05 09:45** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **19200** | | ug/L | 1000 | 1000 | 01/08/06 04:37 | SW846 8260B | 6011094 |
| Benzene | **6240** | | ug/L | 50.0 | 50 | 01/08/06 04:09 | SW846 8260B | 6011094 |
| Ethylbenzene | **1440** | | ug/L | 50.0 | 50 | 01/08/06 04:09 | SW846 8260B | 6011094 |
| Ethyl tert-Butyl Ether | **14.4** | | ug/L | 1.00 | 1 | 01/06/06 17:00 | SW846 8260B | 6010867 |
| Toluene | **8180** | | ug/L | 50.0 | 50 | 01/08/06 04:09 | SW846 8260B | 6011094 |
| Diisopropyl Ether | **6500** | | ug/L | 50.0 | 50 | 01/08/06 04:09 | SW846 8260B | 6011094 |
| Methyl tert-Butyl Ether | **756000** | | ug/L | 5000 | 5000 | 01/08/06 15:00 | SW846 8260B | 6011093 |
| Tertiary Butyl Alcohol | **655** | | ug/L | 10.0 | 1 | 01/06/06 17:00 | SW846 8260B | 6010867 |
| Xylenes, total | **11100** | | ug/L | 150 | 50 | 01/08/06 04:09 | SW846 8260B | 6011094 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *92 %* | | | | | *01/06/06 17:00* | *SW846 8260B* | *6010867* |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *88 %* | | | | | *01/08/06 04:09* | *SW846 8260B* | *6011094* |
| *Surr: Dibromofluoromethane (79-122%)* | *91 %* | | | | | *01/06/06 17:00* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *91 %* | | | | | *01/08/06 04:09* | *SW846 8260B* | *6011094* |
| *Surr: Toluene-d8 (78-121%)* | *62 %* | *Z* | | | | *01/06/06 17:00* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *80 %* | | | | | *01/08/06 04:09* | *SW846 8260B* | *6011094* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *130 %* | *Z* | | | | *01/06/06 17:00* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *83 %* | | | | | *01/08/06 04:09* | *SW846 8260B* | *6011094* |
| **Sample ID: NOL3763-12RE1 (MW-11 - Water) Sampled: 12/29/05 09:51** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **6020** | | ug/L | 500 | 500 | 01/08/06 05:35 | SW846 8260B | 6011094 |
| Benzene | **2410** | | ug/L | 20.0 | 20 | 01/08/06 05:06 | SW846 8260B | 6011094 |
| Ethylbenzene | **1500** | | ug/L | 20.0 | 20 | 01/08/06 05:06 | SW846 8260B | 6011094 |
| Ethyl tert-Butyl Ether | **3.96** | | ug/L | 1.00 | 1 | 01/06/06 17:29 | SW846 8260B | 6010867 |
| Toluene | **5250** | | ug/L | 500 | 500 | 01/08/06 05:35 | SW846 8260B | 6011094 |
| Diisopropyl Ether | **1970** | | ug/L | 20.0 | 20 | 01/08/06 05:06 | SW846 8260B | 6011094 |
| Methyl tert-Butyl Ether | **250000** | | ug/L | 5000 | 5000 | 01/08/06 15:29 | SW846 8260B | 6011093 |
| Tertiary Butyl Alcohol | **41500** | | ug/L | 5000 | 500 | 01/08/06 05:35 | SW846 8260B | 6011094 |
| Xylenes, total | **7630** | | ug/L | 60.0 | 20 | 01/08/06 05:06 | SW846 8260B | 6011094 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *87 %* | | | | | *01/06/06 17:29* | *SW846 8260B* | *6010867* |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *90 %* | | | | | *01/08/06 05:06* | *SW846 8260B* | *6011094* |
| *Surr: Dibromofluoromethane (79-122%)* | *85 %* | | | | | *01/06/06 17:29* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *95 %* | | | | | *01/08/06 05:06* | *SW846 8260B* | *6011094* |
| *Surr: Toluene-d8 (78-121%)* | *53 %* | *Z* | | | | *01/06/06 17:29* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *78 %* | | | | | *01/08/06 05:06* | *SW846 8260B* | *6011094* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *127 %* | *Z* | | | | *01/06/06 17:29* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *83 %* | | | | | *01/08/06 05:06* | *SW846 8260B* | *6011094* |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL3763-13RE1 (MW-6 - Water) Sampled: 12/29/05 09:57** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **11400** | | ug/L | 500 | 500 | 01/08/06 06:33 | SW846 8260B | 6011094 |
| Benzene | **4760** | | ug/L | 500 | 500 | 01/08/06 06:33 | SW846 8260B | 6011094 |
| Ethylbenzene | **1970** | | ug/L | 20.0 | 20 | 01/08/06 06:04 | SW846 8260B | 6011094 |
| Ethyl tert-Butyl Ether | **3.60** | | ug/L | 1.00 | 1 | 01/06/06 17:58 | SW846 8260B | 6010867 |
| Toluene | **11900** | | ug/L | 500 | 500 | 01/08/06 06:33 | SW846 8260B | 6011094 |
| Diisopropyl Ether | **2500** | | ug/L | 20.0 | 20 | 01/08/06 06:04 | SW846 8260B | 6011094 |
| Methyl tert-Butyl Ether | **165000** | | ug/L | 5000 | 5000 | 01/08/06 15:58 | SW846 8260B | 6011093 |
| Tertiary Butyl Alcohol | **38800** | | ug/L | 5000 | 500 | 01/08/06 06:33 | SW846 8260B | 6011094 |
| Xylenes, total | **12700** | | ug/L | 1500 | 500 | 01/08/06 06:33 | SW846 8260B | 6011094 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *91 %* | | | | | *01/06/06 17:58* | *SW846 8260B* | *6010867* |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *87 %* | | | | | *01/08/06 06:04* | *SW846 8260B* | *6011094* |
| *Surr: Dibromofluoromethane (79-122%)* | *88 %* | | | | | *01/06/06 17:58* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *96 %* | | | | | *01/08/06 06:04* | *SW846 8260B* | *6011094* |
| *Surr: Toluene-d8 (78-121%)* | *49 %* | *Z* | | | | *01/06/06 17:58* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *75 %* | *Z10* | | | | *01/08/06 06:04* | *SW846 8260B* | *6011094* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *125 %* | | | | | *01/06/06 17:58* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *84 %* | | | | | *01/08/06 06:04* | *SW846 8260B* | *6011094* |
| **Sample ID: NOL3763-14RE1 (MW-4 - Water) Sampled: 12/29/05 10:03** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **8600** | | ug/L | 500 | 500 | 01/08/06 07:30 | SW846 8260B | 6011094 |
| Benzene | **4080** | | ug/L | 500 | 500 | 01/08/06 07:30 | SW846 8260B | 6011094 |
| Ethylbenzene | **5170** | | ug/L | 500 | 500 | 01/08/06 07:30 | SW846 8260B | 6011094 |
| Ethyl tert-Butyl Ether | **4.77** | | ug/L | 1.00 | 1 | 01/06/06 18:27 | SW846 8260B | 6010867 |
| Toluene | **13500** | | ug/L | 500 | 500 | 01/08/06 07:30 | SW846 8260B | 6011094 |
| Diisopropyl Ether | **2130** | | ug/L | 20.0 | 20 | 01/08/06 07:02 | SW846 8260B | 6011094 |
| Methyl tert-Butyl Ether | **217000** | | ug/L | 5000 | 5000 | 01/08/06 16:27 | SW846 8260B | 6011093 |
| Tertiary Butyl Alcohol | **60700** | | ug/L | 5000 | 500 | 01/08/06 07:30 | SW846 8260B | 6011094 |
| Xylenes, total | **41000** | | ug/L | 1500 | 500 | 01/08/06 07:30 | SW846 8260B | 6011094 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *92 %* | | | | | *01/06/06 18:27* | *SW846 8260B* | *6010867* |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *86 %* | | | | | *01/08/06 07:02* | *SW846 8260B* | *6011094* |
| *Surr: Dibromofluoromethane (79-122%)* | *85 %* | | | | | *01/06/06 18:27* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *96 %* | | | | | *01/08/06 07:02* | *SW846 8260B* | *6011094* |
| *Surr: Toluene-d8 (78-121%)* | *47 %* | *Z* | | | | *01/06/06 18:27* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *77 %* | *Z10* | | | | *01/08/06 07:02* | *SW846 8260B* | *6011094* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *128 %* | *Z* | | | | *01/06/06 18:27* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *96 %* | | | | | *01/08/06 07:02* | *SW846 8260B* | *6011094* |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL3763-15RE1 (MW-3 - Water) Sampled: 12/29/05 10:09** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **8720** | | ug/L | 500 | 500 | 01/08/06 08:28 | SW846 8260B | 6011094 |
| Benzene | **6130** | | ug/L | 500 | 500 | 01/08/06 08:28 | SW846 8260B | 6011094 |
| Ethylbenzene | **3140** | | ug/L | 500 | 500 | 01/08/06 08:28 | SW846 8260B | 6011094 |
| Ethyl tert-Butyl Ether | **4.83** | | ug/L | 1.00 | 1 | 01/06/06 18:56 | SW846 8260B | 6010867 |
| Toluene | **13700** | | ug/L | 500 | 500 | 01/08/06 08:28 | SW846 8260B | 6011094 |
| Diisopropyl Ether | **2680** | | ug/L | 20.0 | 20 | 01/08/06 07:59 | SW846 8260B | 6011094 |
| Methyl tert-Butyl Ether | **185000** | | ug/L | 5000 | 5000 | 01/08/06 16:56 | SW846 8260B | 6011093 |
| Tertiary Butyl Alcohol | ND | | ug/L | 5000 | 500 | 01/08/06 08:28 | SW846 8260B | 6011094 |
| Xylenes, total | **17800** | | ug/L | 1500 | 500 | 01/08/06 08:28 | SW846 8260B | 6011094 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *87 %* | | | | | *01/06/06 18:56* | *SW846 8260B* | *6010867* |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *86 %* | | | | | *01/08/06 07:59* | *SW846 8260B* | *6011094* |
| *Surr: Dibromofluoromethane (79-122%)* | *87 %* | | | | | *01/06/06 18:56* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *94 %* | | | | | *01/08/06 07:59* | *SW846 8260B* | *6011094* |
| *Surr: Toluene-d8 (78-121%)* | *45 %* | *Z* | | | | *01/06/06 18:56* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *80 %* | | | | | *01/08/06 07:59* | *SW846 8260B* | *6011094* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *129 %* | *Z* | | | | *01/06/06 18:56* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *84 %* | | | | | *01/08/06 07:59* | *SW846 8260B* | *6011094* |
| **Sample ID: NOL3763-16RE1 (MW-1 - Water) Sampled: 12/29/05 10:15** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **6090** | | ug/L | 500 | 500 | 01/08/06 09:26 | SW846 8260B | 6011094 |
| Benzene | **3450** | | ug/L | 20.0 | 20 | 01/08/06 08:58 | SW846 8260B | 6011094 |
| Ethylbenzene | **1320** | | ug/L | 20.0 | 20 | 01/08/06 08:58 | SW846 8260B | 6011094 |
| Ethyl tert-Butyl Ether | **3.99** | | ug/L | 1.00 | 1 | 01/06/06 19:25 | SW846 8260B | 6010867 |
| Toluene | **5350** | | ug/L | 500 | 500 | 01/08/06 09:26 | SW846 8260B | 6011094 |
| Diisopropyl Ether | **2200** | | ug/L | 20.0 | 20 | 01/08/06 08:58 | SW846 8260B | 6011094 |
| Methyl tert-Butyl Ether | **238000** | | ug/L | 5000 | 5000 | 01/08/06 17:25 | SW846 8260B | 6011093 |
| Tertiary Butyl Alcohol | **37400** | | ug/L | 5000 | 500 | 01/08/06 09:26 | SW846 8260B | 6011094 |
| Xylenes, total | **7060** | | ug/L | 60.0 | 20 | 01/08/06 08:58 | SW846 8260B | 6011094 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *86 %* | | | | | *01/06/06 19:25* | *SW846 8260B* | *6010867* |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *85 %* | | | | | *01/08/06 08:58* | *SW846 8260B* | *6011094* |
| *Surr: Dibromofluoromethane (79-122%)* | *84 %* | | | | | *01/06/06 19:25* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *93 %* | | | | | *01/08/06 08:58* | *SW846 8260B* | *6011094* |
| *Surr: Toluene-d8 (78-121%)* | *59 %* | *Z* | | | | *01/06/06 19:25* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *79 %* | | | | | *01/08/06 08:58* | *SW846 8260B* | *6011094* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *132 %* | *Z* | | | | *01/06/06 19:25* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *86 %* | | | | | *01/08/06 08:58* | *SW846 8260B* | *6011094* |

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|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## ANALYTICAL REPORT

| Analyte | Result | Flag | Units | MRL | Dilution Factor | Analysis Date/Time | Method | Batch |
|---|---|---|---|---|---|---|---|---|
| **Sample ID: NOL3763-17RE1 (H-1 - Water) Sampled: 12/29/05 10:21** | | | | | | | | |
| Volatile Organic Compounds by EPA Method 8260B | | | | | | | | |
| Tert-Amyl Methyl Ether | **1370** | | ug/L | 10.0 | 10 | 01/08/06 09:55 | SW846 8260B | 6011094 |
| Benzene | **792** | | ug/L | 10.0 | 10 | 01/08/06 09:55 | SW846 8260B | 6011094 |
| Ethylbenzene | **1350** | | ug/L | 10.0 | 10 | 01/08/06 09:55 | SW846 8260B | 6011094 |
| Ethyl tert-Butyl Ether | ND | | ug/L | 1.00 | 1 | 01/06/06 19:54 | SW846 8260B | 6010867 |
| Toluene | **2690** | | ug/L | 200 | 200 | 01/08/06 10:24 | SW846 8260B | 6011094 |
| Diisopropyl Ether | **441** | | ug/L | 10.0 | 10 | 01/08/06 09:55 | SW846 8260B | 6011094 |
| Methyl tert-Butyl Ether | **39500** | | ug/L | 1000 | 1000 | 01/08/06 17:54 | SW846 8260B | 6011093 |
| Tertiary Butyl Alcohol | **9840** | | ug/L | 2000 | 200 | 01/08/06 10:24 | SW846 8260B | 6011094 |
| Xylenes, total | **6690** | | ug/L | 600 | 200 | 01/08/06 10:24 | SW846 8260B | 6011094 |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *84 %* | | | | | *01/06/06 19:54* | *SW846 8260B* | *6010867* |
| *Surr: 1,2-Dichloroethane-d4 (70-130%)* | *97 %* | | | | | *01/08/06 09:55* | *SW846 8260B* | *6011094* |
| *Surr: Dibromofluoromethane (79-122%)* | *81 %* | | | | | *01/06/06 19:54* | *SW846 8260B* | *6010867* |
| *Surr: Dibromofluoromethane (79-122%)* | *97 %* | | | | | *01/08/06 09:55* | *SW846 8260B* | *6011094* |
| *Surr: Toluene-d8 (78-121%)* | *73 %* | *Z* | | | | *01/06/06 19:54* | *SW846 8260B* | *6010867* |
| *Surr: Toluene-d8 (78-121%)* | *78 %* | | | | | *01/08/06 09:55* | *SW846 8260B* | *6011094* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *124 %* | | | | | *01/06/06 19:54* | *SW846 8260B* | *6010867* |
| *Surr: 4-Bromofluorobenzene (78-126%)* | *87 %* | | | | | *01/08/06 09:55* | *SW846 8260B* | *6011094* |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## PROJECT QUALITY CONTROL DATA
### Blank

| Analyte | Blank Value | Q | Units | Q.C. Batch | Lab Number | Analyzed Date/Time |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA Method 8260B** | | | | | | |
| **6011064-BLK1** | | | | | | |
| Tert-Amyl Methyl Ether | <0.350 | | ug/L | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| Benzene | <0.290 | | ug/L | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| Ethylbenzene | <0.340 | | ug/L | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| Ethyl tert-Butyl Ether | <0.410 | | ug/L | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| Toluene | <0.280 | | ug/L | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| Diisopropyl Ether | <0.420 | | ug/L | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| Methyl tert-Butyl Ether | <0.320 | | ug/L | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| Tertiary Butyl Alcohol | <8.26 | | ug/L | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| Xylenes, total | <0.820 | | ug/L | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| *Surrogate: 1,2-Dichloroethane-d4* | 102% | | | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| *Surrogate: Dibromofluoromethane* | 106% | | | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| *Surrogate: Toluene-d8* | 75% | Z10 | | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| *Surrogate: 4-Bromofluorobenzene* | 93% | | | 6011064 | 6011064-BLK1 | 01/07/06 12:15 |
| **6011093-BLK1** | | | | | | |
| Tert-Amyl Methyl Ether | <0.350 | | ug/L | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| Benzene | <0.290 | | ug/L | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| Ethylbenzene | <0.340 | | ug/L | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| Ethyl tert-Butyl Ether | <0.410 | | ug/L | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| Toluene | <0.280 | | ug/L | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| Diisopropyl Ether | <0.420 | | ug/L | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| Methyl tert-Butyl Ether | <0.320 | | ug/L | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| Tertiary Butyl Alcohol | <8.26 | | ug/L | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| Xylenes, total | <0.820 | | ug/L | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| *Surrogate: 1,2-Dichloroethane-d4* | 100% | | | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| *Surrogate: Dibromofluoromethane* | 92% | | | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| *Surrogate: Toluene-d8* | 81% | | | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| *Surrogate: 4-Bromofluorobenzene* | 89% | | | 6011093 | 6011093-BLK1 | 01/08/06 13:04 |
| **6011094-BLK1** | | | | | | |
| Tert-Amyl Methyl Ether | <0.350 | | ug/L | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |
| Benzene | <0.290 | | ug/L | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |
| Ethylbenzene | <0.340 | | ug/L | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |
| Ethyl tert-Butyl Ether | <0.410 | | ug/L | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |
| Toluene | <0.280 | | ug/L | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |
| Diisopropyl Ether | <0.420 | | ug/L | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |
| Methyl tert-Butyl Ether | <0.320 | | ug/L | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |
| Tertiary Butyl Alcohol | <8.26 | | ug/L | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |
| Xylenes, total | <0.820 | | ug/L | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |
| *Surrogate: 1,2-Dichloroethane-d4* | 98% | | | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |
| *Surrogate: Dibromofluoromethane* | 94% | | | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |

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|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## PROJECT QUALITY CONTROL DATA
### Blank - Cont.

| Analyte | Blank Value | Q | Units | Q.C. Batch | Lab Number | Analyzed Date/Time |
|---|---|---|---|---|---|---|
| **Selected Volatile Organic Compounds by EPA Method 8260B** | | | | | | |
| **6011094-BLK1** | | | | | | |
| *Surrogate: Toluene-d8* | 77% | Z10 | | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |
| *Surrogate: 4-Bromofluorobenzene* | 94% | | | 6011094 | 6011094-BLK1 | 01/08/06 00:18 |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673)<br>2142 Priest Bridge Ct. Ste. 1<br>Crofton, MD 21114 | Work Order: | NOL3763 |
| | | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## PROJECT QUALITY CONTROL DATA
## LCS

| Analyte | Known Val. | Analyzed Val | Q | Units | % Rec. | Target Range | Batch | Analyzed Date/Time |
|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA Method 8260B** | | | | | | | | |
| **6010867-BS1** | | | | | | | | |
| Tert-Amyl Methyl Ether | 50.0 | 50.3 | | ug/L | 101% | 49 - 158 | 6010867 | 01/06/06 10:16 |
| Benzene | 50.0 | 56.3 | | ug/L | 113% | 78 - 122 | 6010867 | 01/06/06 10:16 |
| Ethylbenzene | 50.0 | 52.1 | | ug/L | 104% | 82 - 122 | 6010867 | 01/06/06 10:16 |
| Ethyl tert-Butyl Ether | 50.0 | 44.0 | | ug/L | 88% | 60 - 153 | 6010867 | 01/06/06 10:16 |
| Toluene | 50.0 | 43.8 | | ug/L | 88% | 80 - 120 | 6010867 | 01/06/06 10:16 |
| Diisopropyl Ether | 50.0 | 47.4 | | ug/L | 95% | 71 - 134 | 6010867 | 01/06/06 10:16 |
| Methyl tert-Butyl Ether | 50.0 | 45.4 | | ug/L | 91% | 65 - 144 | 6010867 | 01/06/06 10:16 |
| Tertiary Butyl Alcohol | 500 | 692 | | ug/L | 138% | 25 - 168 | 6010867 | 01/06/06 10:16 |
| Xylenes, total | 150 | 164 | | ug/L | 109% | 81 - 125 | 6010867 | 01/06/06 10:16 |
| *Surrogate: 1,2-Dichloroethane-d4* | 50.0 | 55.1 | | | 110% | 70 - 130 | 6010867 | 01/06/06 10:16 |
| *Surrogate: Dibromofluoromethane* | 50.0 | 52.8 | | | 106% | 79 - 122 | 6010867 | 01/06/06 10:16 |
| *Surrogate: Toluene-d8* | 50.0 | 40.5 | | | 81% | 78 - 121 | 6010867 | 01/06/06 10:16 |
| *Surrogate: 4-Bromofluorobenzene* | 50.0 | 48.9 | | | 98% | 78 - 126 | 6010867 | 01/06/06 10:16 |
| **6011064-BS1** | | | | | | | | |
| Tert-Amyl Methyl Ether | 50.0 | 53.8 | | ug/L | 108% | 49 - 158 | 6011064 | 01/07/06 11:17 |
| Benzene | 50.0 | 57.3 | | ug/L | 115% | 78 - 122 | 6011064 | 01/07/06 11:17 |
| Ethylbenzene | 50.0 | 53.2 | | ug/L | 106% | 82 - 122 | 6011064 | 01/07/06 11:17 |
| Ethyl tert-Butyl Ether | 50.0 | 43.2 | | ug/L | 86% | 60 - 153 | 6011064 | 01/07/06 11:17 |
| Toluene | 50.0 | 42.6 | | ug/L | 85% | 80 - 120 | 6011064 | 01/07/06 11:17 |
| Diisopropyl Ether | 50.0 | 45.0 | | ug/L | 90% | 71 - 134 | 6011064 | 01/07/06 11:17 |
| Methyl tert-Butyl Ether | 50.0 | 45.1 | | ug/L | 90% | 65 - 144 | 6011064 | 01/07/06 11:17 |
| Tertiary Butyl Alcohol | 500 | 677 | | ug/L | 135% | 25 - 168 | 6011064 | 01/07/06 11:17 |
| Xylenes, total | 150 | 166 | | ug/L | 111% | 81 - 125 | 6011064 | 01/07/06 11:17 |
| *Surrogate: 1,2-Dichloroethane-d4* | 50.0 | 48.5 | | | 97% | 70 - 130 | 6011064 | 01/07/06 11:17 |
| *Surrogate: Dibromofluoromethane* | 50.0 | 53.3 | | | 107% | 79 - 122 | 6011064 | 01/07/06 11:17 |
| *Surrogate: Toluene-d8* | 50.0 | 37.9 | Z10 | | 76% | 78 - 121 | 6011064 | 01/07/06 11:17 |
| *Surrogate: 4-Bromofluorobenzene* | 50.0 | 42.6 | | | 85% | 78 - 126 | 6011064 | 01/07/06 11:17 |
| **6011093-BS1** | | | | | | | | |
| Tert-Amyl Methyl Ether | 50.0 | 53.1 | | ug/L | 106% | 49 - 158 | 6011093 | 01/08/06 12:06 |
| Benzene | 50.0 | 57.9 | | ug/L | 116% | 78 - 122 | 6011093 | 01/08/06 12:06 |
| Ethylbenzene | 50.0 | 53.2 | | ug/L | 106% | 82 - 122 | 6011093 | 01/08/06 12:06 |
| Ethyl tert-Butyl Ether | 50.0 | 43.5 | | ug/L | 87% | 60 - 153 | 6011093 | 01/08/06 12:06 |
| Toluene | 50.0 | 44.6 | | ug/L | 89% | 80 - 120 | 6011093 | 01/08/06 12:06 |
| Diisopropyl Ether | 50.0 | 46.6 | | ug/L | 93% | 71 - 134 | 6011093 | 01/08/06 12:06 |
| Methyl tert-Butyl Ether | 50.0 | 46.1 | | ug/L | 92% | 65 - 144 | 6011093 | 01/08/06 12:06 |
| Tertiary Butyl Alcohol | 500 | 784 | | ug/L | 157% | 25 - 168 | 6011093 | 01/08/06 12:06 |
| Xylenes, total | 150 | 166 | | ug/L | 111% | 81 - 125 | 6011093 | 01/08/06 12:06 |
| *Surrogate: 1,2-Dichloroethane-d4* | 50.0 | 49.7 | | | 99% | 70 - 130 | 6011093 | 01/08/06 12:06 |
| *Surrogate: Dibromofluoromethane* | 50.0 | 49.1 | | | 98% | 79 - 122 | 6011093 | 01/08/06 12:06 |

TestAmerica
ANALYTICAL TESTING CORPORATION
2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## PROJECT QUALITY CONTROL DATA
### LCS - Cont.

| Analyte | Known Val. | Analyzed Val | Q | Units | % Rec. | Target Range | Batch | Analyzed Date/Time |
|---|---|---|---|---|---|---|---|---|
| **Selected Volatile Organic Compounds by EPA Method 8260B** | | | | | | | | |
| **6011093-BS1** | | | | | | | | |
| *Surrogate: Toluene-d8* | 50.0 | 40.2 | | | 80% | 78 - 121 | 6011093 | 01/08/06 12:06 |
| *Surrogate: 4-Bromofluorobenzene* | 50.0 | 43.2 | | | 86% | 78 - 126 | 6011093 | 01/08/06 12:06 |
| **6011094-BS1** | | | | | | | | |
| Tert-Amyl Methyl Ether | 50.0 | 50.2 | | ug/L | 100% | 49 - 158 | 6011094 | 01/07/06 23:20 |
| Benzene | 50.0 | 55.6 | | ug/L | 111% | 78 - 122 | 6011094 | 01/07/06 23:20 |
| Ethylbenzene | 50.0 | 51.1 | | ug/L | 102% | 82 - 122 | 6011094 | 01/07/06 23:20 |
| Ethyl tert-Butyl Ether | 50.0 | 41.8 | | ug/L | 84% | 60 - 153 | 6011094 | 01/07/06 23:20 |
| Toluene | 50.0 | 42.2 | | ug/L | 84% | 80 - 120 | 6011094 | 01/07/06 23:20 |
| Diisopropyl Ether | 50.0 | 43.7 | | ug/L | 87% | 71 - 134 | 6011094 | 01/07/06 23:20 |
| Methyl tert-Butyl Ether | 50.0 | 44.1 | | ug/L | 88% | 65 - 144 | 6011094 | 01/07/06 23:20 |
| Tertiary Butyl Alcohol | 500 | 697 | | ug/L | 139% | 25 - 168 | 6011094 | 01/07/06 23:20 |
| Xylenes, total | 150 | 162 | | ug/L | 108% | 81 - 125 | 6011094 | 01/07/06 23:20 |
| *Surrogate: 1,2-Dichloroethane-d4* | 50.0 | 46.9 | | | 94% | 70 - 130 | 6011094 | 01/07/06 23:20 |
| *Surrogate: Dibromofluoromethane* | 50.0 | 51.8 | | | 104% | 79 - 122 | 6011094 | 01/07/06 23:20 |
| *Surrogate: Toluene-d8* | 50.0 | 38.4 | Z10 | | 77% | 78 - 121 | 6011094 | 01/07/06 23:20 |
| *Surrogate: 4-Bromofluorobenzene* | 50.0 | 42.2 | | | 84% | 78 - 126 | 6011094 | 01/07/06 23:20 |

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2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## PROJECT QUALITY CONTROL DATA
### Matrix Spike

| Analyte | Orig. Val. | MS Val | Q | Units | Spike Conc | % Rec. | Target Range | Batch | Sample Spiked | Analyzed Date/Time |
|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA Method 8260B** | | | | | | | | | | |
| **6010867-MS1** | | | | | | | | | | |
| Tert-Amyl Methyl Ether | | 56.2 | | ug/L | 50.0 | 112% | 43 - 165 | 6010867 | | 01/06/06 20:23 |
| Benzene | | 56.0 | | ug/L | 50.0 | 112% | 74 - 133 | 6010867 | | 01/06/06 20:23 |
| Ethylbenzene | | 53.5 | | ug/L | 50.0 | 107% | 74 - 134 | 6010867 | | 01/06/06 20:23 |
| Ethyl tert-Butyl Ether | | 51.2 | | ug/L | 50.0 | 102% | 57 - 155 | 6010867 | | 01/06/06 20:23 |
| Toluene | | 46.6 | | ug/L | 50.0 | 93% | 73 - 133 | 6010867 | | 01/06/06 20:23 |
| Diisopropyl Ether | | 50.5 | | ug/L | 50.0 | 101% | 67 - 139 | 6010867 | | 01/06/06 20:23 |
| Methyl tert-Butyl Ether | | 56.4 | | ug/L | 50.0 | 113% | 58 - 151 | 6010867 | | 01/06/06 20:23 |
| Tertiary Butyl Alcohol | | 836 | | ug/L | 500 | 167% | 10 - 186 | 6010867 | | 01/06/06 20:23 |
| Xylenes, total | | 178 | | ug/L | 150 | 119% | 68 - 139 | 6010867 | | 01/06/06 20:23 |
| *Surrogate: 1,2-Dichloroethane-d4* | | 48.6 | | ug/L | 50.0 | 97% | 70 - 130 | 6010867 | | 01/06/06 20:23 |
| *Surrogate: Dibromofluoromethane* | | 51.2 | | ug/L | 50.0 | 102% | 79 - 122 | 6010867 | | 01/06/06 20:23 |
| *Surrogate: Toluene-d8* | | 37.5 | Z11 | ug/L | 50.0 | 75% | 78 - 121 | 6010867 | | 01/06/06 20:23 |
| *Surrogate: 4-Bromofluorobenzene* | | 45.9 | | ug/L | 50.0 | 92% | 78 - 126 | 6010867 | | 01/06/06 20:23 |
| **6011093-MS1** | | | | | | | | | | |
| Tert-Amyl Methyl Ether | ND | 53.8 | | ug/L | 50.0 | 108% | 43 - 165 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| Benzene | ND | 62.4 | | ug/L | 50.0 | 125% | 74 - 133 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| Ethylbenzene | ND | 56.5 | | ug/L | 50.0 | 113% | 74 - 134 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| Ethyl tert-Butyl Ether | ND | 45.8 | | ug/L | 50.0 | 92% | 57 - 155 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| Toluene | ND | 48.2 | | ug/L | 50.0 | 96% | 73 - 133 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| Diisopropyl Ether | ND | 50.2 | | ug/L | 50.0 | 100% | 67 - 139 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| Methyl tert-Butyl Ether | ND | 47.8 | | ug/L | 50.0 | 96% | 58 - 151 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| Tertiary Butyl Alcohol | ND | 761 | | ug/L | 500 | 152% | 10 - 186 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| Xylenes, total | ND | 180 | | ug/L | 150 | 120% | 68 - 139 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| *Surrogate: 1,2-Dichloroethane-d4* | | 52.4 | | ug/L | 50.0 | 105% | 70 - 130 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| *Surrogate: Dibromofluoromethane* | | 51.2 | | ug/L | 50.0 | 102% | 79 - 122 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| *Surrogate: Toluene-d8* | | 40.4 | | ug/L | 50.0 | 81% | 78 - 121 | 6011093 | NPA0024-04 | 01/08/06 22:14 |
| *Surrogate: 4-Bromofluorobenzene* | | 43.9 | | ug/L | 50.0 | 88% | 78 - 126 | 6011093 | NPA0024-04 | 01/08/06 22:14 |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## PROJECT QUALITY CONTROL DATA
### Matrix Spike Dup

| Analyte | Orig. Val. | Duplicate | Q | Units | Spike Conc | % Rec. | Target Range | RPD | Limit | Batch | Sample Duplicated | Analyzed Date/Time |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds by EPA Method 8260B** | | | | | | | | | | | | |
| **6010867-MSD1** | | | | | | | | | | | | |
| Tert-Amyl Methyl Ether | | 57.7 | | ug/L | 50.0 | 115% | 43 - 165 | 3 | 20 | 6010867 | | 01/06/06 20:51 |
| Benzene | | 57.3 | | ug/L | 50.0 | 115% | 74 - 133 | 2 | 19 | 6010867 | | 01/06/06 20:51 |
| Ethylbenzene | | 53.8 | | ug/L | 50.0 | 108% | 74 - 134 | 0.6 | 21 | 6010867 | | 01/06/06 20:51 |
| Ethyl tert-Butyl Ether | | 52.8 | | ug/L | 50.0 | 106% | 57 - 155 | 3 | 19 | 6010867 | | 01/06/06 20:51 |
| Toluene | | 44.6 | | ug/L | 50.0 | 89% | 73 - 133 | 4 | 20 | 6010867 | | 01/06/06 20:51 |
| Diisopropyl Ether | | 50.7 | | ug/L | 50.0 | 101% | 67 - 139 | 0.4 | 17 | 6010867 | | 01/06/06 20:51 |
| Methyl tert-Butyl Ether | | 52.8 | | ug/L | 50.0 | 106% | 58 - 151 | 7 | 28 | 6010867 | | 01/06/06 20:51 |
| Tertiary Butyl Alcohol | | 837 | | ug/L | 500 | 167% | 10 - 186 | 0.1 | 37 | 6010867 | | 01/06/06 20:51 |
| Xylenes, total | | 173 | | ug/L | 150 | 115% | 68 - 139 | 3 | 23 | 6010867 | | 01/06/06 20:51 |
| *Surrogate: 1,2-Dichloroethane-d4* | | 49.9 | | ug/L | 50.0 | 100% | 70 - 130 | | | 6010867 | | 01/06/06 20:51 |
| *Surrogate: Dibromofluoromethane* | | 51.1 | | ug/L | 50.0 | 102% | 79 - 122 | | | 6010867 | | 01/06/06 20:51 |
| *Surrogate: Toluene-d8* | | 36.8 | Z11 | ug/L | 50.0 | 74% | 78 - 121 | | | 6010867 | | 01/06/06 20:51 |
| *Surrogate: 4-Bromofluorobenzene* | | 47.2 | | ug/L | 50.0 | 94% | 78 - 126 | | | 6010867 | | 01/06/06 20:51 |
| **6011093-MSD1** | | | | | | | | | | | | |
| Tert-Amyl Methyl Ether | ND | 50.7 | | ug/L | 50.0 | 101% | 43 - 165 | 6 | 20 | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| Benzene | ND | 58.2 | | ug/L | 50.0 | 116% | 74 - 133 | 7 | 19 | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| Ethylbenzene | ND | 53.0 | | ug/L | 50.0 | 106% | 74 - 134 | 6 | 21 | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| Ethyl tert-Butyl Ether | ND | 43.2 | | ug/L | 50.0 | 86% | 57 - 155 | 6 | 19 | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| Toluene | ND | 45.0 | | ug/L | 50.0 | 90% | 73 - 133 | 7 | 20 | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| Diisopropyl Ether | ND | 47.2 | | ug/L | 50.0 | 94% | 67 - 139 | 6 | 17 | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| Methyl tert-Butyl Ether | ND | 45.3 | | ug/L | 50.0 | 91% | 58 - 151 | 5 | 28 | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| Tertiary Butyl Alcohol | ND | 748 | | ug/L | 500 | 150% | 10 - 186 | 2 | 37 | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| Xylenes, total | ND | 168 | | ug/L | 150 | 112% | 68 - 139 | 7 | 23 | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| *Surrogate: 1,2-Dichloroethane-d4* | | 49.5 | | ug/L | 50.0 | 99% | 70 - 130 | | | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| *Surrogate: Dibromofluoromethane* | | 50.7 | | ug/L | 50.0 | 101% | 79 - 122 | | | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| *Surrogate: Toluene-d8* | | 39.5 | | ug/L | 50.0 | 79% | 78 - 121 | | | 6011093 | NPA0024-04 | 01/08/06 22:43 |
| *Surrogate: 4-Bromofluorobenzene* | | 43.1 | | ug/L | 50.0 | 86% | 78 - 126 | | | 6011093 | NPA0024-04 | 01/08/06 22:43 |

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| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## CERTIFICATION SUMMARY

**TestAmerica Analytical - Nashville**

| Method | Matrix | AIHA | Nelac | Maryland |
|---|---|---|---|---|
| SW846 8260B | Water | N/A | X | N/A |

| | | | |
|---|---|---|---|
| Client | GES (Crofton, MD) / SHELL (13673) | Work Order: | NOL3763 |
| | 2142 Priest Bridge Ct. Ste. 1 | Project Name: | 11800 Parklawn Dr., Rockville, MD |
| | Crofton, MD 21114 | Project Number: | SAP 129427 |
| Attn | Ashley Bell | Received: | 12/30/05 07:55 |

## DATA QUALIFIERS AND DEFINITIONS

| | |
|---|---|
| **Z** | Due to sample matrix effects, the surrogate recovery was below the acceptance limits. |
| **Z10** | Surrogate outside laboratory historical limits but within method guidelines. No effect on data. |
| **Z11** | Surrogate low but all targets within method criteria. No effect on data. |

## METHOD MODIFICATION NOTES

TestAmerica
ANALYTICAL TESTING CORPORATION
Nashville Division

NOL3763

COOLER RECEIPT FORM BC#

Client Name : GES

Cooler Received/Opened On: 12/30/05 Accessioned By: Benjamin C.Wright

Log-in Personnel Signature

1. Temperature of Cooler when triaged: 2.4 Degrees Celsius
2. Were custody seals on outside of cooler?..... YES...NO...NA
   a. If yes, how many and where: ____
3. Were custody seals on containers ?..... NO...YES...NA
4. Were the seals intact, signed, and dated correctly?..... YES....NO...NA
5. Were custody papers inside cooler?..... YES....NO...NA
6. Were custody papers properly filled out (ink, signed, etc)?..... YES....NO...NA
7. Did you sign the custody papers in the appropriate place?..... YES....NO...NA
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Other None zip-lock baggies Foam insert
9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None
10. Did all containers arrive in good condition ( unbroken)?..... YES...NO...NA
11. Were all container labels complete (#, date, signed, pres., etc)?..... YES...NO...NA
12. Did all container labels and tags agree with custody papers?..... YES...NO...NA
13. Were correct containers used for the analysis requested?..... YES...NO...NA
14. a. Were VOA vials received?..... YES...NO...NA
    b. Was there any observable head space present in any VOA vial?..... NO...YES...NA
15. Was sufficient amount of sample sent in each container?..... YES...NO...NA
16. Were correct preservatives used?..... YES...NO...NA
    If not, record standard ID of preservative used here ____
17. Was residual chlorine present?..... NO...YES...NA
18. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:
    2228
    Fed-Ex UPS Velocity DHL Route Off-street Misc.
19. If a Non-Conformance exists, see attached or comments below:

NOL3763

01/06/06 17 00

**TEST AMERICA**

☐ 2690 FOSTER CREIGHTON, NASHVILLE, TN 37204
PHONE 800-765-0980 FAX# 616-726-3404

24 TAT ONLY
☑ 1008 W. NINTH AVE, KING OF PRUSSIA, PA 19406

# Shell Oil Products US Chain Of Custody Record

**SOP US Project Manager to be invoiced:**
☑ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ CRMT HOUSTON
☐ BILL CONSULTANT

NAME OF PM TO BILL: Doug Weimer
NAME OF TS TO BILL: Bill Shell Direct

INCIDENT # (S&E ONLY): 97095440
$AP or CRMT # (TS/CRMT): 129427

DATE: 12-29-05
PAGE: 1 of 1

CONSULTANT COMPANY: Groundwater and Environmental Services, Inc.
ADDRESS: 2142 Priest Bridge Ct, Suite 1
CITY: Crofton, MD
TELEPHONE: 410-721-0047 FAX: 410-721-3733 E-MAIL: abell@gesonline.com

SITE ADDRESS (Street and City): 11800 Parklawn Drive
PROJECT CONTACT (Report to): Ashley Bell
CONSULTANT PROJECT NO.: 04-01339
SAMPLER NAME(S) (Print): Greg King
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☒ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

TEMPERATURE ON RECEIPT C°

SPECIAL INSTRUCTIONS OR NOTES :

REQUESTED ANALYSIS

| LAB USE ONLY | Field Sample Identification | SAMPLING DATE | SAMPLING TIME | MATRIX | PRESERVATIVE HCL | HNO3 | H2SO4 | NONE | OTHER | NO. OF CONT. | BTEX X MTBE X TBA X | OXY's DIPE X ETBE X TAME X | ETHANOL ___ METHANOL ___ | TPHG (418.1) | VOCs +10PPL ___ TCL ___ | TPH-GRO | TPH-DRO | LEAD | | Container PID Readings or Laboratory Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | VP-3 | 12-29-05 | 8:41 | GW | X | | | | | 3 | X | X | | | | | | | 01 | |
| | MW-9 | | 9:16 | | | | | | | | | | | | | | | | 02 | |
| | MW-2 | | 9:34 | | | | | | | | | | | | | | | | 03 | |
| | MW-19 | | 1057 | | | | | | | | | | | | | | | | 04 | |
| | MW-17 | | 1103 | | | | | | | | | | | | | | | | 05 | |
| | MW-18 | | 1109 | | | | | | | | | | | | | | | | 06 | |
| | MW-14 | | 1115 | | | | | | | | | | | | | | | | 07 | |
| | MW-[illegible] | | 1121 | | | | | | | | | | | | | | | | 08 | |
| | MW-[illegible] | | 1127 | | | | | | | | | | | | | | | | 09 | |
| | [illegible]8 | 12-29-05 | 10:01 | GW | X | | | | | 3 | X | X | | | | | | | 10 | |

| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
|---|---|---|---|
| [signature] | | | |
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
| | | | |
| Relinquished by: (Signature) | Received by: (Signature) | Date: 12/30/05 | Time: 755 |

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

05/1/01 Revision

**TEST AMERICA**

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24 TAT ONLY
☑ 1008 W. NINTH AVE, KING OF PRUSSIA, PA 19406

# Shell Oil Products US Chain Of Custody Record

**SOP US Project Manager to be invoiced:**
☑ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ CRMT HOUSTON
☐ BILL CONSULTANT

NAME OF PM TO BILL: Doug Weimer
NAME OF TS TO BILL: Bill Shell Direct

INCIDENT # (S&E ONLY): 97095440
SAP or CRMT # (TS/CRMT): 129427

DATE: 12-29-05
PAGE: 2 of 2

CONSULTANT COMPANY: Groundwater and Environmental Services, Inc.
ADDRESS: 2142 Priest Bridge Ct, Suite 1
CITY: Crofton, MD
TELEPHONE: 410-721-0047 FAX: 410-721-3733 E-MAIL: abell@gesonline.com

SITE ADDRESS (Street and City): 11800 Parklawn Drive
PROJECT CONTACT (Report to): Ashley Bell
CONSULTANT PROJECT NO.: 04-01339
SAMPLER NAME(S) (Print): Greg King
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☒ STANDARD (10 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

TEMPERATURE ON RECEIPT C°

SPECIAL INSTRUCTIONS OR NOTES :

REQUESTED ANALYSIS

| LAB USE ONLY | Field Sample Identification | SAMPLING DATE | SAMPLING TIME | MATRIX | PRESERVATIVE HCL | HNO3 | H2SO4 | NONE | OTHER | NO. OF CONT. | BTEX X MTBE X TBA X | OXY's DIPE X ETBE X TAME X | ETHANOL METHANOL | TPH-G (418.1) | VOCs +10PPL TCL | TPH-GRO | TPH-DRO | LEAD | Container PID Readings or Laboratory Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | [redacted]-10 | 12-29-05 | 0945 | GW | X | | | | | 3 | X | | | | | | | 11 | |
| | [redacted] | | 0951 | | | | | | | | | | | | | | | 12 | |
| | MW-6 | | 0957 | | | | | | | | | | | | | | | 13 | |
| | MW-4 | | 1003 | | | | | | | | | | | | | | | 14 | |
| | MW-3 | | 1009 | | | | | | | | | | | | | | | 15 | |
| | MW-1 | | 1015 | | | | | | | | | | | | | | | 16 | |
| | H-1 | 12-29-05 | 1021 | GW | X | | | | | 3 | X | | | | | | | 17 | |

| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
|---|---|---|---|
| [signature] | | | |
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
| | | | |
| Relinquished by: (Signature) | Received by: (Signature) | Date: 12/30/05 | Time: 755 |

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

05/1/01 Revision